

A CONCEPTUAL ANALYSIS AND PREDICTIVE
MODEL OF THE RELATIONSHIPS BETWEEN
CRITICAL ATTRIBUTES OF UTILITARIAN
ORGANIZATIONS AND VARYING LEVELS
AND STYLES OF MANAGEMENT

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PREFACE

The aim of this dissertation is to provide a new, mathematically-oriented management tool for use by real world industrial supervisors. This tool consists of a three-dimensional predictive model for each characteristic attribute of utilitarian or industrial organizations. The three dimensions of each model are: style of management; level of management; and a specific attribute of a utilitarian organization. Data derived from empirical research can be applied to develop each model which can then be used to select a preferred style of management.

In the absence of actual values, assumed data and weighting of attribute importance relative to the realization of organizational goal(s) provides substance for an illustration of its analysis both by attribute and overall.

This dissertation is an integration of the theories and research of management scholars who have developed the basic concepts adapted for use.

I take this opportunity to offer my sincere thanks to the entire faculty of the School of Industrial Engineering and Management at Oklahoma State University, and especially the members of my committee: Professor Wilson J. Bentley; Dr. Hamed K. Eldin; Dr. G.T. Stevens; Dr. Larry Perkins; but above all I want to express my profound appreciation

to my adviser, Dr. Earl J. Ferguson, whose interest, enthusiasm and advice were the constant catalysts in this endeavor.

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CHAPTER I

INTRODUCTION

For management of an industrial organization to be considered successful, it is necessary for the organization to be successful, i.e., to have achieved its organizational goals, whether written or unwritten. Most organizations, like most people, have their written or public goals and their unwritten or actual goals. The former are treated as being quite solemn and sacrosanct, however, the latter may vary depending on the current desires of the leaders of the organization. In either case, when an organization is unable to realize its established goals, then it is not a truly successful organization. Neither is its management successful. "Management success is an elusive concept. It frequently represents a set of intermediate evaluations which, in turn, it is hoped are approximations of more ultimate criteria of organizational success."¹-p.165

It is intended that this thesis present and substantiate several hypotheses which help to explain the elusive concept of management success. This research is directed towards a conceptual analysis and a predictive model of the relationships between critical attributes of utilitarian organizations and varying levels and styles of management. In the process of presenting this analysis and model, certain terms will

become critical in their usage. Therefore, it is necessary to also present some form of definitive explanation of these terms.

The definitions which follow, as well as the entire thesis, are extensively based on the numerous conceptualizations and results of empirical investigations by many social scientists and engineers whose efforts have preceded this student's. In establishing a common point of departure for this thesis, generous reference will be made to the works of these pioneers in the still youthful field of industrial human relations.

Definitions

Just as a physicist or mathematician introduces a new derivation by describing his symbology, it is equally as necessary here to define some basic terminology upon which an understanding of this thesis will be based.

Organization

Etzioni,^{2-p.vii} following Talcott Parsons,^{3-p.63} defines an "organization" as being a social unit which is predominantly oriented to the attainment of specific goals. The same category of social units are sometimes referred to as "institutions," but for consistency, the term "organization" will be used in this treatise to mean either "organization" or "bureaucracy," but not "institution" which has other broader meanings beyond the scope of this discussion.

Chester I. Barnard, whose extensive achievements in the field of

classical management theory are duly noted by the advocates of the human relations school of management theory, is most frequently quoted in his definition of organization. Barnard^{4-p.65} has stated that:

a cooperative system is a complex of physical, biological, personal and social components, which are in a systematic relationship by reason of the cooperation of two or more persons for at least one definite mutual end.

It then follows that:

one of the systems comprised within a cooperative system, the one which is implicit in the phrase "cooperation of two or more persons," is called an "organization."

Parsons defines an organization as "a system, which, as the attainment of its goal, 'produces' an identifiable something which can be utilized in some way by another system."^{3-p.64} These definitions appear to be mutually consistent and so have been used as a basis for the remainder of the following definitions.

Formal Organization

Barnard's definition of organization has been further redefined so it can be stated that a formal organization is a system of continuously, consciously coordinated activities or forces of two or more persons. Selznick,^{5-p.25} relying on the foundations of bureaucratic theory established by Weber,⁶ says that "a formal organization is the structural expression of a rational action." In practice a formal organization is one which has been verbalized, i.e., carefully described using organizational charts and job descriptions. These charts and descriptions

do not and cannot include informal organizations which invariably exist within the structure of the formal organization. The formal organization expects depersonalized performance of job requirements based on the division of labor, while the informal organization is concerned with personalized individuals, i.e., human beings. This thesis is focused entirely on the management of one type of formal organization--utilitarian organizations--which are discussed in the subsequent definition. This attention to formal organizations denies neither the existence nor the importance of informal organizations to the attainment of organizational goals, it merely reflects this student's desire to produce a working, predictive model for use by managers of utilitarian organizations.

Utilitarian Organization

Utilitarian organizations are those commercial and industrial enterprises which financially compensate their employees in return for the rendering of an individual's services, which are directed toward the achievement of organizational goals. In 1961, Amitai Etzioni,^{7-pp.3-21} a professor of sociology at Columbia University, proposed a basis for a comparative analysis of complex organizations. Using compliance as a central element of organizational structure, he explained that compliance is a major element of the relationship between two parties, those who have power, and those over whom they exercise it. The orientation of the subordinate, whether positive or negative, is referred to as their involvement in the organization. Power is generally defined as a

manager's ability to induce or influence a peer or subordinate to carry out his directives or any other norms he supports. Involvement refers to the cathectic-evaluative orientation of a member of an organization to the organization, and is characterized in terms of its intensity and direction. Using the power of management and the involvement of the subordinates as the two dimensions of his analytical base for the classification of organizations, Etzioni developed nine organizational associations. These associations constitute compliance relationships and serve as a basis for his organizational classification system. With three kinds of power (coercive, remunerative, and normative) and three kinds of involvement (alienative, calculative, and moral), Etzioni conceptually isolated three congruent and six incongruent types of organizations. A congruent relationship is one which empirically occurs more frequently than any of the others, primarily because it is more effective. One of the congruent types, a combination of remunerative power and calculative involvement, is referred to as being a utilitarian compliance organization. For the sake of brevity, it will henceforth be termed as simply a utilitarian organization.

Levels of Management

At the top of each block in an organization chart for a utilitarian organization is a formally appointed supervisor or manager. The total of these formal leaders comprise the managerial organization which exists within the hierarchy of the utilitarian organization itself. The size of the

managerial organization, i. e., the number of managers, varies extensively among bureaucracies; however, an average-sized concern is likely to have five levels: top executive; senior executive; junior executive; supervisory; and worker.⁸ Since these levels of management are common to nearly every utilitarian organization, this organizational fact of life is used extensively in the development of one of the major axes of the tripartite spatial model described in Chapter IV.

Managerial Climate

Kaczka and Kirk,⁹ influenced to a great extent by Likert and Seashore,^{10,11} have conceptually isolated and examined five dimensions of managerial climate: grievance behavior; cost emphasis; leadership style; congruence of leadership style; and attitudes of industrial engineering departments. In their analysis each of these experimental dimensions was assigned two extreme levels on the continuum of managerial climate from employee-oriented to task-oriented. In general, the managerial climate is a term representative of a composite of the predominate style of management (as discussed in Chapter II) and the general attitude regarding subordinates which prevails throughout all levels of management. This concept is useful here as a basis for discussion of organizational climate.

Organizational Climate

In their General Electric study, Meyer and Litwin identified

several variables as components of organizational climate: constraining conformity; responsibility; standards; rewards; organizational clarity; cohesiveness; pay and promotional opportunity; and recognition and support. These were reported by Sorcher and Danzig,¹² who feel that:

it is the manager who exerts a major influence on organizational climate, and therefore on the individuals within it. He should play a crucial and active role in stimulating his subordinates and in helping them grow, but many managers are not fully aware of the impact of their behavior or style.

The organizational climate or ethos is the distinguishing character or tone of a utilitarian organization. This is an emotional level which is closely associated with managerial climate and which effects the various attributes of utilitarian organizations.

