CONTEMPORARY SYSTEMS THEORISTS HAVE PROVIDED A HELPFUL VIEW OF THE WAY GOAL-STRUCTURE MAY SHAPE ADMINISTRATIVE BEHAVIOR IN EDUCATIONAL ORGANIZATIONS. THE "TRADITIONALIST" VIEW ASSIGNED ORGANIZATIONAL GOALS THE FUNCTIONS OF FORECASTING AND PLANNING. THE "EMERGING MODEL" VIEWED GOALS AS UNDEFINED ELEMENTS REQUIRING LITTLE SYSTEMATIC TREATMENT IN A THEORY OF ADMINISTRATION. MARCH AND SIMON, EXEMPLARY OF MODERN THINKING, CONSIDER GOALS AS BOTH OPERATIONAL, THOSE PERMITTING MEANS-END ANALYSIS, AND NONOPERATIONAL, THOSE REQUIRING SUBGOAL SPECIFICATION BEFORE MEANS-END ANALYSIS. THIS DISTINCTION PRESENTS DIFFERENCES IN THE DECISION-MAKING PROCESS AND ILLUSTRATES THE EFFECT OF GOALS ON ADMINISTRATIVE STRUCTURE. THE VIEW OF GOALS AS UNDEFINED "GIVENS" HAS CHANGED TO ONE OF GOALS AS INTRINSIC FUNCTIONS IN THE ADMINISTRATIVE PROCESS. THIS PROJECT CONTINUES BY CLASSIFYING GOALS AND CONSTRAINTS SHAPING A DECISION AND EXPLORES AN IDENTIFIABLE FUNCTION IN THE SYSTEM. ALTHOUGH THE MODEL CONSTRUCTED NEEDS TESTING, "DIFFERENCES AMONG ORGANIZATIONS IN THE DISTRIBUTION OF GOALS (AS CLASSIFIED BY THE MODEL) WOULD BE PREJUDGED TO BE RELATED TO DIFFERENCES IN STRUCTURE AND OUTPUT." ADMINISTRATORS MUST NOT VIEW GOALS AS "GIVENS" BUT AS THE CENTRAL ORDERING PROCESS OF A COMPLEX SYSTEM. THIS PAPER WAS PRESENTED AT THE ANNUAL NATIONAL CONFERENCE OF PROFESSORS OF EDUCATIONAL ADMINISTRATION (20TH, INDIANA UNIVERSITY, AUGUST 25, 1966). (GB)
ORGANIZATIONAL GOALS: A SYSTEMS APPROACH

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The dictum, "define your objectives," is probably the most widely accepted and least questioned principle of the planning professions. Definitions of administration begin or conclude with reference to the primacy of getting objectives stated. Definitions of organizations invariably describe the goal oriented nature of the structure and Drucker's phrase, "managing by objective," brought to focus a variable idea in administrative theory that is beginning to develop conceptual and research status. The purpose of this paper is to identify and describe some models, representing evolving thought, that have been used to deal with the nature and function of goals in the organizational and administrative setting.

The Formal Model

The formal or traditionalist view of organizational goals was bred out of the union of reflective thinking and successful practice first exemplified by Henri Fayol. Fayol's key concept, prevoyance, to foretell the future and to prepare for it, was interpreted by Urwick to mean both forecasting and planning. In Fayol's view forecasting and planning were the central, indispensable administrative tasks which he incorporated into his maxim, "managing means looking ahead." The need for clearly defined goals in this planning process was assumed and the function of goals was to give direction to planning. Goals were viewed as undifferentiated elements, requiring no more than clear definition in order to be understood, accepted and acted on.

Basing much of his thinking on Fayol's earlier work, Urwick accepted planning as a central element in a nine element framework and asserted that if a plan "is to do something," there must be an objective. In his administrative models, however, goals or objectives are subsumed under the element of planning with the exhortation that the first characteristic of a good plan is that it is based on a clearly defined objective. It should be noted, however, that Urwick was one of the first to publicize the fact that most administrators and others are vague and hazy about where they are trying to go or why, a characteristic that is as true now as it was then. However, his model proposes no solutions to this problem nor does it treat objectives systematically.

