

CHAPTER 7

James March and Herbert Simon, *Organizations*

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March and Simon's work *Organizations* (1958) is described by them as one in which they

surveyed the literature on organization theory, starting with those theories that viewed the employee as an instrument and physiological automaton, proceeding through theories that were centrally concerned with the motivational and affective aspects of human behavior, and concluding with theories that placed particular emphasis on cognitive processes. (p. 5)

They assert that the literature about organizations to the time that they wrote was the result of the experience of executives, the scientific management movement, sociologists, social psychologists, political scientists, and economists, little of which had been well substantiated empirically.

Much organization theory was developed by the "classical" school and had been directed largely into two areas. The first is "scientific management." Theorists such as Taylor and Gilbreth brought a great deal of precision into the analysis, management, and reorganization of routine tasks. They attempted to develop a prescribed set of operating procedures to be used in analyzing and setting forth guidelines for effectiveness in organization. The second category is called the "administrative management school." These writers were generally concerned with the most effective way to organize tasks in order to achieve organizational goals, dealing with problems such as how to group tasks into jobs, jobs into larger administrative units, these administrative units into larger units, and so on to minimize the cost of

performing these activities. In general, these theorists attempt to develop principles of organization to be applied across organization types.

These theories were untested. The motivational assumptions they make about individuals and work tend to be inaccurate. There is little appreciation of intra-organizational conflict. By and large they may be criticized for their lack of consideration of the human factor. They give little attention to the role of cognition in task identification, nor does the concept of program elaboration receive much attention. It is with these limitations regarding classical organization theory that March and Simon begin their work.

Some Assumptions

An organization is a system of interrelated social behaviors of a number of participants. While the definitions generally used by the classical school fall within this construct, March and Simon derive their conclusions from the model of influence processes in organizations.

Behavior results from a stimulus. Stimuli are perceived by the individual. They act upon memory. Memory is composed of values, perceptions, beliefs, experiences, programs, alternatives, and other knowledge stored in the psychological bank of the individual. As a result of perceiving external changes in the environment, or stimuli, the individual evokes, or calls forth, certain of these stored values, experiences, and perceptions which he or she believes particularly pertinent to the situation. The “evoked set” is that part of the memory which influences the behavior of the individual: It contains some behavior programs which the individual will enact.

Behavior can be changed, or influenced, in at least two ways. First, behavior may be changed by learning, or changing the memory of the individual. Then, in reacting to stimuli, the individual may evoke part of the new memory content. This, then, should impact his or her behavior. Second, change in the stimuli may change behavior. Different stimuli may evoke different sets, which include different behavior programs, resulting in different behaviors.

There are several possible outcomes that may occur. First, the stimuli may act upon the memory and may obtain the desired behavior. Another possibility is that the stimuli is misunderstood by the individual and may evoke a different set than originally intended. The resulting behavior may be undesired. For example, a person may perceive an unintended stimulus; that is, changes in the environment which were not planned by one who might have some control over it. These perceived stimuli may then evoke a certain set and perhaps trigger responses other than those intended.

In earlier theories, most of these possibilities were overlooked or not dealt with. The classical theorists and the administrative theorists did not consider in detail the fact that stimuli may generate unanticipated consequences because they may evoke a larger, or a different, memory set than expected. They believed that the environment contained well-defined stimuli which evoked a predictable memory set. This included a program for generating the appropriate, desirable response. For instance, use of the concept of economic rationality may result in offering increases

in economic well-being to the organization member as a stimulus. This presumably would evoke a set which contained values oriented toward improving one's economic status, a belief that such improvement is desirable, and a behavior program which includes the "appropriate" response of engaging in the activity desired by the management.