Attributes of Utilitarian Organizations

An attribute of a utilitarian organization is any of a group of dichotomous properties which characterize such a bureaucracy and whose presence is inherent therein. These attributes which are presented and discussed in Chapter III can be either dysfunctional or eufunctional in their effect on the goals of utilitarian organizations. While dysfunctional attributes are deleterious to these goals, eufunctional attributes contribute to the accomplishment or realization of the goals. It is in the best interests of both organizational efficiency and effectiveness to eliminate dysfunctional attributes; however, this is often difficult. It seems that, in this regard, reduction of the degree of the propensity of a dysfunctional attribute will also contribute to the achievement of organizational goals.

One way that this can be accomplished is positive attribute transference, i.e., causation of a dysfunctional attribute to become eufunctional. The manner by which this can be done is described later in this chapter in the discussion following the presentation of hypotheses.

Interrelationships

Consistent with Parsons,^{3-p.63} a formal point of reference for this thesis is "primacy of orientation to the attainment of a specific goal." This is the "defining characteristic of an organization which distinguishes it from other types of social systems."

Beginning with the general case of a single individual, each individual has a multitude of goals which he desires to achieve, in an order of primacy previously described by Maslow.^{13-pp.80-106} Expanding this view, there is a collectivity of individuals with a far-reaching assortment of goals, some of which repeat, but none of which are identical to any other individual's goal(s). It occurs to this collectivity that the achievement or attainment of some of their individual goals is impossible without mutual cooperation; and so, with consensus, they organize--informally at first--to discuss their collective goal and the responsibilities of formal organization. Finally a formal assignment or allocation of these responsibilities to particular individuals is made. This formal organization has a primary goal, associated with the collectivity of individuals, and a secondary goal of satisfying the desires of the organization's members. The allocation or assignment of formal

responsibilities to selected individuals is commonly referred to as organizing, and is usually graphically portrayed by an organizational chart of interconnected blocks. These blocks are placed at various levels of the organizational hierarchy and reflect the organizational division of labor. This is the bureaucratic structure which formally functions to achieve organizational goals. Organizing, leading, creating, and deciding in each block at every level is a supervisor or manager who is responsible to his supervisor or manager for his portion of the organizational goal.⁸ The collectivity of individuals with these responsibilities is termed management. This exists in every formal utilitarian organization and so represents the general case for this study.

Given that the general case exists as previously described, consider what is referred to as the specific case. Within the hierarchy of the formal organization a specific task or immediate collective goal is assigned to the supervisor or manager of a particular block. This situation contains some certain pertinent components: the assigned task; the managerial climate which prevails through the formal organization; the organizational climate which results from the managerial climate; and a particular style of management. Conceptualists have theorized and empiricists have substantiated that management style is a continuum ranging from complete autocracy to total delegation and is at least dependent on: managerial motivation; managerial capability (including perception of the following); task; situation (including the work environment); the workers' educational level; the workers' socio-economic origin

(initial social status); and the workers' concept of the formally appointed manager's capabilities and motivations. ^{10-p.95}

Based on the task, the managerial and organizational climates and the resulting management style, a group effort results in some partial or full achievement of the assigned task. This, in turn, represents a portion of the primary collective goal of the collectivity of individuals referred to as a formal organization.

If each block was able to complete its task with 100 percent efficiency in coordination with every other block, this thesis (and others like it) would not be necessary. However, organizations are composed of people, and as a result certain dysfunctional attributes arise in the normal process of an organization's functioning. These dysfunctions are the curves, detours, and road blocks in what could otherwise be a straight road leading to the realization of the collective goals of the members of the organization, as well as those of the organization itself.

A careful examination of the attributes of utilitarian organizations leads to the belief that these dysfunctional attributes can be reduced and even made to be functional. Hopefully, this thesis provides a literate compendium of:

- (1) sufficient conceptualizations and suitable analyses to establish the validity of the hypotheses; and
- (2) a predictive model worthy of use by managers of utilitarian organizations.

Background Discussion

Recollecting the process of seeking, researching and reporting on this dissertation topic, several emotional experiences are recalled. For example, to an industrial engineer, schooled in the rational and logical technical skills of this discipline, it was indeed a special moment when it became clear that there are many innate benefits to be derived from the application of modern human relations techniques in today's industrial world.

It was, in fact, an engineer named Frederick Taylor,¹⁴ who first introduced the concept of scientific management to the industrial community (referred to in this thesis as utilitarian organizations). Taylor's works were followed by a seemingly endless stream of theorists and empiricists and the volumes of management texts began to grow, especially since the end of World War II. Today there is no great need for additional management historians, since several attempts at chronicling these endeavors have already been made. What are needed, however, and quite badly, are more attempts at integrating the various piecemeal management theories which exist today.

This thesis is just such an attempt. Combining the results of many management scholars into a practical, workable model is one small move toward the integration of some published investigations, results and conclusions. Hopefully this model will prove to be both productive and inspirational: productive in that it may be useful in the real world of industry; and inspirational in that it will cause other interested

students to move along similar lines and thereby advance the limits of man's self-knowledge.

Hypotheses

Up to now many management theorists have advocated that certain attributes of utilitarian organizations are always dysfunctional or negative in nature, but this student maintains and hopes to substantiate that:

(1) certain attributes of utilitarian organizations, normally considered dysfunctional, may also possess effectively eufunctional or positive properties, i. e., they can be made to be advantageous to an organization;

(2) the extent and frequency with which dysfunctional attributes become eufunctional depends in part on the style of management which prevails throughout an organization and the level of management being considered; and

(3) the incidence and effect on organizational goals of dysfunctional attributes can be significantly reduced through the judicious selection and application of an appropriate management style at each level of management.

For example, consider any typical attribute of a utilitarian organization, such as those listed in Table I, Chapter III. This attribute is classified by management theorists as being intrinsically dysfunctional. The presence of this dysfunctional attribute is known to be deleterious to the goals of the organization; however, due to the nature of the

organization, its presence cannot be avoided and so must be tolerated. In order to maximize organizational efficiency and effectiveness, the dysfunctional aspects of this attribute must be minimized. This is achievable through positive attribute transference, i.e., causation of a dysfunctional attribute to become eufunctional.

First, isolation of the particular level of management involved in the investigation must be accomplished. An examination of the appropriate tripartite spatial model of the type described in Chapter IV will reveal that a particular style of management will be superior to any other, given a selected attribute and a specific level of management.

The supervisors at this level of management must then receive appropriate encouragement and instruction to alter whatever style of management they have been using in favor of the style marked by the model as providing the least dysfunctional or most eufunctional consequences for that attribute. When this is accomplished in fact, then attribute transference will take place, thus yielding a condition more conducive to goal accomplishment. If, on the other hand, the wrong management style is effected, then negative attribute transference may occur. This is the worsening effect of increasing the dysfunctionality or reducing the eufunctionality of the existing condition.

CHAPTER II

MANAGEMENT STYLE CONTINUUM

Introduction

The manner in which a manager or formally-appointed leader conducts himself in the presence of his subordinates is frequently referred to as his management style. While this manner or style may or may not be altered from time to time depending upon pertinent circumstances, its presence is quite discernible and easily differentiated from some other style, however similar it may be superficially. There are numerous articles and books whose primary concern is the discussion and evaluation of various styles of management. It has been observed by learned management theorists, such as Likert,^{10,15} McGregor^{16,17} and Tannenbaum,¹⁸ that these varying management styles are in actuality discrete points on a continuum of possible management techniques.