As a third practitioner turned theorist, Mooney viewed organization as, "the form of every human association for the attainment of a common purpose"; considered organization to begin when people combine their efforts for a given purpose; and, as his first principle of organization, proposed coordination as the orderly arrangement of group effort to provide unity of action in the pursuit of a common purpose. Though purpose or objective seems a central element in his thought, it remains an undefined term and receives no systematic treatment.

Assuming that Fayol, Urwick, and Mooney represent the early formalists, the formalist model that emerges views goals or objectives as undefined or undifferentiated elements in organization and administration; central to the planning process, but requiring little or no systematic treatment in a theory of organization and
administration. The function of goals is to give direction to planning. It is assumed that, once organizational goals are clearly defined, the other elements of a plan, such as procedures and achievement or production measures will become clear and fall in line. This model assumes the rationality of stating objectives as the first step in a linear planning sequence.

A typical later extension of the undefined, formal model is found in Newman's Administrative Action (1956). The chapter, "Goals - The Guideposts in Administration," is essentially descriptive and reiterates the conventional wisdom. He begins and ends with the traditional assertions that sound administration starts with a statement, or at least a clear recognition, of goals to be achieved, and that every enterprise needs a clear statement of its objectives as a basis for all of its planning. Newman, however, does mention the existence of multiple organizational objectives, the need for balancing the importance of different objectives, and the need to break down broad objectives into a sequence of sub-objectives and operating goals.

Though Newman concludes by indicating that goals serve such functions as standards for appraising operating results, as a means of exercising control, and as a form of motivation, his basic approach is to see goals as inherently rational, undefined elements; as given requiring no further analysis of their nature or function in administration. In this he reflects the persistence of the formalist model in much of the current thinking on the topic.

Modern Rationalists Models

The undefined rationality of the early formalists was subjected to a major re-thinking in March and Simon's theory of formal organization. On the basis of generalizations that behavior in organization is intendedly rational and that organization structure and function derive from the characteristics of human problem-solving processes and rational human choice, March and Simon have made a distinction between operational and nonoperational goals; a distinction leading to differences in decision making processes and organization structure. Operational goals are defined as those which permit a means-ends analysis to be made, i.e., they provide the necessary measuring rod for comparing alternative means and for determining the contribution of means to goals. Non-operational goals are those which require the specification of sub-goals before they can be related to specific means or actions, i.e., there do not exist agreed-upon criteria for determining the extent to which particular activities or programs of activity contribute to these goals.

According to March and Simon, the distinction between operational and non-operational goals leads to two qualitatively different decision making processes and to the distinction between unitary and federal organization units. When individuals have the same operational goals, differences in opinion about the course of action will be resolved by predominantly analytic processes. When goals are not shared or when the shared goals are nonoperational and the operational subgoals are not shared, the decision will be reached by predominantly bargaining processes.

The relation of goals to structure is given in the following definitions:

1. "An organization is unitary to the extent that the scope of its activity coincides with a means-end structure organized around a single operational goal."
2. "An organization is federal if it is composed of a number of unitary sub-divisions."

3. "An organization is composite if the scope of its activity encompasses more than one means-end structure organized around operational goals and if it is not composed of unitary sub-divisions."

The importance of March and Simon's analysis is in its recognition of distinctions among goals and the influence of goal structure or organization structure. In contrast to traditionalist views, goals are perceived as significant variables in the administrative process and are moved to a more defined and central role in the study of organization and administration. The distinction between operational and nonoperational goals provides a major dimension for classifying goals with significant differences in functions between the goals thus classified.

Another current rationalist view is Vernon Buck's model for viewing an organization as a system of constraints. The model attempts to analyze all organization as a system of constraints. The model attempts to analyze all organizational behavior in terms of goals, costs, and resource capacity restrictions; using linear programming as a decision making model. In discussing goals, Buck points out that it is the decision to commit resources for certain activities and to withhold them from others that operationally defines the organization goals. Verbal pronouncements are insufficient for defining goals; the speaker must put his resources where his mouth is if something is to be considered a goal.

