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Management and Decision-Making in Organizations

To manage is to forecast and plan, to organize, to command, to co-ordinate, and to control.

-Henri Fayol

Scientific Management will mean, for the employers and the workmen who adopt it, the elimination of almost all causes for dispute and disagreement between them.

—Frederick W. Taylor

The needs of large-scale organization have to be satisfied by common people achieving uncommon performance.

-Peter F. Drucker

Is it surprising that prisons resemble factories, schools, barracks, hospitals, which all resemble prisons?

-Michel Foucault

The task of administration is so to design this environment that the individual will approach as close as practicable to rationality (judged in terms of the organization's goals) in his decisions.

-Herbert A. Simon

An organization is a collection of choices looking for problems, issues and feelings looking for decision situations in which they might be aired, solutions looking for issues to which they might be the answers, and decision-makers looking for work.

-James G. March

An organization . . . quite literally does impose the environment that imposes on it.

-Karl E. Weick



organizations with different structures, functioning in different environments, have to be managed. Managers have to make effective decisions to keep the organization flourishing. As long as there is management, there will be the problem of how to manage better. In one sense, attempts at answers to this problem will be as numerous as managers, for each will bring an individual approach to the task. Nonetheless, at any one time, there is enough in common for broad similarities to exist in what is thought and what is taught on this issue. The writers of this section have

each sought to improve the understanding of administration and its practice. They have looked for the ingredients of better decision-making in management.

Henri Fayol puts forward a classic analysis of the management task, based on his long practical experience of doing the job and the personal insights he gained. Frederick W. Taylor's name is synonymous with the term *scientific management*. His extremely powerful ideas made him a controversial figure in his own day and have remained a subject for much argument. Peter Drucker has presented a very influential analysis of the tasks which modern managements have to undertake in order to be effective. Michel Foucault explores the methods by which those at the top of organizations, and of society, maintain their control.

For Herbert Simon and his colleagues at Carnegie-Mellon University, management is based on rational decision-making. His former colleague, James March, develops this approach to consider in addition the nonrationality of decision processes. Karl Weick points to the way in which each individual's subjective attempts to make sense of the organization must be understood and taken into account in the decision-making process.

Henri Fayol

Henri Fayol (1841–1925) was a mining engineer by training. A Frenchman, he spent his working life with the French mining and metallurgical combine Commentry-Fourchamboult-Decazeville, first as an engineer, but from his early 30s onward in general management. From 1888 to 1918, he was Managing Director.

Fayol is among those who have achieved fame for ideas made known very late in life. He was in his 70s before he published them in a form that came to be widely read. He had written technical articles on mining engineering and a few preliminary papers on administration, but in 1916, the Bulletin de la Société de l'Industrie Minerale printed Fayol's Administration Industrielle et Générale—Prévoyance, Organisation, Commandement, Coordination, Contrôle. He is also among those whose reputation rests on a single short publication still frequently reprinted as a book; his other writings are little known.

The English version appears as *General and Industrial Management*, translated by Constance Storrs and first issued in 1949. There has been

some debate over this rendering of the title of the work, and in particular of expressing the French word *administration* by the term *management*. It is argued that this title could simply imply that Fayol is concerned only with industrial management, whereas his own preface claims, "Management plays a very important part in the government of undertakings; of all undertakings, large or small, industrial, commercial, political, religious or any other." Indeed, in his last years, he studied the problems of state public services and lectured at the *École Supérieure de la Guerre*. So, it can be accepted that his intention was to initiate a theoretical analysis appropriate to a wide range of organizations.

Fayol suggests that

all activities to which industrial undertakings give rise can be divided into the following six groups:

- 1. Technical activities (production, manufacture, adaptation)
- 2. Commercial activities (buying, selling, exchange)
- 3. Financial activities (search for and optimum use of capital)
- 4. Security activities (protection of property and persons)
- 5. Accounting activities (stocktaking, balance sheet, costs, statistics)
- 6. Managerial activities (planning, organization, command, coordination, control)

Be the undertaking simple or complex, big or small, these six groups of activities or essential functions are always present.

Most of these six groups of activities will be present in many jobs but in varying measure, with the managerial element in particular being greatest in senior jobs and least or absent in direct production or lower clerical tasks. Managerial activities are specially emphasized as being universal to organizations. But it is commonplace to ask, What is management? Is it anything that can be identified and stand on its own, or is it a word or label that has no substance?

Fayol's answer was unique at the time. The core of his contribution is his definition of management as comprising five elements:

- 1. To forecast and plan (in the French, *prévoyance*): "Examining the future and drawing up the plan of action."
- To organize: "Building up the structure, material and human, of the undertaking."

- 3. To command: "Maintaining activity among the personnel."
- To coordinate: "Binding together, unifying and harmonizing all activity and effort."
- 5. To control: "Seeing that everything occurs in conformity with established rule and expressed command."

For Fayol, managing means looking ahead, which makes the first element—the process of forecasting and planning—a central business activity. Management must "assess the future and make provision for it." To function adequately, a business organization needs a plan that has the characteristics of "unity, continuity, flexibility, and precision." The problems of planning that management must overcome are (a) making sure the objectives of each part of the organization are securely welded together (unity), (b) using both short- and long-term forecasting (continuity), (c) being able to adapt the plan in the light of changing circumstances (flexibility), and (d) attempting to accurately predict courses of action (precision). The essence of planning is to allow the optimum use of resources. Interestingly, Fayol in 1916 argued the necessity of a national plan for France, to be produced by the government.

To organize, which is the second element, is "building up the structure, material and human, of the undertaking." The task of management is to build up an organization that will allow the basic activities to be carried out in an optimal manner. Central to this is a structure in which plans are efficiently prepared and carried out. There must be a unity of command and direction, clear definition of responsibilities, and precise decision making backed up by an efficient system for selecting and training managers.

Fayol's third element—to command—comes logically after the first two. An organization must start with a plan, a definition of its goals. It then must produce an organizational structure appropriate to the achievement of those goals. Next, the organization must be put in motion, which is command, maintaining activity among the personnel. Through an ability to command, the manager obtains the best possible performance from subordinates. This must be done through example, through continuous contact with the staff, and by maintaining a broad view of the directing function. In this way, the manager maintains a high level of activity by instilling a sense of mission.

The term *command* refers to the relationship between a manager and the subordinates in the area of the immediate task. But organizations have a variety of tasks to perform, so the fourth element—coordination—is

necessary, "binding together, unifying and harmonizing all activity and effort." Essentially, this is making sure that one department's efforts are coincident with the efforts of other departments and keeping all activities in perspective with regard to the overall aims of the organization. This can only be attained by a constant circulation of information and regular meetings of management.

The fifth element—control—is logically the final element because it checks that the other four elements are, in fact, performing properly and "that everything occurs in conformity with established rule and expressed command." To be effective, control must operate quickly, and there must be a system of sanctions. The best way to ensure this is to separate all functions concerned with inspection from the operation departments whose work they inspect. Fayol believed in independent, impartial staff departments.