Organization Equilibrium: The Decision to Participate

The individual is essentially faced with two different decisions about organizations, each reflecting different considerations. The first is the decision to participate and the second is the decision to produce. The *decision to participate* is based on the concept of organization equilibrium, which refers to the balance of payments to members for their continued participation and contribution to the organization. The underlying concepts of organization equilibrium state that:

1. The organization is a system of interrelated social behavior of participants.
2. Each participant and group receives inducements from the organization for their contribution.
3. The individual continues to participate so long as the inducements he or she receives are greater than his or her contribution. This evaluation is measured by the individual in terms of his or her own values, which may reflect or include those other than economic.
4. The contributions of various groups are sources from which the organization creates inducements to pay the others.
5. Equilibrium (or solvency) occurs when the organization can continue to provide inducement to members to obtain their contributions.

The general scope of the concept of organization equilibrium considers managers, employees, customers, suppliers, investors, the communities, and lenders. These are individuals and subgroups which make some sort of contribution to the existence of the organization. In short, anyone providing input needed by the organization for its continued existence and survival must be viewed as an integral part of the system. Should one group leave, or change basically in nature, then the organization's equilibrium is disturbed, and a new level must be sought and achieved. This may require a redistribution of inducements to others in order to obtain their participation.

The basic notion of organization equilibrium is: Increases in the balance of inducement utilities over contribution utilities decrease the propensity of the individual to move; decreases in the balance of inducement utilities over contribution utilities increase the propensity to move. Inducement utilities received by an individual or group represent more than economic consideration such as wages. Satisfaction with the organization, identification with group members, and other noneconomic values all contribute to the inducement-contribution balance.

This balance is affected by two major considerations: (1) the perceived desirability of leaving the job, and (2) the perceived ease of movement from the organization. The perceived desirability of leaving is a function of the individual's job satisfaction and the possibility of intraorganizational transfer. When individual job satisfaction is high, it may be less desirable for one to move. Several factors may affect job satisfaction (such as compatibility of work requirements with other roles, conformity of the work roles with the individual's self-characterization, and the predictability of instrumental relationships on the job), and when the person is not satisfied with his or her job, he or she may consider the possibility of an intraorganizational transfer. If this is possible, then there is less likelihood of leaving the organization. Intraorganizational transfer possibilities may be related to the organizational size; that is, in large organizations there is a greater possibility of internal transfer than in small.

The second factor that affects the inducement-contribution balance is the person's perceived ease of movement, or the number of job alternatives available. The more job offers he or she believes to have, the greater the perceived ease of movement. Personal characteristics, such as sex, age, and social status, may affect the degree to which external alternatives are perceived to be available. Skill and organizational tenure may reduce the external alternatives perceived to be available.

Thus, the likelihood of the individual leaving is a function of the desire to leave and the perceived ease of movement. If there is no desire to leave, then perceived ease of movement is not important. When one is highly dissatisfied with the organization and does wish to leave, but has few perceived external alternatives available, then it is not likely that he or she will leave and, thus, decide to remain in the organization—or participate.

The Decision to Produce

The *decision to produce* is based on a set of factors different from those that affect the decision to participate. It is a function of the character of, and the perceived consequences of, the evoked set of alternatives that emerges from the cues perceived within the environment, both internal and external to the organization that are then weighed against the individual's goals and values.

One factor which affects the motivation to produce may be the perceived external alternatives, discussed above. It may be more desirable to leave the organization than to comply with the performance requirements or group norms. A second factor, the work group and its norms, also affects the individual's evaluation of alternatives. One evaluates alternatives in terms of group norms, or those behaviors which the group may define acceptable. Thus, behavior of those in close social and physical proximity affects alternatives one may consider.

By and large, these alternatives represent possible actions. We simultaneously consider behavior possibilities and assess the perceived consequences of the evoked set. Conformity to organizational requirements will be less important when the individual perceives other alternatives to participation, which may be largely determined by his or her perception of the job market or general labor market conditions.

It is also a function of the perceived ease of movement to other organizations. When the individual feels that it would be difficult to move, that few jobs are available, he or she may view organizational conformity as important, and thus conform.