Simon pursued the notion of goals as constraints by confronting the dilemma of the concept of the organizational goal as a form of reification of the organization leading to its treatment as something more than a system of interacting individuals, and the seeming indispensability of the goal concept to organization theory. He proposes that instead of the phrase, "organizational goal," it is easier and clearer to view decisions as being concerned with discovering courses of action that satisfy a whole set of constraints. It is this set, and not any one of its members, that is most accurately viewed as the goal of the action.

Simon proceeds to identify two types of constraint sets or goals; those that may be used directly to synthesize proposed solutions (alternative generation) and those that test the satisfactoriness of a proposed solution (alternative testing). The goals that guide the actual synthesis and the constraints that determine whether possible courses of action are in fact feasible, i.e., the distinction between generator constraints and test constraints, help to resolve the ambiguity in the notion of goals as widely shared and in conflict. The constraint sets used in testing are generally widely shared and serve as organizational goals. Goals as constraint sets denoting the generators are typically in conflict. It is important to make explicit which sense of goal is intended.

In the process of operationalizing the concept of organizational goal, the new rationalists have moved from a view of goals as undefined and a priori given in the organization to a view of goals as a function of decisions involving resource allocations and constraints on these allocations. In this sense, goals are emergent, changing, multi-functional and frequently conflicted rather than unitary, precise, and teleological. The review of selected systems approaches to goal analysis that follows provides a set of insights that are as important as, and complementary to, current rationalist approaches.
System Approaches

Though current rationalist approaches to organizational goals merge into system terms and concepts, system theory approaches to the study of organizational goals have contributed useful concepts and understandings of their own. One of the first breaks with the undefined rationality of the early formalists was Barnard's insightful analysis which may be said to be the precursor of the systems approach.

Starting from the position that purpose is the unifying element of formal organization, Barnard sees purpose as having two forms: as an act of cooperation in which purpose is viewed objectively and reflects the interests of the organization, and as the subjective meaning of the act to the individual. In turn, purpose as the object of cooperation can serve as an element of a cooperative system only so long as the participants do not recognize that there are serious divergencies in their understanding of that purpose as an object of cooperation. Recognition of divergency varies with the concreteness or abstractness of the purpose. When purpose is of a general, intangible and sentimental character, divergencies can be very wide and yet not recognized. The following quote relates this view to current thinking:

"An objective purpose that can serve as the basis for a cooperative system is one that is believed by the contributors (or potential contributors) to it to be the determined purpose of the organization. The inculcation of belief in the real existence of a common purpose is an essential executive function." (Underlining added)

In further definition of his concepts, Barnard arrives at his well known distinction between effectiveness and efficiency. Effectiveness of cooperation is the accomplishment of the recognized objectives of cooperative action. Efficiency of a cooperative system is its capacity to maintain itself by the individual satisfactions it affords. This identification of two classes of processes first suggested the multi-purpose nature of an organization and the inherent conflict between them. As Barnard points out, the functions of the executive are those of securing the effective adaptation of these processes.

The proposition that an organization had more than one purpose and that purposes could be classified along an achievement-satisfaction dimension received considerable support from the human relations phase of theory development in administration and corollary developments in group dynamics and small group process. Lonsdale first traced the development of this line of thought from Barnard, through Roethlisberger and Dickson to the early work in group dynamics. The concept was stated explicitly by Roethlisberger and Dickson in their observation that:

"An industrial organization may be regarded as performing two major functions, that of producing a product and that of creating and distributing satisfaction among the individual members of the organization." (16)

This general concept received important support and elaboration from the work in group dynamics, small group research and theory, and T-Group theory and laboratory method. Beginning with Bion's formulation that every group has two
purposes; to accomplish work and to deal with the internal emotional resistances to work. Thelen\(^{18}\) extended the concept to ordinary work groups in his distinction between achievement problems and process problems.

Group activity may move from one problem area to the other. Nonproductive periods (in achievement terms) indicate that group energy is being given to dealing with process problems. Obstacles to achievement problem solving are due to an inability to find behaviors which simultaneously satisfy both sorts of problem solving demands. The relation between achievement and process is dynamic in that energy must be given to both problem areas if the group is to solve its achievement problems in a socially productive form.