Fayol uses this classification to divide up his chapters on how to administer or manage. It is probable that when he wrote of "une doctrine administrative," he had in mind not only the above theory but also the addition of experience to theoretical analysis to form a doctrine of good management. He summarizes the lessons of his own experience in a number of general principles of management. These are his own rules, and he does not assume that they are necessarily of universal application or that they have any great permanence. Nonetheless, most have become part of managerial know-how, and many are regarded as fundamental tenets. Fayol outlines the 14 principles.

- 1. *Division of work:* Specialization allows the individual to build up expertise and thereby be more productive.
- 2. Authority: This is the right to issue commands, along with which must go the equivalent responsibility for its exercise.
- 3. *Discipline*: This is two-sided, because employees only obey orders if managers play their part by providing good leadership.
- 4. Unity of command: In contrast to F. W. Taylor's functional authority, Fayol was quite clear that each worker should have only one boss, with no other conflicting lines of command. On this issue, history has favored Fayol because his principle has found most adherents among managers.

- 5. Unity of direction: People engaged in the same kind of activities must have the same objectives in a single plan.
- 6. Subordination of individual interest to general interest: Management must see that the goals of the firm are always paramount.
- 7. Remuneration: Payment is an important motivator although, by analyzing a number of possibilities, Fayol points out that there is no such thing as a perfect system.
- 8. Centralization or decentralization: Again, this is a matter of degree, depending on the condition of the business and the quality of its personnel.
- 9. Scalar chain: A hierarchy is necessary for unity of direction, but lateral communication is also fundamental as long as superiors know that such communication is taking place.
- 10. Order: Both material order and social order are necessary. The former minimizes lost time and useless handling of materials; the latter is achieved through organization and selection.
- 11. Equity: In running a business, a "combination of kindliness and justice" is needed in treating employees if equity is to be achieved.
- 12. Stability of tenure: This is essential because of the time and expense involved in training good management. Fayol believes that successful businesses tend to have more stable managerial personnel.
- 13. Initiative: Allowing all personnel to show their initiative in some way is a source of strength for the organization, even though it may well involve a sacrifice of "personal vanity" on the part of many managers.
- 14. Esprit de corps: Management must foster the morale of its employees and, to quote Fayol, "Real talent is needed to coordinate effort, encourage keenness, use each person's abilities, and reward each one's merit without arousing possible jealousies and disturbing harmonious relations."

But Fayol's pride of place in this field is due not so much to his principles of how to manage, enduring though these are, as to his definition of what management is. He is the earliest known proponent of a theoretical analysis of managerial activities—an analysis that has withstood a half-century of critical discussion. There can have been few writers since who have not been influenced by it; and his five elements have provided a system of concepts with which managers may clarify their thinking about what it is they have to do.

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Frederick W. Taylor

Frederick Taylor (1856–1917) was an engineer by training. He joined the Midvale Steel Works as a laborer and rose rapidly to be a foreman and later Chief Engineer. He was afterward employed at the Bethlehem Steel Works and then became a consultant, devoting his time to the propagation of his ideas.

He first published his views on management in a paper entitled "A Piece Rate System," read to the American Society of Mechanical Engineers in 1895. These views were expanded into the book *Shop Management* (1903) and further developed in *Principles of Scientific Management* (1911). As a result of labor troubles caused by the attempt to apply his principles in a government arsenal, a House of Representatives' Special Committee was set up in 1911 to investigate Taylor's system of shop management. (A full description of events at the arsenal is given in Aitken's [1960] case study.) In 1947, *Shop Management*, the *Principles*, and Taylor's testimony to the Special Committee were collected together and published under the title *Scientific Management*.

Taylor was the founder of the movement known as scientific management. "The principal object of management," he states, "should be to secure the maximum prosperity for the employer, coupled with the maximum prosperity of each employee." For the employer, *maximum prosperity* means not just large profits in the short term but also the development of all aspects of the enterprise to a state of permanent prosperity. For the

employees, it means not just immediate higher wages but also their development so that they may perform efficiently in the highest grade of work for which their natural abilities fit them. The mutual interdependence of management and workers and the necessity of their working together toward the common aim of increasing prosperity for all seemed completely self-evident to Taylor. He was thus driven to ask, Why is there so much antagonism and inefficiency?

He suggests three causes: (1) the fallacious belief of the workers that any increase in output would inevitably result in unemployment, (2) the defective systems of management that make it necessary for workers to restrict their output in order to protect their interests ("systematic soldiering"), and (3) inefficient rule-of-thumb effort-wasting methods of work. Taylor conceived it to be the aim of scientific management to overcome these obstacles. This could be achieved by a systematic study of work to discover the most efficient methods of performing the job, and then a systematic study of management leading to the most efficient methods of controlling the workers. These methods would bring a great increase in efficiency and, with it, prosperity to the benefit of all because a highly efficient, prosperous business would be in a much better position to ensure the continuing well-paid employment of its workers. As Taylor puts it, "What the workmen want from their employers beyond anything else is high wages and what employers want from their workmen most of all is low labour cost of manufacture . . . the existence or absence of these two elements forms the best index to either good or bad management."

To achieve this, Taylor lays down four "great underlying principles of management."

The development of a true science of work. Taylor points out that no one really knows what constitutes a fair day's work; a boss, therefore, has unlimited opportunities for complaining about workers' inadequacies, and workers never really know what is expected of them. This dilemma can be remedied by the establishment, after scientific investigation, of a "large daily task" as the amount to be done by a suitable worker under optimum conditions. For this, the workers would receive a high rate of pay—much higher than the average worker would receive in "unscientific" factories. They would also suffer a loss of income if they failed to achieve this performance.

The scientific selection and progressive development of the worker. To earn this high rate of pay, workers would have to be scientifically selected to ensure that they possess the physical and intellectual qualities to enable

them to achieve the output. Then, they must be systematically trained to be "first class." Taylor believes that every worker could be first class at some job. It was the responsibility of management to develop workers, offering them opportunities for advancement that would finally enable them to do "the highest, most interesting, and most profitable class of work" for which they could become first class.

The bringing together of the science of work and the scientifically selected and trained workers. This is the process that causes the "mental revolution" in management, and Taylor maintains that, almost invariably, the major resistance to scientific management comes from the side of management. The workers, he finds, are very willing to cooperate in learning to do a good job for a high rate of pay.

The constant and intimate cooperation of management and workers. The division of work and responsibility between management and workers is almost equal. The management takes over all the work for which it is better fitted than the workers, that is, the specification and verification of the methods, time, price, and quality standards of the job and the continuous supervision and control of the workers doing it. As Taylor saw it, hardly a single act should be done by any worker that is not preceded by and followed by some act on the part of management. With this close personal cooperation, the opportunities for conflict are almost eliminated because the operation of this authority is not arbitrary. The managers are continually demonstrating that their decisions are subject to the same discipline as the workers—namely, the scientific study of the work.