An adaptation of Tannenbaum's continuum of leadership behavior is presented in Figure 1.^{18-pp.67-100} This constitutes recognition and a description of seven distinctly different management styles: the Autocrat; the Explainer; the Listener; the Buyer; the Brainstormer; the Participator; and the Delegator. The remainder of this chapter is devoted to a full explanation of the Autocrat, the Participator, and the Delegator (which

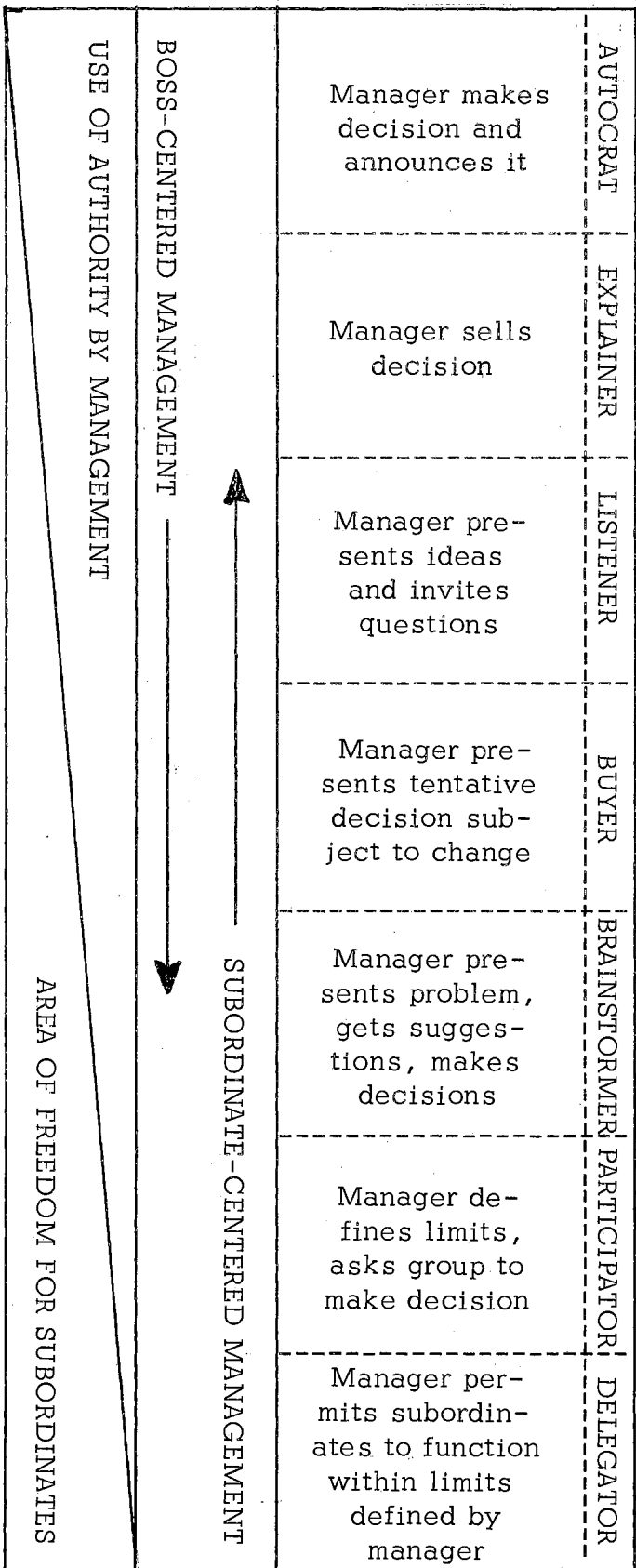


Figure 1. Management Style Continuum

comprise the autocracy-delegation management scale), and a briefer description of the characteristics of the remaining management styles. The autocracy-delegation management scale is used extensively as one dimension in the tripartite spatial model described in Chapter IV.

Autocratic Style

The autocratic manager is an individual who makes all his decisions without considering the needs or desires of his subordinates. Such a manager stubbornly refuses to provide any opportunity for group participation in the decision-making process. As Tannenbaum points out, "In this case the boss identifies a problem, considers alternative solutions, chooses one of them, and then reports this decision to his subordinates for implementation. . . . Coercion may or may not be used or implied."

Making maximum use of the authority vested in his position, the autocratic manager behaves in accordance with his belief that his subordinates expect him to exercise the power of this position. According to Kurt Lewin, this includes the authority to determine what each subordinate should do and with whom he should work. Without the courtesy of a rational reason for his decision, the autocratic manager introduces to his subordinates both the problem (a new task) and his solution (the method of resolution).

This is the original management style and has been used since prehistoric times by many different leaders of men. Primarily, it has been implemented by individuals who are unable to make use of other styles

of management due to either environmental circumstances (such as an emergency situation which requires immediate action) or personal inability to cope with subordinates in any other but a directive manner.

Participative Style

The participative manager or Participator is an individual who clearly defines the limits of a problem and then requests his subordinates to make a decision. The Participator may or may not take part in the ensuing discussion and actually become a member of the subordinate group while the problem, its limits and potential solutions are being considered.

This type of manager presumably understands the basic mechanics of human relations in that, by encouraging his subordinates to take part in the problem-solving, decision-making process, he is in fact providing them with a supporting, non-material incentive. Numerous empirical studies have conclusively determined that subordinate participation can improve morale, raise productivity, reduce turnover and nearly eliminate absenteeism. 10, 15

When a manager can share unlimited information regarding their jobs with his subordinates, he is better able to explain the advantages of proposed alternative solutions to problems posed. As a result, subordinates provide better recommendations and final decisions too. With an emphasis on informal, free communication and agreement rather than on rules or his own knowledge and authority, he sees his responsibility

primarily as one of coordination and of resolving problems of communication and understanding. 19-pp.87-93

Delegatory Style

The manager who primarily delegates total responsibility for a task where the only limits are those set by his boss is a rare one indeed. The Delegator permits his subordinates to make all decisions regarding a particular task without establishing any rules other than those imposed upon him from above. As Tannenbaum says,

This represents an extreme degree of group freedom only occasionally encountered in formal organizations, as, for instance, in many research groups. Here the team of managers or engineers undertakes the identification and diagnosis of the problem, develops alternative procedures for solving it, and decides on one or more of these alternative solutions.

If the Delegator participates in the subordinate meeting, he attempts to do so with no more authority than any of his subordinates. He commits himself in advance to assist in implementing whatever decision his subordinates collectively agree to. Many Delegators decline an opportunity such as this because they have consciously or unconsciously determined themselves to be unable to sit at any equal level with their subordinates. Given sufficient trust and confidence in his subordinates, this Delegator passes on the problem to the group and then accepts their collective decision without question.

Other Styles

Having discussed the Autocrat, the Participator and the Delegator, a briefer description of the remaining four management styles conceptually isolated by Tannenbaum are now presented:

The Explainer

The Explainer is located next to the far left of the management style continuum, and is an autocratic manager who recognizes human resistance to change. Therefore, rather than simply presenting his solution to a problem, he takes the precaution of persuading his subordinates to accept his decision.

This is accomplished by selling his methods through the suggestion of certain advantages to be gained by the subordinates should they support his decision to their fullest abilities. The Explainer seeks subordinate acceptance for several reasons: he may realize the importance of subordinate acceptance of his decision; he may be unable to arbitrarily issue orders, as an Autocrat does, without being assured of subordinate acceptance of himself or his orders; or he may have been instructed by his boss to completely acquaint his subordinates with the reasons or rationale behind a decision.

The Listener

The Listener is an Explainer, who, after he has attempted to sell his decision to his subordinates, asks for and tries to answer his

employees' questions. His decision is already made, but bearing in mind the importance of good human relations, he provides his subordinates with a question-and-answer period where they can better understand what he is trying to accomplish. Beyond this, such a give-and-take session enables both the Listener manager and his subordinates to explore more fully the implication of the manager's decision. Sometimes the Listener is well-intended and actually means to provide his subordinates, as well as himself, with a better understanding of the problem, his solution, and its ramifications; other times the Listener is playing the role of an understanding Autocrat, paternal if you will, who wants his employees to believe he is really interested in their welfare but who, in actuality, is merely trying to make his own job easier by smoothing the way for his decision and its implementation.

The Buyer

The Buyer is located at the centermost point of the seven discrete styles of management on Tannenbaum's continuum. The Buyer exercises the prerogative of management to analyze a problem and develop a tentative solution before meeting with his subordinates. Having identified and diagnosed a problem, he presents one or more approaches to its solution, and then discusses them with the people who will be responsible for carrying out whatever the final solution may be. As the manager, he reserves the right to make the final decision himself, but he permits his subordinates the opportunity to convince him to buy their way. The

styles of management to the left of the Buyer have all made their decision prior to meeting with the subordinates, but here is the first sign of equality--an opportunity for subordinates to help their manager to make up his mind. When he buys what his subordinates have to sell, he is, in effect, exercising considerably more human relations skill than does the Autocrat, the Explainer, or the Listener.