The dimension emerging from such distinctions as effectiveness and efficiency, product and satisfaction, work and emotionality, achievement and process, and task and maintenance aspects of group and organizational activity is incorporated in Parson's\(^{19}\) social system theory. Hill's\(^{20}\) succinct simplification of this theory asserts that all social systems are organized in the sense that they are structurally differentiated about two major axes; a differentiation between internal and external considerations and a differentiation between instrumental considerations or problems of means, and consummatory considerations or problems of ends. When these axes are dichotomized they define four major functions; adaptation, goal attainment, pattern maintenance, and integration.

This four part framework provides one means of classifying goals and identifying goal functions. Goal statements are not simple, undefined elements in a rational three part framework of goals, processes, and evaluation, but statements depicting a variety of desired states of a multipurpose organization and serving a number of functions for the organization. Goal statements may have an adaptive function, goal attainment function, pattern maintenance function, or integrative function. And each of these functions may be in competition for scarce resources. Therefore, the edict, state your goals, does not necessarily lead to rational planning, since goal statements may be in conflict. The problem of whether a pattern maintenance goal is given greater emphasis than a system attainment goal does not necessarily have a purely rational solution since it may be determined by collective bargaining or some other form of power play.

Another system based approach to goal analysis has been developed by Etzioni\(^{20}\). He begins with two assumptions; (1) goals depict a future state of affairs which organizations strive to realize, and (2) goals are multi-functional.

The definition of a goal as a desired state of affairs which an organization attempts to realize indicates that a goal state is sought but never exists. Once realized, a goal ceases to be a goal. The consequences of this view for organizational success almost always lead the evaluator or researcher to conclude that low effectiveness is a general characteristic of organizations since most organizations most of the time do not attain their goals in any final sense. Since goals as symbolic units, are ideals which are more attractive than the reality which the organization attains, the organization can almost always be reported to be a failure.

The notion of goals as future states of affairs permits a variety of goals to be stated or to be sought. The organization can be viewed as multi-purpose and/or it can be viewed as engaged in activities directed toward both implicit and explicit goals, many of which may conflict with each other.
Etzioni makes a distinction between a goal model and a system which is a working model of a social unit which is capable of achieving a goal.

"It is assumed a priori that some means have to be devoted to such non-goal functions as service and custodial activities, including means employed for the maintenance of the unit itself. From the viewpoint of the system model, such activities are functional and increase organizational effectiveness. It follows that a social unit that devotes all its efforts to fulfilling one functional requirement, even if it is that of performing goal activities, will undermine the fulfillment of this very functional requirement, because recruitment of means, maintenance of tools, and the social integration of the unit itself will be neglected."22

The systems-goal or instrumental-substantive distinction provides a useful view of the way goal structure may shape administrative behavior in educational organizations. Etzioni23 has proposed that the traditional concepts of line and staff tend to be reversed in institutions whose defining characteristic is the creation of, interpretation, application, and dissemination of knowledge. Hierarchical authority tends to become directed to the instrumental goals of maintaining the organization while the characterizing or substantive goals become the immediate responsibility of the specialist staff. Such instrumental goals as morale, satisfaction, loyalty or cohesiveness, have become measures of administrative effectiveness and sources of authority legitimation. For administrators, instrumental goals have become a primary concern in the exercise and legitimation of authority.24

One of the most systematic and comprehensive mergers of the theoretical and practical in the treatment of organizational goals, is the work of Bertram Gross.25 He introduces his topic "What Are Your Organization's Objectives" by pointing out that there is nothing that managers and management theorists are more solidly agreed on than the vital role of objectives in the managing of organizations and nothing better calculated to embarrass the average executive than the direct query, "Just what are your organization's objectives?" He goes on to assert that many managers are still too much the prisoners of outworn, single purpose models erected by defunct economists, engineers and public administration experts. Categorizations such as long and short range, general and specific, and instrumental and ultimate are considered inadequate for the complexities of purpose multiplicity. The complex domain of organizational objectives requires an approach capable of dealing more fully with the multiple dimensions of an organization's performance. This is the general systems approach, which in terms of the formal organization is:

1. A man-resource system in time
2. Open, transacts with environment
3. Characterized by internal and external relations of conflict as well as cooperation
4. A system for developing and using power, with varying degrees of authority and responsibility, both within the organization and in the external environment
5. A "feedback" system
6. Changing
7. Complex-with many sub-systems
8. Loose, with many components that may be imperfectly coordinated, partially autonomous, and only partially controllable.
Only partially knowable with many areas of uncertainty, with "black regions" as well as "black boxes" and with many variables that cannot be clearly defined and must be described in qualitative terms.