By science, Taylor means systematic observation and measurement, and an example of his method that he often quotes is the development of "the science of shovelling." He is insistent that, although shovelling is a very simple job, the study of the factors affecting efficient shovelling is quite complex—so much so that a worker who is phlegmatic enough to be able to do the job and stupid enough to choose it is extremely unlikely to be able to develop the most efficient method alone. But this is, in fact, what is hoped will happen. The scientific study of shovelling involves the determination of the optimum load that a first-class worker can handle with each shovelful. Then, the correct size of shovel to obtain this load, with different materials, must be established. Workers must be provided a range of shovels and told which one to use. They must then be placed on an incentive payment scheme

The insistence on maximum specialization and the removal of all extraneous elements in order to concentrate on the essential task is fundamental to Taylor's thinking. He applies this concept to management, too. He considers that the work of a typical factory supervisor is composed of a number of different functions (e.g., cost clerk, time clerk, inspector, repair boss, shop disciplinarian), and he believes that these could be separated out and performed by different specialists who would each be responsible for controlling different aspects of the work and the workers. He calls this system functional management, and likens the increased efficiency that it would bring to that obtained in a school where students go to specialist teachers for different subjects, compared with a school in which there is one teacher for all subjects. He also formulates the exception principle, which states that management reports should be condensed into comparative summaries giving in detail only the exceptions to past standards or averages—both the especially good and especially bad exceptions. Thus, the manager would obtain an immediate and comprehensive view of the progress of the work.

Taylor's methods have been followed by many others, among them Gantt, Frank and Lillian Gilbreth, Bedaux, Rowan, and Halsey. They have developed his thinking into what is now called *work study*, or *industrial engineering*. But even in his lifetime, Taylor's ideas led to bitter controversy over the alleged inhumanity of his system, which was said to reduce workers to the level of efficiently functioning machines. In fairness to Taylor, it must be said that his principles were often inadequately understood. For example, few managements have been willing to put into practice one of his basic tenets—that the earnings of a high-producing worker should have no limit; many incentive schemes involve such limits. This unwillingness may inhibit the "mental revolution" Taylor sought, which requires that "both sides take their eyes off the division of the surplus as the all important matter and together turn their attention towards increasing the size of the surplus."

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Peter F. Drucker

Peter Drucker (1909–2005) was born in Austria. He qualified in law and was a journalist in Germany until the advent of the Nazis. After a period in London, in 1937 he moved permanently to the United States, becoming an American citizen in 1943. He has been an economic consultant to banks and insurance companies and an adviser on business policy and management to a large number of American corporations. He was for many years at New York University Business School and from 1971 until his death was Clarke Professor of Social Science at Claremont Graduate University, California. In 1987, the University named its Management School after him. In 2002, he was awarded the Presidential Medal of Freedom for his contribution to American life.

Drucker has published more than 30 books on business topics and is the external author who has contributed the largest number of articles to the *Harvard Business Review*. His writings have made him one of the leading contemporary thinkers on management issues; the doyen of management gurus.

Drucker's work begins with a view of top management and its critical role in the representative institution of modern industrial society, namely the large corporation. He identifies management as the central problem area, and the manager as the dynamic element in every business who provides the integration of the inevitably disparate parts. Managers, through their control of the decision-making structure of the modern corporation, breathe life into the organization and the wider society. The manager is given human and material resources to work with, and from them must fashion a productive enterprise from which springs the wealth of society.

This is becoming increasingly true as we operate in an era of knowledge technology, making human beings central to effective performance in organizations. Yet managers, although becoming ever more basic resources of a business, are the scarcest, the most expensive, and the most perishable. Given this, it becomes extremely important that managers should be used as effectively as is possible at the present state of knowledge about the practice and functions of management. It is not just a question of efficiency, that is, doing things right; effectiveness is doing the right things. "There is nothing so useless as doing efficiently that which should not be done at all."

It is only possible to arrive at prescriptions for effectiveness if we first understand the role of the manager in the organization, that is, if we know what the job of management is. There are two dimensions to the task of management: an economic dimension and a time dimension. Managers who are responsible for business organizations must always put economic performance first; this is not the case for all administrators. The second dimension, time, is one which is present in all decision-making systems. Management always has to think of the impact of a decision on the present, the short-term future, and the long-term future.

Management is the job of organizing resources to achieve satisfactory performance; to produce an enterprise from material and human resources. This does not necessarily mean profit maximization. Profit is not the cause of business behavior, or the rationale of business decision-making in the sense of always attempting to achieve the maximum profit. Rather, profit is a test of the validity or success of the business enterprise. The aim of any business must be to create and keep customers, and by doing so achieve sufficient profit to cover the risks that have been taken.

The central question is thus how best to manage a business to ensure that sufficient profits are made, and that the enterprise is successful over time. Although it is possible to state the overall aims in a fairly precise and simple way, any ongoing functioning organization has a variety of needs and goals. It is not realistic to think of an enterprise having a single objective. Effective management always involves a juggling act, balancing the different possible objectives and deciding the priorities to be put on the multiple aims that an organization has. Because of this, and due to the complex nature of business as exemplified by the large number of types of specialists involved, MBO is vital. This is essential in the process of ensuring that informed judgement takes place. MBO forces managers to examine available alternatives and provides a reliable means for evaluating management performance.

Specifically, objectives in a business enterprise enable management to explain, predict, and control activities in a way that single ideas like profit maximization do not. First, they enable the organization to explain the whole range of business phenomena in a small number of general statements. Second, they allow the testing of these statements in actual experience. Third, it becomes possible to predict behavior. Fourth, the soundness of decisions can be examined while they are still being made rather than after the fact. Fifth, performance in the future can be improved as a result of the analysis of past experience. This is because objectives force one to plan in detail what the business must aim at and to work out ways of effectively achieving these aims. MBO involves spelling out what is meant by managing a business. By doing this and then examining the outcome over time, the five advantages outlined above are realized.

This still leaves the problem of what the detailed objectives of a business enterprise should be. "Management by objective works—if you know the objectives. Ninety percent of the time you don't." There are eight areas in business where performance objectives must be set: market standing, innovation, productivity, physical and financial resources, profitability, manager performance and development, worker performance and attitude, and public responsibility. In deciding how to set objectives for these areas, it is necessary to take account of possible measures and lay down a realistic time span. Measures are important because they make things visible and real; they tell the manager what to focus attention upon. Unfortunately, measurement in most areas of business is still at a very crude level. As far as the time span of objectives is concerned, this depends on the area and the nature of the business. In the lumber business, today's plantings are the production capacity of 50 years' time; in parts of the clothing industry, a few weeks' time may be the long-range future.

Perhaps the most important part of the MBO process is the effect that it has on the manager personally. It enables the organization to develop its most important resource, management. It is a key part of the process of MBO that the manager fully participates in negotiating the setting of personal goals. This is because managerial *self*-control is developed, leading to stronger motivation and more efficient learning. It is the essence of this style of management that all managers arrive at a set of realistic objectives for the units under their control and for themselves. These objectives should spell out the contribution that the manager will make to the attainment of company goals in all areas of the business.