The Brainstormer

Located immediately to the right of the Buyer, the Brainstormer comes to his subordinates with a statement of a problem and a request for assistance in determining a solution. The group, i.e., the manager and his subordinates, sit down and brainstorm the multitude of possible solutions which appear to be feasible. Having conducted such a "skull session," the Brainstormer, like all the other managers to his left on the continuum, makes the final decision himself. This, however, is the ultimate in good human relations without actually permitting the subordinates to collectively and democratically make the final decision themselves. To the right of the Brainstormer, the Participator and the Delegator (both previously discussed in this chapter), encourage and actively support collective, democratic decision-making by their subordinates.

CHAPTER III

ATTRIBUTES OF UTILITARIAN ORGANIZATIONS

Presentation

Just as material objects have discernible, measurable attributes, non-material reality also possesses discernible, if not so measurable, attributes. The attributes of utilitarian organizations fall into the latter category, and as was noted in Chapter I, are a group of dichotomous properties which characterize such a bureaucracy and whose presence is inherent therein.

In the case of material reality, it is relatively simple to see and determine values for selected attributes. The height of a door, the thickness of a piece of glass, the color of a shirt, the viscosity of a liquid-- these are all attributes of a material reality. But non-material reality such as a utilitarian organization also possesses attributes. These attributes can be either dysfunctional or eufunctional in their influence on the goals of utilitarian organizations.

Dysfunctional attributes are harmful to these goals in that they hinder the efficient accomplishment of tasks which require effective completion in order to realize organizational goals. Eufunctional attributes, on the other hand, contribute to the actualization of organizational goals,

i.e., they reinforce individual and group physical efforts towards these ends. It is in the best interests of both organizational efficiency and effectiveness to eliminate, or at least reduce the effect of, dysfunctional attributes and stimulate or encourage the presence of eufunctional attributes.

One way that this can be accomplished is positive attribute transference, i.e., causation of a dysfunctional attribute to become eufunctional. It is our contention that intelligent application of the tripartite spatial model described in Chapter IV will accomplish this end.

Many management theorists and empiricists have studied the concept of organizational dysfunctions. They have been in fact, viewing what has been termed attributes of utilitarian organizations, but considering only the dysfunctional properties of these attributes. The remainder of this chapter is devoted to an initial presentation and brief discussion of critical attributes of utilitarian organizations. In the absence of sufficient empirical data associated with actual attributes, assumed data for demonstrational purposes only are used in the Chapter IV description of the tripartite spatial model and its analyses.

In an effort to reduce the time necessary for the initial presentation of the subject attributes, these are presented in tabular form (Table I) along with the name of the author whose literary works brought the attribute to this student's attention.

TABLE I
SELECTED ATTRIBUTES OF UTILITARIAN ORGANIZATIONS

Attribute	Author(s)
1. a. Displacement of Goals	Merton
b. Acceptance of Rationality as more than a tool, i.e., as an end	Weber
2. a. Displacement of Values	Presthus; Merton
b. Valuational Bias	Simon
3. a. Hierarchical Differentiation of Status	Blau & Scott
b. Status	Presthus; Weber
4. Resistance to Change	Hollander
5. a. Trained Incapacity	Merton
b. Specialization	Presthus
c. Division of Labor	Durkheim
6. a. Utility of Conflict	Presthus
b. Conflict Theory	Coser
c. Conflict Variables	Caplow
d. Conflict between Organizational and Personality Development	Argyris
e. Staff/Line Conflicts	Dalton
f. Role Conflict	Presthus; Baumhart
7. Process of Sanctification	Merton
8. Aggrandizement Effect	Caplow
9. Size	Presthus
10. Exaggeration of Authority Demands	Presthus; Blauner
11. a. Conformity	Tillich; Presthus
b. Demands for Conformity, Obedience, Dependence and Immature Behavior	Sayles

Continued

TABLE I (Continued)

	Attribute	Author(s)
12.	a. Anticipatory Socialization	Caplow
	b. Xenocentrism	Caplow
13.	Co-optation	Selznick; Presthus
14.	Mortification	Caplow
15.	a. Individual Morality	Durkheim
	b. Ethical Standards	Baumhart

Discussion

This section is devoted to a brief discussion of the selected attributes of utilitarian organizations, presented in Table I.

Displacement of Goals

In reviewing the dysfunctions of bureaucracy, Robert Merton²⁰-pp.253-254 notes that :

Adherence to the rules, originally conceived as a means, becomes transformed into an end-in-itself; there occurs the familiar process of displacement of goals whereby "an instrumental value becomes a terminal value."

It is possible to magnify this strict adherence to the point where there is a primary or sole concern with conformity to the rules. Such concern hinders the effective accomplishment of organizational goals; this results in the familiar phenomenon of official red tape. Amitai Etzioni,²¹-pp.10-12

in discussing Merton's treatise, suggests that "this may occur even when the organization formally or informally encourages flexibility in the application of the rules as part of its policy and as in line with its goals."

Whether or not this flexibility is officially encouraged, its presence is necessary in order to reduce the dysfunctional consequences of this attribute of a utilitarian organization.

The subject of organizational acceptance of rationality as more than a tool, i.e., as an end, was first discussed by Max Weber. "Bureaucracy," according to Weber,^{22-pp.244,281-282} "has a 'rational' character: rules, means, ends, and matter-of-factness dominate its bearing." This acceptance of rationality is a subtle form of goal displacement whereby the humanistic management of people is subverted in favor of the rational management of an organization. Failure to consider the complete individual ultimately reduces both organizational efficiency and effectiveness.

Displacement of Values

Both Robert Presthus^{23-pp.8,155,186,195} and Robert Merton^{24-pp.197-202} have indicated that there is currently "a displacement of value from the intrinsic quality of work to its by-products of income, security, prestige, and leisure." According to Presthus, this attribute finds its source in "the impersonality, the specialization, and the group character of work in the typical big organization." One common example is when an individual's desire for status and prestige becomes

an end in itself rather than the reward to be received for a job well done. From an expanded viewpoint, Presthus notes that displacement of values is also a major quality and dysfunction of large organizations. Management's inflexibility in the face of social and technological pressures for change is based on the assumption, "that what is, is good."

Herbert Simon^{25-pp.185-186} has reviewed this subject from a somewhat different point of view. Discussing what he has termed valuational bias, Simon reflects that "A closely related fallacy in the efficiency criterion is to include in the evaluation of alternatives only those values which have been previously selected as the objective of the particular administrative activity under consideration." Overlooking valuationally insignificant, indirect results cannot be justified if they are, in fact, present. Relating this usually dysfunctional attribute to the preceding discussion of value displacement, managers cannot restrict themselves to considering only those values which are certain to bring praise and other more material incentives, they must realistically give sufficient weight to all organizational values which are relevant to their activity. Anything less than this is certainly ethically unacceptable.

Hierarchical Differentiation of Status

Peter Blau and W. Richard Scott,^{26-pp.121-123} in their discussion of hierarchical differentiation of status, have concluded that, at least to some extent, "differentiation of hierarchical status in groups attenuates the very characteristics that have been hypothesized to be responsible for

the superiority of groups over individuals in problem-solving." The implication that exaggerated hierarchical differences in utilitarian organizations reduce performance effectiveness is supported by three empirically-supported conclusions: (1) "explicit status distinctions tend to reduce social interaction and social support"; (2) the process of competition for respect is weakened by formally established status differences; and (3) the error-correcting function provided by social interaction is weakened by status differences, especially those which are formally established.

In describing the status systems of big organizations, Presthus²³-pp. 36-37, 148-151, 273-274 thus states that:

Status refers to the allocation of different amounts of authority, income, deference, rights, and privileges to the various positions in the hierarchy. Prestige is the deference attached to each position, and generally it follows hierarchy.