The degree to which the desired alternatives violate organizational requirements is another important individual consideration in the evaluation of alternatives. Effective compliance with organizational requirements is intended to result in the attainment and acquisition of organizational rewards. The reward system in an organization will have an effect on activity of members. Obtaining organizationally based values is largely a function of an individual's ability to meet the performance requirements of the organization.

However, it is often difficult to determine organizational performance criteria. These criteria may be a function of work group size; that is, the larger the work group, the more difficult it is to develop performance criteria and apply incentive systems. Second, the degree to which activities have been routinized and measured are important dimensions in criteria development. Organizational level is relevant here. Activities at the lowest level of the organization are more routine and programmed than higher-level activities. Performance criteria are generally more difficult to determine for higher-level officials, making it extremely difficult to tie organizational rewards to current performance at high levels. For example, the success of an organization today may be a result of decisions made three, five, or ten years ago by some other chief executive, yet it is the incumbent chief executive who receives praise or criticism.

Identification with internal or external groups affects one's evaluations of the consequences. Group pressures will largely be a function of the degree to which the individual identifies with the group. The stronger the group identification, the greater the potential group pressures.

Group pressures are significant for other reasons. Group consensus and the extent to which the group controls the environment represent pressures that may have an impact on the individual even though he or she may not identify with the group. If the group is able to influence organizational activity, or control the reward-sanction system, the individual may be forced to respond to group pressures even though he or she does not identify with the group.

When an individual perceives a stimulus to engage in behavior, a set is evoked which includes alternative actions. Each of these alternatives is evaluated in terms of its perceived consequences. They are compared to some values, or standards, which are a function of the individual's goals. These do not develop in a sterile environment. Humans, in general, evaluate their own positions in relation to the values of others and may accept other's goals as their own. Individual goals emerge from the process of identification with others. Here the concern is with the degree to which groups of one sort or the other affect and condition the goals of the individual.

An individual may identify with any or all, at different points in time, of the following types of groups:

Professional associations, family, or other types of extraorganizational groups.

Friendship groups and other social-emotional subgroups within the organization environment.

The organization itself.

Task groups in the organization involved in the performance of specific organizational assignment, similar perhaps to departments.

Obviously, the stronger the group identification, the more likely it is that individual's goals will conform to those prescribed by group norms. Group identification will be greater as a function of the following:

1. The greater the perceived prestige of the group. Prestige may be a function of success, status, or the individual's perception.
2. The greater the extent to which perceived goals are shared by members.
3. The more the perceived goals are shared by group members, the greater interaction of members.
4. The more frequent the interaction among members, the greater the propensity to identify with the group.
5. The greater the number of needs satisfied in the group, the greater the propensity of any individual to identify with the group.
6. The amount of competition between the individual and the group is negatively related to the degree of individual identification with the group.

Group Conflict

Simply because one elects to remain in an organization and operate at a given activity level, internal conflict and bargaining among members and member units are not precluded. The inducements/contributions balance permits some degree of latitude within which organization conflict and bargaining can occur because it is flexible and the level of productive activity is elastic. The decision to produce and to participate may be within the range of "semiconscious" motivational factors but conflict is more a "conscious and deliberate power phenomenon."

Conflict among organizational units arises from the following factors: the existence of a "felt need for joint decision making," differences in goals, and differences in perceptions of reality. Individuals may feel that certain decision-making situations call for representatives from several units. There may be a high degree of instrumental interdependence among units. Unit A may perform an operation on a product which may limit or condition the degree of success of Unit B. For instance, if Unit A is a metal-finishing department and Unit B is a paint shop, then the metal finish may significantly affect the quality of the paint job. Mutual dependence upon limited resources may increase the need for joint decision-making. Where several units rely on a limited budget for support, it is likely that members desire to jointly determine budget allocations.

Differences in perceived goals may be a condition that precedes conflict. Different organizational units may perceive different ends as justified. Organizational units

may view their function as being more significant than other units, justifiably believing they should have a larger share of resources. Differences in goals may be a function of the size of the unit, particularly when it is reflected in the existence of a greater number of departments, which results in a larger number of differentiated goals.