It is always necessary that the objectives set should be checked by higher levels of management to make sure that they are attainable (neither too high nor too low). But it is a degradation of the process if the goals are simply imposed from above. The importance as a motivator of individual managerial involvement in the setting of objectives cannot be overstressed. If the manager is really going to be able to develop and take proper advantage of the system, information must be given directly to enable self-measurement of performance. This is very different from the situation in some companies where certain groups (e.g., accountants) act as secret police on behalf of the chief executive.

The necessity of individual managers setting their own objectives stems from the nature of modern business, and what Drucker calls three forces of misdirection. These are the specialized work of most managers, the existence of a hierarchy, and the differences in vision that exist in businesses. All these raise the possibility of breakdown and conflicts in the organization: "Most of what we call management consists of making it difficult for people to get their work done."

MBO is a way of overcoming these deficiencies by relating the task of each manager to the overall goals of the company, thus encouraging integration. By doing this, it takes note of a key aspect of modern business operations: management is no longer the domain of one person. Even the chief executive does not operate in isolation. Management is a group activity, and the existence of objectives emphasizes the contribution that each individual manager makes to the total group operation. The problem of a chief executive is that of picking the best managerial group; the existence of objectives with their built-in evaluation system enables better choices to be made.

MBO enables an executive to be effective. An important point is that effectiveness can be learned. Drucker insists that the self-development of effective executives is central to the continued development of the organization as the "knowledge worker" has become the major resource. The system of objectives allows managers to evaluate their performance and by so doing strengthens the learning process. This is done by showing where the particular strengths of the individual are and then building on them to produce effective decision-making patterns. The regular review of objectives and performance enables managers to know where and how their most effective contribution is made and, as a result, develop skills in these areas.

Overall, then, MBO helps to overcome some of the internal forces which threaten to divide the organization, by clearly relating the task of each manager to the overall aims of the company. The result is that organizational goals can be reached by having "common people achieve uncommon performance."

With his emphasis on the long-term effects of management decisions, Drucker has been very well aware of the inevitably changing nature of the environment in which organizations function and has warned that "the only thing we know about the future is that it will be different." His latest view is, "We can say with certainty—or 90% probability—that the new industries that are about to be born will have nothing to do with information."

Throughout his writings, he has been very early in alerting managements to changes that are taking place. For example, that knowledge has succeeded physical power as the basis for effectiveness; that we are operating in a society where continual learning is necessary for all; that Japan will rise as an economic power and then stagnate; and that economic organizations cannot do all that is required for modern society. The Drucker Foundation for Non-profit Management (now called The Leader to Leader Institute) was established to apply his ideas in that sector, and he worked

with such organizations as the Red Cross, the Girl Guide movement, and evangelical churches.

Drucker has always insisted that there must be an ethical basis to management, in his own case based on Protestant Christianity. For example, maximizing profit at all costs is not acceptable in the long run. Managers who reap large bonuses by laying off workers are storing up problems for society. And he maintained that top management's pay should not be more than 20 times that of workers. This aspect of his ideas has not gone unchallenged by managers.

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Michel Foucault

Michel Foucault (1926–1984) was a French philosopher and cultural historian—although his iconoclastic approach makes him reject as inadequate any categorization of his work using such preexisting concepts. After qualifying in Philosophy and subsequently in Abnormal Psychology, he held positions in a number of universities in France and abroad. In 1970, he was appointed to the prestigious *Collége de France* where, for the first time, he was able to determine the precise title he wished to take. He chose the distinctive one of Professor of the History of Systems of Thought. He remained in this post until his death.

During his career Foucault published extensively, having to his credit a series of weighty volumes, numerous articles and lectures, as well as reports of interviews. His work, with its highly nuanced use of the French language, is difficult to understand—particularly in English. He writes in the profuse style of French philosophers to elaborate and complicate the ideas he presents, and as he develops his thought, his analyses and arguments are not consistent from one volume to the next. In spite of this (from the

Anglo-Saxon viewpoint)—or because of this (as the French tradition would have it)—his writings in this genre of literary philosophy have led him to be widely considered as one of the leading cultural commentators who feature prominently in intellectual life in France.

Foucault's work deals with historical topics, although to emphasize that his concerns are very different from those of traditional historians he does not use the term *history* to describe his work. His first major impact was his writing on the way in which the conceptualization and treatment of insanity has changed during the past 400 years. He details the changes from the 17th to the 20th centuries in the notions of what constitutes madness and how it should be treated. These analyses are characterized as archaeological investigations to indicate that they refer to the all the philosophical, social, and economic changes that have contributed to society's characterization of the insane. The English title of his major work on this topic, *Madness and Civilization*, illustrates the wide range of factors on which he draws.

His basic argument uses historical sources to show that madness is not an objective scientific condition which some people have whereas others do not. Its characterization is a result of society's philosophies and practices that change over the course of time. Until the 18th-century philosophical revolution known as the Enlightenment, madness was not sharply distinguished from reason. It was associated with knowledge of sacred mysteries and could provide insights into the human experience. In Shakespeare's plays, for example, this is illustrated by the character of the Fool or the Jester with his wise idiocy.

In the Enlightenment, the distinction between reason and unreason (madness) became much sharper. People with reason worked, and thus achieved salvation. Those who did not work—the destitute, the idle (i.e., unemployed), the beggars, the criminals, as well as the insane—were now regarded as scandalous and shameful by society and were excluded. The establishment of a physical separation was assisted because the dying out of leprosy across Europe meant that empty former leper colonies became asylums where they could all be incarcerated.

The harsh discipline of the asylum came later to be regarded as a form of ill-treatment, and the insane were physically less restrained. They were then subject to the attentions of psychiatrists, and the medical approach of attempting a cure was established. But, Foucault maintains, they were even less free, because now their minds were being pressured. Madness was a social failure, and the doctor's exercise of absolute authority was a reflection of the stratification of the wider bourgeois society in which the mad were at the bottom of the social scale.

At each stage in history, it was not the objective nature of madness but the complex systems of moral discourse and social practice which determined how all the actors—both the mad and the sane—participated in the endeavor. These are the systems of thought that Foucault is concerned with, as in the title of his Professorship. In later work on the history of sexuality, he uses a similar range of historical, cultural, and ethical influences to analyze the processes by which individuals in modern Western society come to experience their sexuality.

The Foucault project which has had the biggest impact on organization theory is his analysis of power and authority in the organization. The organizations which he considers are those where the exercise of power in their everyday working is very visible (e.g., prisons, armies, hospitals, and schools). In these organizations, the wardens, officers, doctors, and schoolmasters legitimately exercise considerable powers of discipline and control over the other members. His major work, *Discipline and Punish: The Birth of the Prison*, is a historical examination of the treatment of prisoners in the French penal system. Once again, to emphasize his particular approach, he does not use the word *history* but rather *genealogy* to identify his analytical concerns. Genealogy is a "form of history which can account for the constitution of knowledges, discourses and domains of objects." It draws on historical, literary, medical, religious, and philosophical bodies of knowledge to establish the distinctive discourse on discipline and punishment which is the basis of power in the organization.