In continuing his thoughts on status, Presthus indicates that the dysfunctions of status include spiteful comparisons of individual contributions, comparisons which are not always based objectively. Making reference to earlier thoughts by Chester I. Barnard, Presthus is careful to mention that the status system is not without redeeming attributes, i.e., "differential status allocations reinforce the authority of organizational leaders [managers]."

Weber,²²-pp. 186-188, 190-194 on the other hand, supports the dysfunctional aspects of this attribute of utilitarian organizations. This is clear in his statement:

As to the general effect of the status order, only one consequence can be stated, but it is a very important one: the

hindrance of the free development of the market occurs first for those goods which status groups directly withheld from free exchange by monopolization.

Resistance to Change

In his discussion of resistance to change, E.P. Hollander²⁷-pp. 35-38 supports the position that "what employees actually resist is not technical change but social change, the change in human relationships that generally accompanies technical change." Workers feel threatened when necessary changes are implemented which directly ~~affect~~^{affect} the prevailing organizational patterns and the associated structure of the work group. Empirical investigations have led to the conclusion that the management style used to present technological innovations to subordinates has a direct bearing on both employee attitude and their expenditure of effort on organizational goal accomplishment.

Trained Incapacity

Another of the dysfunctions of bureaucracy described by Merton,²⁰-p. 252 trained incapacity,

refers to that state of affairs in which one's abilities function as inadequacies or blind spots. Actions based upon training and skills which have been successfully applied in the past may result in inappropriate responses under changed conditions.

This view is based on Dewey's notion of "occupational psychosis" and Warnotte's concept of "professional deformation." In any case, insufficient occupational flexibility will, in a constantly changing utilitarian environment, result in some serious psychological maladjustments. Such

psychoses develop through management's demands placed upon subordinates who have developed a "pronounced character of mind" and, as a result of these special preferences, discriminations and emphases, are unable to adapt themselves to environmental changes.

Other views of the same attribute have been taken by Presthus, 23-pp. 28-31 and Durkheim, 28-pp. 396-409 who refer to it simply as specialization and the division of labor respectively. Both scholars agree that as organizations grow larger, a greater division of labor is required. This is not totally dysfunctional as Presthus points out:

this differentiation attracts and accomodates the different interests and abilities of individuals, enabling each to find his place.

On the other hand, Presthus appears to agree with Merton that there is an inherent tension in organizations between management and those who fill positions requiring specialized skills. The most highly skilled engineer or technician must elect to leave his acquired skills by the wayside and become a member of the managerial organization (discussed in Chapter I) if he desires to secure a larger share of the major rewards of prestige and income that accrue, not to the skilled operator, but rather to his supervisor. As a final thought on this subject: what happens, then, where there are all "chiefs" and no "indians"?

Utility of Conflict

Speaking of the utility of conflict, Robert Presthus^{23-pp. 288-294} indicates that "among its useful aspects is its tendency to further and

intensify group cohesiveness." However, the managers of utilitarian organizations seem to view conflict as a threat to their "disciplined, cohesive system for achieving a common goal." To this conflict theory

Lewis Coser²⁹-pp. 15-31 adds,

Whatever conflicts occur within these structures will appear to be dysfunctional. . . . Far from being necessarily dysfunctional, a certain degree of conflict is an essential element in group formation and the persistence of group life.

One management scholar, Theodore Caplow,³⁰-pp. 326-329 has described his view of a conflict relationship and conceptually isolated four conflict variables for his conflict model. He has analogized that the former:

resembles a cooperative relationship in that the parties have equal or unequal power to influence each others' activity, remain aware of each other and in contact for the duration of the relationship, and develop sentiments toward each other in accordance with the expectations of the larger system in which the relationship occurs.

Caplow's four conflict model variables are: subjugation (the difference in the degree of influence of one individual or organization on another); insulation (measures the extent to which communication between individuals or organizations in conflict are purposely blocked); violence (measures the overt hostility that each individual or organization develops toward the other); and attrition (the cost of a conflict to the participants, measured by the collective cost of damage inflicted on each other).

The remainder of this discussion of the utility of conflict is devoted to three common varieties of conflict which are encountered in utilitarian organizations. Chris Argyris³¹-pp. 161-163 has written of the conflict

between organizational and personality development. As a result of his conceptual analysis, Argyris has concluded:

... that it would be difficult for the organization to place relatively normal adult individuals in 'ideal' job (i.e., from the organization's point of view) situations without creating difficulties. Similarly, it would be difficult for the individual to obtain ideal personality expression without blocking the efficient expression of the organizational principles.

Another conflict arena is that interaction between the two major vertical groupings of management within utilitarian organizations. These two groupings are described by Melville Dalton^{32-pp. 116-127} as being: "(1) The staff organization, the functions of which are research and advisory; and (2) the line organization, which has exclusive authority over production processes." In reviewing the tensions caused by staff-line conflicts, Dalton presents empirical evidence which shows that conflict between the managerial staff and line groups directly reduced organizational effectiveness. Both Presthus^{23-pp. 169, 281-282} and Raymond Baumhart^{33-pp. 28-29} have discussed the problem of role conflict and, coincidentally, have reviewed this subject as a problem of ethical standards. Presthus indicated that the individual he calls an "ambivalent personality" is not able to play the roles required for success. Despite this inability to cope with the expectations of a utilitarian organization, he badly needs success to support his intense need for recognition by his peers, his family and his friends. Baumhart has enumerated several of the role conflicts described in an empirical investigation: collusion in price fixing; truth in advertising; attempts to "buy business"; and

personnel management (employee relations such as dismissals and layoffs).

Process of Sanctification

Merton^{20-p. 256} describes the process of sanctification as another of the dysfunctions of bureaucracy. Coming about as a result of

sentiment-formation, emotional dependence upon bureaucratic symbols and status, and affective involvement in spheres of competence and authority, there develop prerogatives involving attitudes of moral legitimacy which are established as values in their own right, and are no longer viewed as merely technical means for expediting administration.

Observers of utilitarian organizations have noted that there is a tendency for some organizational rules and regulations, originally introduced for reasons of efficiency and effectiveness, to become rigidified and sacred, as though they were, themselves, their own reason for being. The occurrence of this attribute of utilitarian organizations is intensified when management fails to provide subordinates with justification and background for a decision which causes the implementation of a rule or regulation.

Aggrandizement Effect

Another attribute of utilitarian organizations isolated by Caplow^{30-pp. 213-216} is the aggrandizement effect. This is "the upward distortion of an organization's prestige" by members of that or some other organization. Based on empirical investigations, Caplow has offered the following characteristics as being typical of the aggrandizement effect:

(1) An organization will be given a higher place in the prestige order of its set by its own members than by outsiders, including members of other organizations in the same set.

(2) Members of an organization, while disagreeing with outsiders about the prestige of their own organization, will agree with them more or less about the prestige of all other organizations in the same set.

(3) The amount of upward distortion when members evaluate the prestige of their own organizations will be roughly constant throughout the prestige order of a given set.

The functional properties of this attribute include: making the managerial organization appear to be more effective than it actually is; reducing the attractiveness of outside memberships, and; bridging periods of crisis by concealing organizational failures. Its dysfunctional properties are: reduced potential for organizational improvement through the falsification of performance measures; maintenance of lesser organizations at the expense of better ones by raising barriers to personnel mobility, and; introduction of an undercurrent of dissention by precluding a common frame of reference in mutual dealings with parallel organizations.

Size

The size of a utilitarian organization can be measured in many ways: its production volume; the number of employees on the payroll; the extent of capital resources; the geographical scope of its operations; and so on. Presthus^{23-pp. 25-31} measures it in terms of "organizations in which the number of members is large enough to prohibit face-to-face relations among most participants." Empirical research has resulted in evidence

which substantiates the hypothesis that "as size increases, morale decreases." It also follows logically that as the size of an organization increases, there is an increase in the number of horizontal groupings and a greater division is necessitated. While the relationship is less consistent, lower individual productivity and higher absenteeism are also associated with increased organizational size. "This is apparently because men find it difficult to identify with the large number of people found in the typical big organization." One of the primary dysfunctions of large organizations is that they tend to view their employees, manager and worker alike, instrumentally.