Individual perceptions of reality may foster intergroup conflict. There may be substantial difference between the goals of individual members. The departmental affiliation of a member may affect perception of problems. The kind of information and the communication channels through which it flows affect the perceptions of the reality of the problem. As the number of communications channels increases, the possibility for increased differentiation of perception within the organization occurs. When the same information passes through many different channels, each may distort, filter, and edit it to suit its own needs.

When intergroup conflict exists, it must be resolved to obtain equilibrium. Conflict may be resolved by analytic or bargaining processes. Analytic processes are methods where public and private agreement among the conflicting groups is sought. Problem-solving and resolution of conflict by higher-level officials are *analytic* processes. These tend to be used when the conflict situation is more a function of individuals than intergroup differences. The general characteristic of these processes is increased information of alternatives and evaluation of the consequences of them.

Bargaining processes are attempts to resolve conflicts through the use of politics or gamesmanship. These methods are predominant when the differences are between groups rather than individuals. Bargaining processes, however, require the use of power and status, and this may have a negative impact on members. Power and status differences may be strengthened or weakened in the process. In either event, one group may suffer. Hence, there will be a tendency to treat conflict as “individual” and resolve it using an analytical method.

The Cognitive Limits of Rationality

The classical concept of the “rational” decision-making situation is limited in practice. Rational, or optimum, decisions require that all alternatives to a problem are perceived by the problem-solver. Criteria must be available which permit these to be evaluated and compared. The alternative finally selected should be that preferred above all others.

This is hardly the case in organizational life, where it is unlikely that all alternatives are known. It is even less likely that criteria exist for adequate comparison of all alternatives. Thus, decision making can only be rational within certain limits. The known alternatives, then, represent the boundaries, or parameters, of decision rationality.

Rather than “optimizing” as an organizational decision-making methodology, decision makers “satisfice.” 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.

An alternative is considered satisfactory if

1. a set of criteria exists that describe minimally satisfactory alternatives, and
2. the alternative in question meets or exceeds all these criteria.

Types of decision making may vary, ranging from a case in which an individual searches for various alternative behavior to one where environmental stimuli evoke a highly complex and organized set of responses. These highly complex sets of responses are called "programs." The existence of programs accounts, in large part, for the predictability of individual performance and behavior. Programs may be viewed as a part of the organizational control system. Individuals in the organization accept programs based on the factors discussed previously under the "decision to produce."

Programs exist as a function of the ability to group activities and a need for coordination. When it is relatively easy to observe and relate job output and activities, then it is possible to develop programs. As the difficulty of observing this relationship increases, the difficulty of devising organizational programs increases. Programs may also exist, or be developed, when there is a need for coordination of either activity or output. Where there is a need for a high level of coordination, then some method will be developed to ensure that it occurs.

Programs are not meant to be extremely rigid behavioral specifications in all cases, but they may be. For instance, a program which prescribes behavior for an emergency breakdown of a production line may be highly specific. On the other hand, a program dealing with price determination of special job-lot-produced equipment may be relatively flexible. Individual discretion in the use of programs is determined by whether it specifies outcome, or ends, to a greater degree than it specifies the means of achieving these ends. Programs which describe how to do something allow less discretion than programs which simply state the results desired. The hierarchical structure of programs within the organization is related to the concept of organizational levels. Higher-level officials in an organization modify programs implemented by lower-level personnel.

The organization's structure may be viewed as a function of the problem-solving process. The existence of structure, or programs, provides boundaries or parameters of rationalities for the decision-making process. Its existence provides some degree of stability and permanency to behavior within an organization, and this is a necessary characteristic of an organization's behavior.

Rational behavior rests upon the concept of "goal." The individual defines his or her behavior in terms of goal attainment. Selection of alternatives which enhance the probability of obtaining goals may be viewed as rational behavior. Thus, the goals of the individual condition whether his or her behavior is "rational" or "irrational." The behavior of one unit may be viewed by another as being nonrational behavior because of discrepant goal perception. This may be due to factoring organizational goals into subgoals for lower-level units.