It is the discourse or frame of reference of those involved which determines the way they think and act, and therefore how the organization and those in it function. The nature of the discourse explains the way in which organizations emerge, develop, and sustain themselves. In his genealogical investigations, Foucault examines all the many factors which affect that discourse, coming to feel that the earlier archaeological investigations were too limited in focusing on the structural influences of social hierarchies.

Discourse, as Foucault formulates it, may be considered as the rules of the game for those in the organization. It is the way of thought that they take for granted. It shows not just in what they say, but also in the arrangements and technological devices which are used for control.

Here Foucault takes up the notion of the panopticon as designed by the early 19th-century British philosopher, Jeremy Bentham. Bentham developed a theoretical design for a prison building which allowed the warden to continually survey many prisoners, each in his own cell, while not being seen himself. Thus, the prisoners could not know whether they were being

watched (hence *panopticon*, or all-seeing machine). The aim, in addition to being a cost-effective, low-staffed prison, was to instill correct behavior into the prisoners. Because they cannot know if they are being watched, they have to act properly all the time and so they internalize the rules. In Foucault's terms, the physical setting is thus part of the discourse.

In organizational life, what is considered as true are not objective facts but what is part of the discourse. For example, it may have been established that managerial work is worth more and should be paid more than physical work, and this is accepted without question. But only certain facts are regarded as knowledge, whereas other facts are omitted. In a discussion about the closure of a plant, for example, the profitable operation of the company will be taken to be part of the discourse. But the consequent economic and psychological disruption to redundant long-serving workers may not included in the discourse, being deemed irrelevant to the company's performance. Prohibitions on discourse by the powerful serve to order and control it against the resistances of the rest.

Surveillance and discipline are also crucial parts of the discourse by which the powerful establish their "truth" in organizations. Writing in the 1970s, Foucault presciently focuses on surveillance as the key control process of the powerful, even before modern technological developments such as closed-circuit television (CCTV), e-mail trails, and large-scale computer databases vastly increased the reach of this process. So, "Is it surprising that prisons resemble factories, schools, barracks, hospitals, which all resemble prisons?"

The aim of the discourse is thus to establish what is taken to be normal by all the participants. But Foucault does not regard this argument as meaning that the powerful in organizations can simply impose their domination on the powerless. Power is relational. The discourse is a battlefield in which the powerful fight for their conceptions of truth and the powerless have ways of resisting. It may be established that joining trades unions or going on strike are also normal parts of the discourse. The fact that resistance to change (i.e., resistance to management's proposals for change) is endemic in organizations is indicative that lower levels are part of the discourse. For the powerful, of course, such resistance is itself a justification of the need for surveillance and discipline.

So the basic question that Foucauldian analysts ask is, What is the discourse and how is it being formed? Barbara Townley has applied this approach to Human Resource Management. An employment contract must leave much of the relationship between the organization and the individual

undetermined. It can specify the system of remuneration to be paid, but can be only very general about the commitment and effort required from an employee. How, then, is the discourse governing these to be established? Managements acquire knowledge about employees by the application of personality and aptitude tests, grading systems, incentive schemes, developmental appraisals, or training programs. The results of these procedures do not constitute objective facts which are value neutral. What they also do is give more information about the employee and thus increase the opportunities for classification, evaluation, and control by top management—while at the same time establishing in the discourse that this is a normal, acceptable way to proceed.

Similarly, the establishment of bureaucracies (see Weber, chapter 1) or the introduction of scientific management (see Taylor) are not only, or primarily, for efficiency, as their proponents argue. Their aim is to obtain knowledge to enable the organizationally powerful to establish the discourse which normalizes their control. Alfred P. Sloan's concept of coordinated decentralization (see Chandler, chapter 1) or Drucker's management by objectives are ways of establishing a discourse in which managers accept self-control by internalizing the aims of the top management. Foucault coined the term *governmentality* to mean the strategies both of the organizational governance of those at the top and the self-governance of those below. The aims of modern accounting and IT systems are, likewise, to establish governmentality by obtaining knowledge to make the managers in the organization more open to both higher control and self-control.

Foucauldian analysis by emphasizing the subjective, contested nature of knowledge in the establishment of discourse provides another way of looking at the functioning of organizations.

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Herbert A. Simon

Herbert Simon (1916–2001) was a distinguished American political and social scientist whose perceptive contributions influenced thinking and practice in many fields. He began his career in public administration and operations research, but as he took appointments in successive universities, his interests encompassed all aspects of administration. He was Professor of Computer Science and Psychology at Carnegie-Mellon University, Pittsburgh, where he and his colleagues were engaged in fundamental research into the processes of decision making, using computers to simulate human thinking. Simon's outstanding intellectual contribution was publicly recognized when, in 1978, he was awarded the Nobel Prize for Economics.

For Simon, management is equivalent to decision making, and his major interest has been an analysis of how decisions are made and how they might be made more effectively. He describes three stages in the overall process of making a decision:

- 1. Finding occasions calling for a decision—the *intelligence* activity (using the word in the military sense).
- 2. Inventing, developing, and analyzing possible courses of action—the *design* activity.
- Selecting a particular course of action from those available—the choice activity.

Generally speaking, intelligence activity precedes design, and design activity precedes choice; but the sequence of stages can be much more complex than this. Each stage in itself can be a complex decision-making process. The design stage can call for new intelligence activities. Problems at any stage can generate a series of subproblems, which in turn have their intelligence, design, and choice stages. Nevertheless, in the process of organizational decision making, these three general stages can be discerned.

Carrying out the decisions is also regarded as a decision-making process. Thus, after a policy decision has been taken, the executive having to carry it out is faced with a wholly new set of problems involving decision making. Executing policy amounts to making more detailed policy. Essentially, for Simon, all managerial action is decision making.

On what basis do administrators make decisions? The traditional theory of economists assumed complete rationality. Their model was of an economic man (which, of course, embraced woman) who deals with the real world in all its complexity. He selects the rationally determined best course of action from among all those available to him in order to maximize his returns. But, clearly, this model is divorced from reality. We know that people's thinking and behavior have a large nonrational element. The need for an administrative theory is precisely because human rationality has practical limits. These limits to rationality are not static but depend on the organizational environment in which the individual's decision takes place. It then becomes the task of administration to design this environment so that the individual will approach as closely as practicable to rationality in decisions as judged in terms of the organization's goals.

In place of this economic man, Simon proposes a model of an administrative man. Whereas the economic man maximizes (i.e., selects the best course from those available), the administrative man "satisfices" (i.e., looks for a course of action that is satisfactory or good enough). In this process, decision makers are content with gross simplifications, taking into account only those comparatively few relevant factors that their minds can manage to encompass. "Most human decision-making, whether individual or organizational, is concerned with the discovery and selection of satisfactory alternatives; only in exceptional cases is it concerned with the discovery and selection of optimal alternatives." Most decisions are concerned not with searching for the sharpest needle in the haystack but with searching for a needle sharp enough to sew with. Thus, administrators who satisfice can make decisions without searching for all the possible alternatives and can use relatively simple rules of thumb. In business terms, they do not look for maximum but adequate profit; not optimum but fair price. This makes their world much simpler.