Exaggeration of Authority Demands

Another of the attributes of utilitarian organizations described by Presthus ^{23-pp. 146-147} is the exaggeration of authority demands. A latent consequence of the anxiety-authority relationship, this attribute "is often dysfunctional since it aggravates the fear of action and responsibility often seen in big organizations." This misproportioned view of the intentions of an organization's upper hierarchy is a reflection of an employee's anxiety grown out of a desire to please his superiors, even though they remain anonymous to him. This attribute is one of the four modes of industrial powerlessness discussed by Peter Blau ^{34-pp. 16-17}, who contends that control over the conditions of employment is one of the "most salient for manual workers." By virtue of the established hierarchy necessitated by the large size of a utilitarian organization, subordinate

members are unable to meet face-to-face with an organization's executives or any of their intermediaries. Unable to anticipate the expectations of an organization's unseen executives, these expectations may seem more urgent than they are actually meant to be. As a result of these distorted interpretations of management's intentions, lower echelon personnel find themselves involved in psychologically-based traumas.

Conformity

Paul Tillich^{35-pp. 456-457} has written that "Conformity is a negative force if the individual form that gives uniqueness and dignity to a person is subdued by the collective form." When this occurs, Tillich indicates a preference for the word "patternization" in lieu of "conformity," where patternization is "the process in which persons are modeled according to a definite pattern."

This process, whether it is Tillich's patternization or Presthus' conformity, is demanded of individuals employed by utilitarian organizations. Presthus^{23-pp. 133-134, 168} presents an analogy: "the organization tends to resemble a church, which needs champions to endorse its values and to increase its survival power. No dissenters need apply." Modern successes require extended university training, and middle-class values such as "striving, punctuality, and the suppression of unprofitable emotions." Members of the management organization search for those who possess these characteristics and replace themselves with men who conform to their own image of themselves. "In such ways the socialization

process is tuned to the organization's demand for consistency, conformity, and the muting of conflict."

These thoughts are substantiated by Leonard Sayles,^{36-pp. 68-69} when he says, "The organization ... seeks to program individual behavior and reduce discretion. It demands conformity, obedience, dependence, and immature behavior."* It has been verified that subordinates react to these pressures from above in a hostile manner. To keep these employees in their place, management imposes still more restrictions, thus eliciting still more dysfunctional behavior.

Anticipatory Socialization

Within a utilitarian organization, Caplow^{30-p. 176} theorizes, anticipatory socialization is more complex than that which involved personnel movement between disconnected organizations. This attribute "rests on the identification of an individual with a group \angle or organization \angle to which he does not yet belong but which he proposes to join." In such a case a marginal individual assumes the mores of a target group or organization which he desires to join, while rejecting the established values of his own group. At this point, such a person is not so much fixed between his own and a target group or organization, but rather, he is "moving across a social no man's land from one group \angle or organization \angle to the other." This process is a logical one for the aspiring

*Underlining not part of original text, but is included for emphasis.

upward-mobile since every group or organization screens or reviews candidates for positions and accepts only those with certain desired characteristics. Whatever the reason for this process, it is logical that persons desiring either intra- or inter-group or organization mobility will take whatever steps they can to improve their success potential.

Caplow^{30-pp. 216-217} also describes one form of anticipatory socialization which has been dubbed "xenocentrism." In actuality this is a weak antithesis of the aggrandizement effect discussed earlier in this section. Serving the double purpose of aiding an individual's promotion into a group or organization of his choice and of easing his adjustment after he has joined it, this social phenomenon also serves to disrupt organizational complacency for the sake of internal reform. "A conspicuous example has been the ascription of superiority of the Soviet educational system by American educators pressing for reform in the curricula of their own schools."

Co-optation

Philip Selznick^{37-pp. 135-139} has defined the concept of "coöptation" (sic) as "the process of absorbing new elements into the leadership or policy-determining structure of an organization as a means of averting threats to its stability or existence." Referring to this attribute of utilitarian organizations as a mechanism for their stability, Selznick enumerates the qualities of its:

... two basic forms: Formal coöptation [sic], when there

is a need to establish the legitimacy of authority or the administrative accessibility of the relevant public; and informal cooptation [sic], when there is a need of adjustment to the pressure of specific centers of power within the community.

Co-optation which has, as its end result, an actual sharing of power, tends to operate informally; but when it is oriented toward legitimization or accessibility, co-optation tends to function formally. In a utilitarian organization, a strong youth group may be formally co-opted into executive management through the appointment of the leaders of the youthful opposition to desirable positions within the managerial organization.

Presthus²³-pp. 27, 49-50 describes co-optation as being the process by which an organization's elite select their successors. It is his contention that co-optation enhances organizational discipline and continuity. These are accomplished in that "sanctioned behaviors and expectations are transmitted through agents selected after what tends to be (given the remarkable tenure of oligarchs) a lengthy apprenticeship."

Mortification

Caplow³⁰-p. 174 describes mortification as a mode of socialization which prepares new members of a utilitarian organization for the conformist roles which they will be expected to fill. It is the "sequence of steps by which the recruit to a total institution is dispossessed of his previous roles and deprived of the self-image he brings with him from the outside world." The common purpose of all the devices of mortification is to deprive the new member of control over his own activities, thereby

making it virtually impossible for him to resist the influence of the organization as it begins to alter his behavior patterns in accordance with its own procrustean bed. Several devices common to the mortification procedures of utilitarian organizations are: minute subjection to routine; instant punishment for defiance of even unreasonable authority; and subjection of personal appearance to some arbitrary uniform criteria. Without some degree of mortification, neither the new nor the old members of a utilitarian organization would have the necessary degree of commonality which is vital to the facilitation of communications among the members.

Individual Morality

Emile Durkheim^{28-pp. 399-401} contends that there exists today,

... a very lively sense of respect for human dignity, to which we are supposed to conform as much in our relations with ourselves as in our relations with others, and this constitutes the essential quality of what is called individual morality.

Taking a more practical approach, Baumhart^{33-pp.46-47,87-90,105-106,121-122, 175-176,217} feels that when a member of a utilitarian organization acts ethically, he attributes it to his own strength of character to resist financial pressure and temptation, with only some credit due to his managers and the resulting organizational climate; on the other hand, his unethical acts are blamed on these same managers and the climate of his particular industry. Substantiating his feeling that "the long shadow of the ethical standards and actions of the boss falls across all his

subordinates," Baumhart quotes Charles Morrow^{38-p. 2} who said, "A corporation's ethical attitude is the result of its chief executive's beliefs. It reflects the decisions he makes about the kind of company he wants to have." Analysis of the results of several empirical investigations conducted by Baumhart and his associates revealed that top management's opinions regarding ethics were not significantly different from those of middle and lower management. Baumhart has concluded that top management has a responsibility toward the members of its organization to provide them with both a policy and climate conducive to ethical decisions. "The right policy and climate bring out the best in employees and enable them to be human, to act ethically, These same empirical investigations made it clear that the most important influence on the ethical practices of a particular industry is competition, both in the extent and type. It was noted that:

a college education, and especially a course in ethics, improves a person's sensitivity to ethical problems, as well as his ability to think and speak about them. There is no implication that this improvement is related to acting more, or less, ethically.

CHAPTER IV

TRIPARTITE SPATIAL MODEL

Introduction

This tripartite spatial model is based entirely on the results and conclusions of empirical investigations and is capable of being used for making significant predictions concerning the propensity of attributes of utilitarian organizations. It portrays the complex inter-relationships between any of a number of specific attributes of a utilitarian organization such as those discussed in Chapter III and varying management levels and styles as described in Chapter II. Used as a basis for rational decision-making, it demonstrates the advantages of positive attribute transference for varying styles of management at a single level of management (represented by the iso-level planes). In addition, it clarifies the extent of attribute transference, either positive or negative, with respect to a single style of management (represented by the iso-style planes) at varying levels of management.