Subject to considerable uncertainty with respect to current information, future environmental conditions, and the consequences of its own actions.

Gross proceeds to identify two kinds of performance: producing outputs of services or goods and satisfying (or dissatisfying) various interests. These performances consist of seven structural activities from which seven sets of structural objectives may be derived. He proposes that the structure of any organization or unit thereof consist of:

1. people and
2. non-human resources,
3. grouped together in differentiated subsystems that
4. interrelate among themselves and
5. with the external environment
6. and are subject to various values and
7. to such central guidance as may help to provide the capacity for future performance.

The planning problem is to develop commitments to some pattern of objectives derived from the seven categories of objectives. The essence of planning is the selection of strategic objectives in the form of specific sequences of action to be taken by the organization.

The action that structure is determined by strategy is explored by Learned and Sporat in a brief but thorough review of relevant studies. Though evidence is presented to support the relation, the question is left open. They conclude their review with the question of whether or not the organizational pattern can or should reflect all the variables entering into company strategy and what variables it can or should reflect.

A Goal Analysis Model

In this section an attempt is made to construct a goal analysis and classification framework particularly applicable to educational goals and the functions they perform in educational organizations. The framework is based on open system theory. It is designed to classify statements that have been formally labeled as goals, behaviors in which goal direction is included in the description, and described constraints shaping a decision. The goal types within each of the categories formed by the intersects of the several dimensions are considered to perform an identifiable function in the system. In one sense, the classification scheme may be viewed as the basis for a content analysis of goal statements, constraint sets, policies, or strategies. Differences in the distribution or patterning of goals or goal strategies may provide a means for further exploration of the structure-strategy question. In addition, an understanding of goal patterning should prove to be useful information for the practicing administrator in the strategy of planning.

A preliminary definition of terminology may be helpful. Goals, aims, objectives, ends, purposes, and outputs are interchangeable terms in much of the discussion on goals and common usage in administration. In this paper, the term goals
will be used as the generic form; objectives will refer to those statements which can be used to generate means and be incorporated in measures of progress or production; aims will be used to refer to general statements that require sub-statements of objectives to put them into operational form; and purposes will be used to refer to statements which synthesize individual needs and organizational objectives.

The basic classification framework is shown in Figure 1.

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<th>Instrumental</th>
<th>Criterion</th>
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<tr>
<td>Nonoperational</td>
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<td>Operational</td>
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Figure 1. Two-Dimensional Goal Classification Framework.

The instrumental-criterion dimension is considered to include such related dimensions as (a) task-maintenance, (b) substantive-maintenance, and (c) instrumental-consummatory. Distinctions made by those cited in the previous sections of this paper. Instrumental goals refer to the stability, coherence, cohesiveness, equilibrium, or other aspects of the system. They include such notions as morale, satisfaction, efficiency, belongingness, esprit de corps, unity, loyalty, commitment, motivation, and sentiments. Their function in the system is given by the class designator, instrumental.

Criterion goals refer to statements that serve to characterize the system or organization, that relate the system to other systems, that serve to generate means and that are used to construct measures of production or progress. Their basic characteristic is the specification of substance, content or product of action. They incorporate the notions of task, production, work and achievement.

The operational-nonoperational dimension, as proposed by March and Simon, was defined previously. Operational goals are those which can be used in a means-end-evaluation analysis. Nonoperational goals require the specification of subgoals before a means-end analysis can be made.

Nonoperational goals serve a number of important functions including institutional legitimation; authority legitimation; relating the organization to the cultural, political, economic, and other social systems; justifying a multiplicity of operational goals some of which may be in conflict; and mobilizing support from diverse interest groups.