What techniques of decision making are then available? In discussing this problem, Simon makes a distinction between two polar types of decisions: programmed and nonprogrammed. These are not mutually exclusive but rather make up a continuum stretching from highly programmed decisions at one end to highly unprogrammed decisions at the other. Decisions are programmed to the extent that they are repetitive and routine or a definite procedure has been worked out to deal with them. They thus do not have to be considered afresh each time they occur. Examples are the decisions involved in processing a customer's order, determining an employee's sickness benefit, or carrying out any routine job.

Decisions are unprogrammed to the extent that they are new and unstructured or where there is no cut-and-dried method for handling the problem. This may be either because the decision has not occurred before or because it is particularly difficult or important. Examples are decisions to introduce a new product, to make substantial staff redundancies, or to move to a new location. All these decisions would be nonprogrammed (though entailing many programmed subdecisions) because the organization would have no detailed strategy to govern its responses to these situations, and it would have to fall back on whatever general capacity it had for intelligent problem solving.

Human beings are capable of acting intelligently in many new or difficult situations, but they are likely to be less efficient. The cost to the organization of relying on nonprogrammed decisions in areas where special-purpose procedures and programs can be developed is likely to be high, and an organization should try to program as many of its decisions as possible. The traditional techniques of programmed decision making are habit (including knowledge and skills, clerical routines, and standard operating procedures) and the organization's structure and culture, that is, for example, its system of common expectations, well-defined information channels, and established subgoals. The traditional techniques for dealing with nonprogrammed decisions rely on the selection and training of executives who possess judgement, intuition, and creativity. All these categories of techniques have been developed over thousands of years (the building of the pyramids must have involved the use of many of them). But since World War II, Simon argues, a complete revolution in techniques of decision making has been under way, comparable to the invention of powered machinery in manufacturing.

The revolution has been a result of the application of such techniques as mathematical analysis, operational research, electronic data processing, information technology, and computer simulation. These were used first for completely programmed operations (e.g., mathematical calculations, accounting procedures) formerly regarded as the province of clerks. But more and more elements of judgement (previously unprogrammed and the province of middle management) can now be incorporated into programmed procedures. Decisions on stock control and production control have been in the forefront of this development. With advances in computer technology, more and more complex decisions will become programmed. Even a completely unprogrammed decision, made once and for all, can be reached via computer techniques by building a model of the decision

situation. Various courses of action can then be simulated and their effects assessed. "The automated factory of the future," Simon maintains, "will operate on the basis of programmed decisions produced in the automated office beside it."

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James G. March

James March is Professor Emeritus of International Management at Stanford University, California. His breadth of mind is indicated by his being also linked with the Political Science, Sociology, and Education Departments. His interests have long focused on decision making in organizations, ever since his early work at Carnegie-Mellon University. Its renowned contributors to the understanding of decision making include Herbert A. Simon and Richard Cyert, both former colleagues of March's at Carnegie-Mellon.

March himself brings to his lively analyses of decision making a unique blend of the logical and the poetical. His work is logical in argument, poetical in imagery and expression. He believes that decision making can be understood in much the same nonrational way as a painting by Picasso or a poem by T. S. Eliot. It is far from a rationally controlled process moving steadily to a culminating choice. The confusion and complexity surrounding decision making is underestimated. Many things are happening at once. Views and aims are changing, and so are alliances among those concerned. What has to be done is not clear, nor is how to do it. In this topsy-turvy world, in which people do not comprehend what is going on, decisions may have little to do with the processes that supposedly make them, and organizations "do not know what they are doing."

It is a world in which rationality has cognitive, political, and organizational limits. Cognitively, attention is the key scarce resource. Individuals

cannot attend to everything at once, nor can they be everywhere at once. So, they attend to some parts of some decision making, not to all of them. What they attend to depends on the alternative claims on them, because giving attention to one decision means overlooking others. As March puts it, "Every entrance is an exit somewhere else." Therefore, timing is crucial—timing when to join in and which matters to raise.

March shares with his former colleague Simon the conception of bounded rationality. Not only is attention scarce, but mental capacity is also limited. The mind of the decision maker can only encompass so much. It can only cope with a limited amount of information and with a limited number of alternatives. That being so, even if decision making is intended to be rational, its rationality has severe bounds. Decisions will be taken knowing much less than in principle could be known.

Along with scarce attention and bounded rationality come erratic preferences. People change their minds about what they want. Even if they know what they want, they may ignore their own preferences and follow other advice or other traditions. They may state their preferences in an ambiguous way. Their preferences may conflict with the preferences of others.

Here, the cognitive limits to rationality connect with the political limits. March and his other former colleague, Cyert, recognize that a firm, and indeed any other kind of organization, is a shifting, multiple-goal, political coalition: "The composition of the firm is not given; it is negotiated. The goals of the firm are not given; they are bargained." The coalition, to use their word, includes managers, workers, stockholders, suppliers, customers, lawyers, tax collectors, and other agents of the state, as well as all the subunits or departments into which an organization is divided. Each group has its own preference about what the firm should be like and what its goals should be. Hence, negotiation and bargaining, rather than detached rationality, are endemic.

This is where the political limits to rationality connect with the organizational limits. These are the limits set by organized anarchies. Although all organizations do not have the properties of organized anarchy all of the time, they do for part of the time, and especially if they are publicly owned or are educational, such as universities, colleges, and schools. Organized anarchies have three general properties. First, because preferences are unclear, the organization discovers its goals from what it is doing, rather than by defining them clearly in advance. Second, because it has "unclear technology," "its own processes are not understood by its members," and it

works by trial and error more than by knowing what it is doing. Third, because of "fluid participation," who is involved in what is constantly changing. Take a college, for instance. Pronouncements on strategy are more reviews of what courses are already taught than they are statements of future goals; new teaching techniques, such as video games, are tried without knowing whether they will work and without their being understood by authorizing committees; and what such committees understand and approve depends on who turns up at meetings.

Given these cognitive, political, and organizational characteristics, decision-making processes are bound to be affected. Not only in those organizations prone to organized anarchy, but even in business firms, such decision processes have four peculiarities: (a) quasi resolution of conflict, (b) uncertainty avoidance, (c) problemistic search, and (d) organizational learning.

Quasi resolution of conflict is the state of affairs most of the time. The conflicts inherent in the political nature of organizations and therefore in the making of decisions are not resolved. Rather, devices for their quasi resolution enable them to be lived with. One such device is "local rationality." Because each subunit or department deals only with a narrow range of problems—the sales department with how to sell, the personnel department with how to recruit, and so on—each can at least purport to be rational in dealing with its local concerns. Of course, these local rationalities can be mutually inconsistent, as when accounting's insistence on remaining within budget destroys marketing's advertising campaign. Thus, they may not add up to overall rationality for the organization as a whole.