Dimensions

The dimensions of this tripartite spatial model are portrayed graphically in Figure 2. There are three dimensions or components whose axes

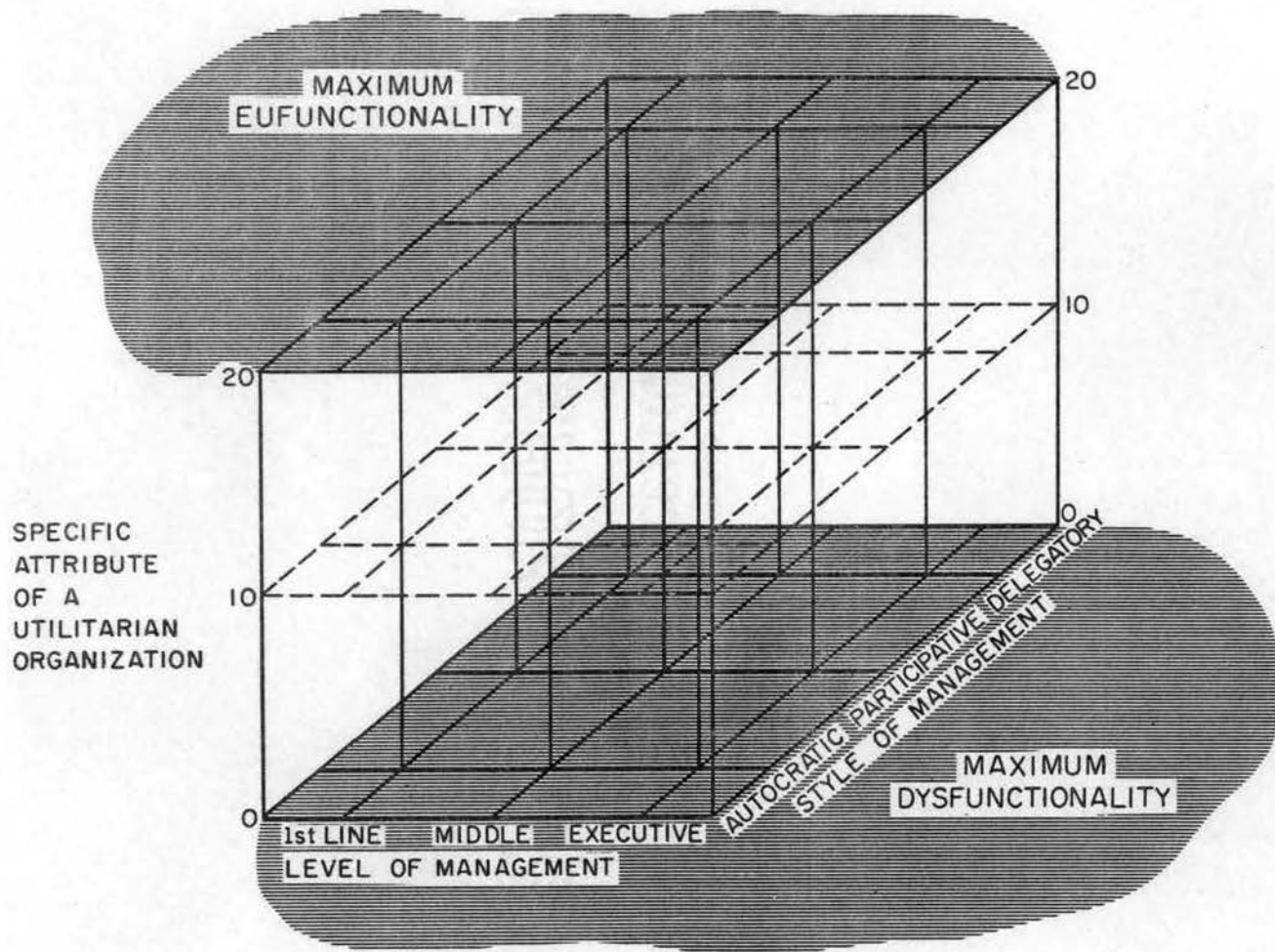


Figure 2. Tripartite Spatial Model

are positioned at right-angles to each other. In the horizontal plane there are two dimensions; the level of management, and the style of management. Perpendicular to these components of the model is the axis of the primary variable, a specific attribute of a utilitarian organization. These three dimensions provide the basis for this empirically-supported, graphical and predictive model.

Level of Management Axis

In the interest of clarity, this axis is divided into only three levels of management: First Line; Middle; and Executive. In actual practice, there are likely to be as many as five levels, but three will suffice here to demonstrate this thesis. Each of these levels is representative of typical management responsibilities in actual utilitarian organizations.

Style of Management Axis

Again for the sake of clarity, this axis is divided into only three styles of management: Autocratic; Participative; and Delegatory. As described in Chapter II, these styles are representative of the seven discrete points conceptually isolated on the management style continuum.

Specific Attribute of a Utilitarian Organization Axis

Like the two horizontal axes whose points are oriented in only one direction (Level of Management Axis; First Line to Middle to Executive : Style of Management Axis; Autocratic to Participative to Delegatory),

the single vertical axis is also oriented in one direction, from 0 or dysfunctional (negative) properties to 20 or eufunctional (positive) properties. The orientation is arranged so that a point denoting a dysfunctional attribute is closer to the two horizontal axes than is a point denoting a eufunctional attribute. In other words the further a point is from the horizontal axes, the more eufunctional the attribute whose property it represents for a particular level-style relationship.

The most eufunctional point on the vertical axis is equal to 20 and is located at the top of the axis, the furthest point from the two horizontal axes. The most dysfunctional point on the vertical axis is equal to 0 and is located at the base of the axis, coincident with the intersection of the two horizontal axes. The center point on the vertical axis is designated as 10 and is the dividing line between an attribute's inclination to be either eufunctional or dysfunctional.

Iso-Style Planes

These two-dimensional vertical planes, whose axes are the Level of Management and a Specific Attribute of a Utilitarian Organization, indicate the propensity of a specific attribute of a utilitarian organization in relation to varying levels of management.

Iso-Level Planes

These two-dimensional vertical planes, whose axes are the Style of Management and a Specific Attribute of a Utilitarian Organization,

indicate the propensity of a specific attribute of a utilitarian organization, in relation to varying styles of management.

Iso-Level-Style Lines

The nine intersections of the three Iso-Style Planes and the three Iso-Level Planes result in nine vertical Iso-Level-Style Lines. On each of these nine lines a point is located denoting the extent of dysfunction or eufunction which exists for a specific attribute of a utilitarian organization. The location of each of these points for the two tripartite spatial models of the example attributes in Figures 3a and 3b are assumed; however, they are typical of those supported by empirical evidence collected and analyzed by the Institute for Social Research located on the University of Michigan campus at Ann Arbor, as well as several other institutions such as the University of Illinois and Yale University.

Level-Style-Attribute Ceiling

When the nine points on the Iso-Level-Style Lines are joined, eight individual triangularly-shaped planar surfaces result. The combination of these contiguous surfaces comprise what has been termed the Level-Style-Attribute Ceiling. This ceiling can be composed of either all dysfunctional or all eufunctional points, or a combination of both. Examples of two typical ceilings are shown in Figures 3a and 3b. It is ceilings like these which can be used for predicting and forecasting the extent of dysfunction or eufunction, i.e., the point location on each of