The four cell classification requires a third dimension in order to incorporate current system and rational distinctions among goals. The dimension as defined is an effort to make the framework exhaustive. The points along the continuum of the dimension differentiate ritual, telic, and constraint goals. Figure 2 is a diagram of the categories thus constructed.
Ritual goals are those in which both ends and means are perceived as clearly specific and known. Both ends and means are self-evident, requiring no justification or analysis. The means and ends are fixed or given with a single means performed according to a predetermined order, sequence, or rule. In the vernacular of bureaucracy, jurisdictions, rules, and routines become inviolable even though the substantive goals of the organization, as services to clients, are not served.

In another sense, ritual goals relate to Etzioni's cultural goal model and are the kinds of statements that pay obeisance to "God, motherhood and the flag." Nonoperational, criterion, ritual goals comprise much of the material in the periodic pronouncements of 'national' education committees, organizations and other self-appointed or politically appointed groups or individuals speaking for 'Education.' The function of these statements for the local school administrators are important as they may serve to legitimize programs, curricula, as innovations or to provide some focus for unity or consensus of otherwise diverse and conflicted special interest groups.

Teleological goals or statements are those in which the end is clearly defined and understood and the means or alternatives exist in discernible or describable form. In short there are known means to achieve known ends although the best alternative may not be known. Most of the subject goals in education are perceived as telic in form. Similarly production goals in industry would be classified in this category.

Constraint goals may be improperly or poorly labeled, partly because, as Gross pointed, there is a lack of a well developed language of organizational purposefulness. The referrent is to goals or statements which become increasingly defined as action is taken; in which the end emerges as action ensues; or in which the system state becomes defined as actions are taken. The emergent nature of these goals is consistent with the notion of goals as constraints, or of Cyert and March's description of preferences as an important element in their theory.

"Of the states of the world that might result from an organization's actions at any time, the organization will prefer some states to others. Preferences are generally not organization wide or immutable. They reflect a shifting consensus, forged in large measure from discussion, bargaining, compromise, and power plays among subgroups within the organization."29

The ritual-teleic-constraint dimension gives substance to the more general
instrumental-criterion and operational-nonoperational dimensions without tying to structural content such as personnel, finance, curriculum and the like. The complete model requires testing; first as a content analysis framework for examining the stated and behavioral goals of an organization and second as a research tool. Differences among organizations in the distribution of goals would be presumed to be related to differences in structure and output.
SUMMARY

The position developed in this paper is probably best summarized in a quote from Gross:

"Planning is an exercise in conflict management rather than only the sober application of technical rationality. Any real life planning process may be characterized as a stream of successive compromises punctuated by frequent occasions of deadlock or avoidance and occasional victories, defeats, and integrations."30

The ability to analyze and work with the patterned yet changing nature of organizational goals would seem to be an essential administrative skill for, as Gross has pointed out, the entire management structure is involved de facto in the daily operation of formulating and winning commitment to objectives for future performance and structure.

Goals, as a basic element of organization and a central concern of administration, can no longer be viewed as givens exempt from questioning, competition and conflict. The notion that stated goals are a self-evident basis for the beginning of a linear planning process does not hold for the range or multiplicity of an organization's goals. A considerable part of an administrator's time is involved in the development of goal strategies. And the prospect for even greater involvement is in the offing.

Michael has pointed out one of the implications for administration of the computer revolution in decision making.

"While the computer will relieve top administrators of minor burdens, it will enormously increase the demands on them to wrestle with the moral and ethical consequences of the policies they choose and implement. He will have to be a perpetual student, not only of the techniques of rationalized decision making but even more of the humanities."31

The point is more precisely made by Harlow32 in his assertion that purpose defining is the central function of the school administrator. In system terms purpose definition may be the central ordering process of a complex, indeterminate, boundedly rational, conflicted system and the definition of purpose may be the most important output of the system. The implications of this position for the training of administrators have yet to be explored.
Notes and Bibliography

12. Ibid, p. 87.


23. Ibid., p. 272.

24. Morris Janowitz, "Changing Patterns of Organizational Authority: The Military," *Administrative Science Quarterly*, 3 (March, 1959) p. 474. According to Janowitz, even military organizations have experienced the relative shift in the basis of authority from status toward morale and the more indirect forms of control involving persuasion and manipulation.


26. Ibid., p. 198.

27. Ibid., p. 195.