A second such device can ease this difficulty. It is acceptable-level decision rules. The acceptable level of consistency between one decision and another is low enough for the divergences to be tolerable. What is needed is an outcome acceptable to the different interests rather than one that is optimal overall.

A third such device, sequential attention to goals, also helps. As the conflicts between goals are not resolved, attention is given first to one goal and then to another, in sequence. For example, smooth production is first emphasized, and then later on the priority switches to satisfying customers by design variations that disrupt production.

Uncertainty avoidance, too, pervades decision making. All organizations must live with uncertainty. Customer orders are uncertain; so are currency fluctuations, future taxation, and so on. Therefore, decision making responds to information here and now and avoids the uncertainties of longer term forecasting. Pressing problems are dealt with, and planning for the longer run is avoided. Market uncertainties are avoided by exclusive

contracts with customers and by conforming with everyone else to recognized pricing and negotiating practices. For the same reason, search is problemistic and short-sighted. The occurrence of a problem spurs a search for ways to deal with it, and once a way is found, then search stops. Farsighted regular search, such as the steady accumulation of market information, is relatively unimportant. Such information is likely to be ignored in the urgency of any particular sales crisis. Moreover, search is simple-minded. When a problem arises, search for a solution is concentrated near the old solution. Radical proposals are brushed aside, and a safer answer is found, not much different from what there was before. When a U.S. university sought a new dean to head a major faculty, prominent outsiders were passed over and an established insider chosen because of fears that outsiders might make too many changes. Business organizations, too, regularly choose both managers and workers to fit in with the least amount of change.

Finally, decision-making processes are learning processes. In them, organizational learning takes place. Decision makers do not begin by knowing all they need to know. They learn as they go. They learn what is thought practicable and what is not, what is permissible and what is not. By trial and error, they find out what can be done and adapt their goals to it.

Perhaps it should not be surprising that all this leads March, together with Cohen and Olsen, to propose a garbage can model of organizational choice, famed for its name as well as for what it postulates. For when people fight for the right to participate in decision making and then do not exercise it, when they request information and then do not use it, when they struggle over a decision and then take little interest in whether it is ever carried out, something curious must be going on.

So, the opportunity or need to arrive at a decision, to make a choice, can be seen as "a garbage can into which various kinds of problems and solutions are dumped by participants, as they are generated." There may be several garbage cans around with different labels on them.

In the model so vividly depicted, a decision is an outcome of the interplay between problems, solutions, participants, and choices, all of which arrive relatively independently of one another. Problems can arise inside or outside the organization. Solutions exist on their own, irrespective of problems (people's preferences wait for their moment to come; the computer waits for the question it can answer). Participants move in and out. Opportunities for choices occur any time an organization is expected to produce a decision—for example, when contracts must be signed or money must be spent.

The decisions come about by resolution, oversight, or flight. If by resolution, then the choice resolves the problem, although this is likely to take time. If by oversight, the choice is made quickly, incidentally to other choices being made. If by flight, the original problem has gone (flown) away, leaving a choice that can now be readily made but that solves nothing. Probably, most decisions are made by oversight or flight, not by resolution.

Whether a decision happens is because of the temporal proximity of what streams into the garbage can, that is, a decision happens when a suitable collection of problems, solutions, participants, and choices coincides. When it does, solutions are attached to problems and problems to choices by participants who happen to have the time and energy to do it. So, the decision that is made may be more or less uncoupled from the apparent process of making it, being a result of other coincidental reasons.

Seen like this, "An organization is a collection of choices looking for problems, issues and feelings looking for decision situations in which they might be aired, solutions looking for issues to which they might be the answer, and decision-makers looking for work." Although this may be so anywhere, nowhere is it more so than in an organized anarchy, such as a university.

March admits that the picture may be overdrawn, but he contends that it is real enough to mean that the rational technology of reason should be supplemented with a technology of foolishness. Sometimes, people should act *before* they think, so that they may discover new goals in the course of that action. They should make decisions with consequences for the future in the knowledge that they do not know what will be wanted in the future. In terms of ostensible rationality, this is foolish. But decision making needs scope for foolishness. Playfulness allows this. Playfulness is a deliberate (but temporary) suspension of the normal rational rules so that we can experiment. We need to play with foolish alternatives and inconsistent possibilities. We need to treat goals as hypotheses to be changed, intuitions as real, hypocrisy as a transitional inconsistency, memory as an enemy of novelty, and experience not as fixed history but as a theory of what happened, which we can change if that helps us learn. From time to time, we should be foolishly playful inside our garbage cans.

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Karl E. Weick

Karl Weick's lively view of managing and organizing, active words he prefers to the more static terms *management* and *organization*, matches the liveliness of his personal interests, which he says range from jazz big bands to railroading. In its essentials, his is the view of an American psychologist who has used his discipline imaginatively to deepen the understanding of this field of endeavor. Weick is the Rensis Likert Distinguished Professor of Organizational Behavior and Psychology at the University of Michigan.

As he sees organizations, they are "sensemaking systems" which incessantly create and recreate conceptions of themselves and those around them that seem sensible and stable enough to be manageable. Their members continually reaffirm to one another the truths of this reality as they see it and the correctness of what should be done about it. Sensemaking is more than interpretation; it includes generating what is interpreted. People build up a view of themselves and what is going on, and at the same time interpret what was their own view in the first place. As Weick frequently puts it, "People know what they think when they see what they say."

So, sensemaking is rolling hindsight. It is a continual weaving of sense from beliefs, implicit assumptions, tales from the past, unspoken premises for decision and action, and ideas about what will happen as a result of what can be done. Once put into words, it is constrained and framed by those same words because they are only approximately what they refer to. Often, words have multiple meanings, so all the time people are working with puns. Furthermore, words are inclined to convey discrete categories: They are not equal to depicting the unbroken complex flow of life in organizations.

The sense that is made is shaped also by selective perception, that is, by noticing some things and not others. Commitments that have been made, then, have to be justified retrospectively. There is a constant process of putting together reasoned arguments and arguing about them, most obviously in meetings that have a value as sensemaking occasions. The sense

that is made, though, has its limits. People with time to spend on a problem make sense of it in a way most understandable to themselves, so others become less able to follow what is afoot. Showing up at meetings therefore produces a situation that is manageable only by those who have been showing up.

The whole sensemaking process gives ostensible orderliness to what is going on and has occurred. The development of a generic sensemaking, within which individuals differ yet sufficiently concur, maintains a sense of organization.