Goal factoring may be viewed as a type of means-end analysis: if the overall organizational goal is viewed as the end, then those units at the highest level engage in the means of achieving that end. When one of these units is subdivided into

small organization components, the means of the larger unit become the objective (or the end) of the smaller unit. This continues until the overall organizational goal has been factored into small behavior components. The factoring of overall organizational goals may result in units directing attention to their own goals. The degree of goal differentiation is important, since members of units often see goals in some particular frame of reference. Thus the number of departmental units, and the one with which an individual is affiliated, affects his or her goal perception.

As the goal becomes factored at lower and lower organizational levels, specialization of function and labor occur. Specialization of labor allows the organization to take advantage of repetitive programs. The type of specialization of labor, or the manner in which the goals have been factored, will affect the interdependence relationships among various departments. For instance, the greater the process specialization, the greater the interdependencies among departments.

The interdependencies and complexities that can occur within an organization are limited by the effectiveness of the communication processes and channels. The communication channels, or systems, in an organization are both planned and spontaneous. Certain methods for transmission of specific types of information must be provided to satisfy formal organization requirements. Additionally, there may be a need for information that is not specifically formally sanctioned. Where this information gap exists, a channel will develop to provide it. The greater the efficiency in communications, the greater the tolerance among members for departmental interdependence.

The Innovation and Elaboration of Programs

When the structure of active programs does not contain any which are adequate to meet organizational criteria, then new ones will be initiated to solve the problem. Programmed activity involves routine problem-solving. The details of behavior are relatively well-defined. Changing old programs, or devising new ones, requires a process of innovation and initiation. New program possibilities must be generated and their consequences examined. This innovating process is closely related to "problem-solving processes." In searching for programs, variables within the control of the individual or the organization will be first considered. If a satisfactory program is not developed, then an attempt will be made to change variables not within the discretion of the problem solvers. If this fails, then the criteria may be relaxed.

The criteria for satisfactory performance are closely related to the psychological concept of "level of aspiration." Aspiration levels change, but in general the adjustment process is a relatively slow, though constant one pressing upward. The aspiration level may be based on past organizational performance, but also on other bases of comparison. Firms compare themselves to other firms. When there is an awareness that better results can be obtained with other programs, there will be a revision in the standards of satisfaction.

The rate of innovation is likely to increase when changes in the internal or external environment make existing programs unsatisfactory. These environmental changes may result from deliberate design, or by accident. A "natural" process of

innovation, that is, a response to environmental stimuli, may be supplemented by organizational mechanisms to facilitate innovation. Whether or not members engage in research for new programs is a function of time pressures or deadlines and the degree to which clear goals can be associated with the activities.

The discovery, development, and implementation of a new program in the organization may result in the creation of a new unit to develop, elaborate, and implement it. The development phase of new programs may be a period of high activity and excitement, while the implementation phase tends to spur less interest since the program is becoming more routine. New programs may be invented, or borrowed. If a program exists outside the boundaries of the innovating organization, then it is likely that the organization will “borrow” it. When such is not the case, organization members will first call on their “stored” program solutions. As more people in the organization become aware of the problem, the number of available solutions will increase. The development and elaboration of these new programs is through the process of means-end analysis. The solution to the general problem is by a set of generally specified means. Each of these means becomes a subgoal, and a set of means must be discovered for achieving it. This process continues until the level of detail is such that programs exist to achieve the subgoal, for which criteria must be developed. Sensitivity to innovations is a function of the relevance of the innovation to needs of the specific unit involved. When the goal of the innovation does not “fit” with that of the reviewing organization level, it is less apt to receive high priority, or it may be referred to the appropriate level. The location of innovation is important to the power and influence structure of an organization. Organizational activity is affected by the processes that originate and evaluate proposals. The right to initiate is a source of power. It is one control over organizational activities.