Organizational sensemaking has at least seven distinguishing characteristics. It is:

- 1. *Grounded in identity construction* because sensemakers perpetually redefine their notion of themselves.
- Retrospective, a never-ending reconstruction of experience. We are in the position of explorers who never know what they are exploring until it has been explored.
- 3. Enactive of sensible environments because people make sense of their worlds. By so doing, they create, or enact, a part of the very environment they face. They implant their own reality. So, an organization imposes the environment that imposes on it, and the bigger it becomes the more it runs into what it has itself enacted. A manufacturer that defines itself as the monopoly supplier of a product will, by that enactment, hamper itself from perceiving that innovative substitutes are a threat to its market. Most firms in the Swiss traditional watch industry, for example, just did not enact their environment to include cheap digital watches, and so suffered.
- 4. *Social* because it occurs with and in relation to other people inside and outside the organization.
- 5. *Ongoing* because it never stops and therefore never starts. Sensemaking is always in process.
- 6. Focused on and by extracted cues, that is, growing from familiar points of reference. Controlling these cues is a source of power because controlling what others respond to frames the view they will take and what they will do.
- 7. Driven by plausibility rather than accuracy because "the sensible need not be sensable." People go along with what to them is plausible and credible even if it cannot be checked. It might also have some accuracy, but because an equivocal and changing world has always moved on before a precise account of it can be formulated, absolute accuracy is impossible. Hence, accuracy takes second place to acceptability, to a version good enough to guide action for the time being.

Excellent illustrations of the impact of the enacted nature of organizational sensemaking are given by an examination of crisis situations. These are so complex that the enactments of the individuals involved will inevitably be partial, and their interactions may well exacerbate the crisis. Weick uses the example of the industrial disaster at the Union Carbide plant in Bhophal, India, to show how the preconceptions of everybody involved, from senior managers to operators, determined which action was taken. Their enacted views of their situation led to disaster. He wryly quotes the operating manual. After telling operators to dump the gas into a spare tank if a leak cannot be stopped, this manual states: "There may be other situations not covered above. The situation will determine the appropriate action." In fact, it was the other way around: The actions of the managers and operators determined the disaster situation. For example, after earlier safety violations had been corrected, top management regarded the plant as safe. This preconception allowed them to undertake methods of reducing the operating costs of a safe plant in ways that, in the event, contributed to the disaster. Again, the operators had long dismissed an operating gauge as dysfunctional, having had trouble with it. They therefore neglected its correct reading in the disaster situation—a blind spot which had an important bearing on their attempts to make sense of what was happening. This is not to blame them; we often cannot know what "the appropriate action" should be until we are involved in doing something, seeing what happens, and making sense of it.

Weick also makes use of a published study in the knitwear industry in Scotland to illustrate the seven characteristics of sensemaking given above. A number of small manufacturers in and around one town make cashmere sweaters. The managers of each see their own firm as having a distinct identity, signified by color and design of product, within an industry having a collective high-quality identity that distinguishes it from other makers of sweaters. The industry claims to have a business strategy centered on a specific high-income market, a strategy that has developed retrospectively from experience of sales, rather than has been planned with foresight. The sales agents whom the firms employ sell classically designed clothes and therefore feed back information from that particular market that confirms the prior beliefs the makers hold about it. Thus, the latter constantly reenact their environment, affirming this by social (including sociable) contacts in and between firms, the whole a continual ongoing process during which cues from designers, trade shows, and shops, as well as from the agents, reinforce the particular way in which the situation is perceived and so sustain its plausibility.

This is a long-established industry where sensemaking is molded by handicraft traditions. In younger organizations with professionally qualified employees, sensemaking has freer range, especially when innovative, nonroutine decisions are to be made. Here, the enactment of environments and the self-fulfilling prophecies that result should be most conspicuous. If, however, these newer organizations follow the current fashion and set up self-managed teams, their sensemaking will become less generic and more fragmented. Each team will make sense of things in its own way.

Paradoxically, if sensemaking constructs relatively stable interpretations, then this would render a flexible organic form of organization (see Burns, chapter 2) steadily less so, and steadily less effective if it continued to be in an unstable environment. This might account for the tendency of organic organizations to drift toward the mechanistic form.

Whatever the form of organization, some of its elements will be tightly coupled together, whereas the coupling of others will be comparatively loose. Weick derives the concept of loose coupling from work by March and others. It means that if some parts or activities in an organization change, the effect of this on other parts or activities will be limited, slow to show, or both. The mutual influence of loosely coupled systems is low.

Loose coupling facilitates adaptation. In a loosely coupled organization, there can be differential change, some aspects changing faster or more than others, so that, overall, there is a flexible response by the organization. Because bonds within loosely coupled subassemblies are stronger than those between them (e.g., within work groups or departments, as against between work groups or departments), there is both stability and flexibility.

Whatever the form of organization, it will have to work with ambiguous, uncertain, equivocal, and changing information. Despite their facade of numbers and objectivity and accountability, organizations and those who manage them wade among guesswork, subjectivity, and arbitrariness. Weick believes that language could better reflect this constant ambiguous flux by making more use of verbs and less of nouns. Indeed, as noted earlier, he urges people to "stamp out nouns": to think of *managing* rather than *management*, of *organizing* rather than *organization*.

He offers managers and others in organizations 10 further pieces of advice:

Don't panic in the face of disorder. Some degree of disorder is necessary so
that disorderly, ambiguous information can be taken in and coped with
rather than tidily screened out.

- 2. You never do one thing all at once. Whatever you do has many ramifications, not just the one you have in mind. And whereas some consequences happen right away, others show up indirectly and much later.
- 3. Chaotic action is preferable to orderly inaction. When someone says, "What shall I do?" and is told, "I don't know, just do something," that is probably good advice. Because sense is made of events retrospectively, an action, any action, provides something to make sense of. Inaction is more senseless.
- 4. The most important decisions are often the least apparent. Decisions about what is to be retained in files, in databases, or in memories indeed provide the basis for future action. Such decisions may not be conspicuous, yet they sustain the past from which the future is begun.
- 5. *There is no solution.* Because there are no simple answers and because rarely is anything right or wrong, learn to live with improvisation and just a tolerable level of reasonableness.
- 6. Stamp out utility. Good adaptation now rules out some options for the future. Concentrating overmuch on utility now can rule out sources of future utility. Resources and choices are used up. It is better to retain some noise and variability in the system, even at a cost to present efficiency, so that fresh future repertoires of action may be opened up.
- 7. The map is the territory. When the manager's map of what causes what, drawn from past experience, is superimposed on the future, it becomes for the user the territory that it maps. Simplification though it is, such a map has been worked over more than any other product has, and is as good a guide as can be had.
- 8. Rechart the organizational chart. Do not be boxed in by its conventional form. See things as they work out and people as they are to you. See the chart in the way it functions. For example, in the box on the chart for chairperson, write "hesitancy"; in the box for general manager, write "assertiveness"; and so on as people come over to you.
- 9. Visualize organizations as evolutionary systems. See what is evolving and what you can and should change. Likewise, recognize what is not and what you cannot.
- Complicate yourself! Consider different causes, other solutions, new situations, and more complex alternatives and take pleasure in the process of doing so.

Weick does his best to follow his own final piece of advice and always to move on toward other ways of looking at organizing and organizers.

SOURCE: From Weick, K. E. (1995). Sensemaking in organizations, Thousand Oaks, CA: Sage.

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