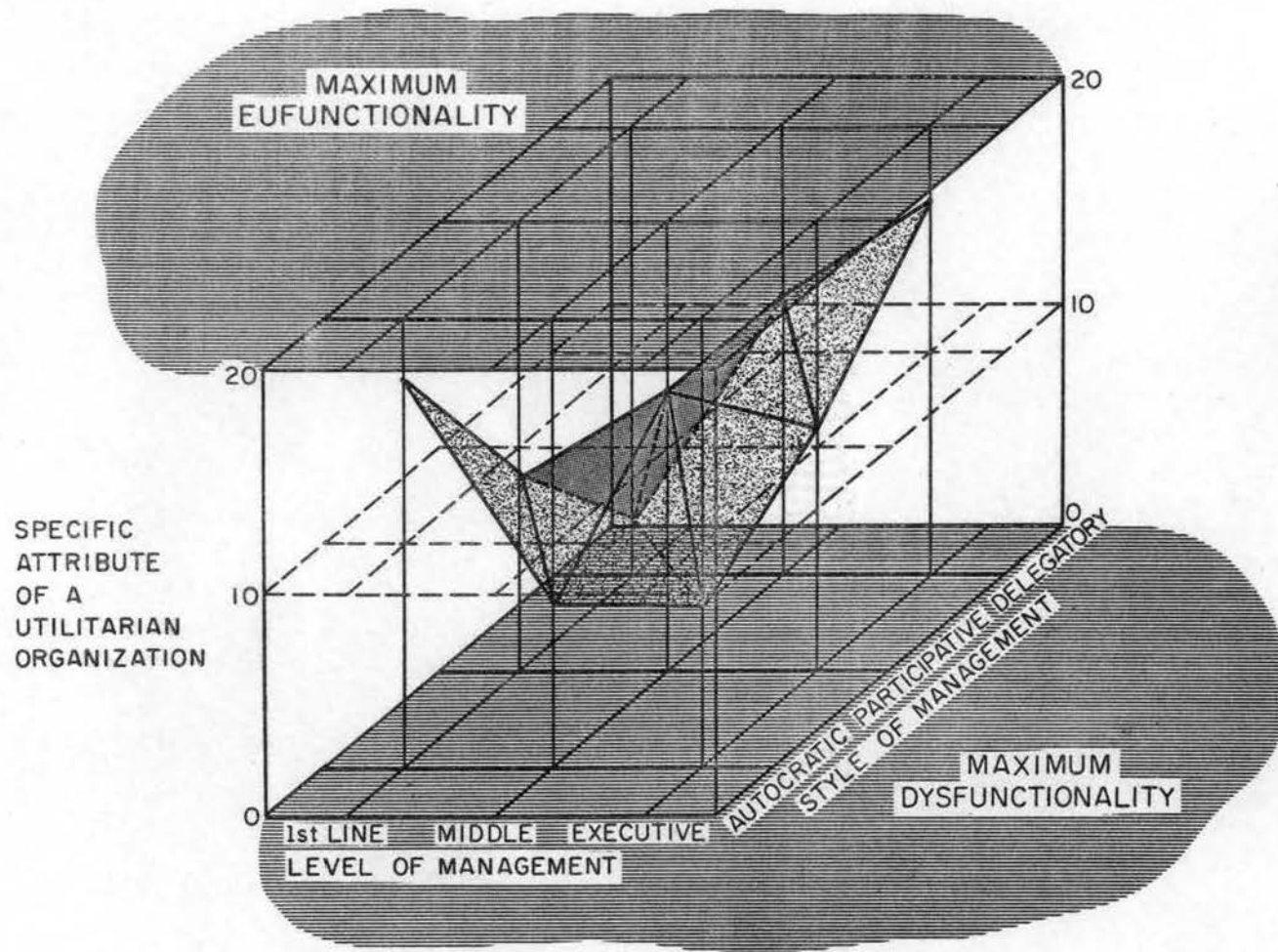


Figure 3a. Example of Level-Style-Attribute Ceiling

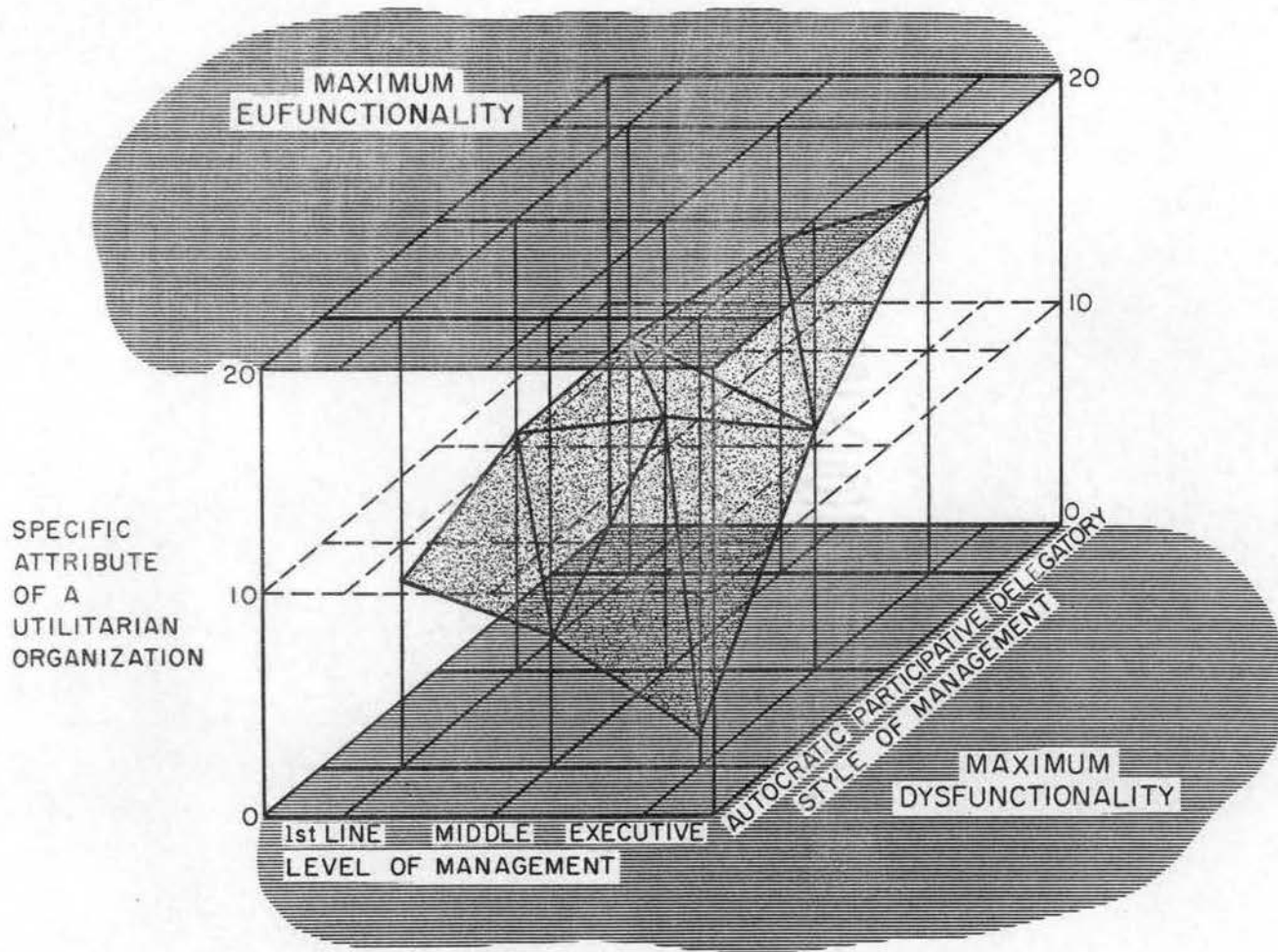


Figure 3b. Example of Level-Style-Attribute Ceiling

the various Iso-Level-Style Lines for a specific attribute of a utilitarian organization.

Utilization

Used as a predictive model, the Iso-Style and Iso-Level Planes can be used to forecast the proclivity of a specific attribute for a specified style-level relationship. With this knowledge, selection of the most advantageous management style for each level of management and attribute considered will be based on the results and conclusions of scientific inquiry and should encourage positive attribute transference through the alteration of management styles wherever necessary, in order to maximize organizational effectiveness.

Data Analysis

Application of the results of empirical research regarding one specific attribute of a utilitarian organization to the tripartite spatial model just described produces a total of nine discrete points, one on each of the nine Iso-Level-Style lines. Each data point on each of these vertical lines is bounded by upper and lower statistical confidence limits and indicates the propensity of the attribute under consideration to be either dysfunctional or eufunctional when a designated style of management is applied at a specific level of management or throughout an organization.

Fiedler, ³⁹-pp. 94, 134 & 142 for example, has demonstrated that

when a task is highly structured and management is in a position of great power, a participative manager in a utilitarian organization is less likely to be successful than an autocratic manager when the criterion is "percent of company net income over three years." On a scale from 0 to 20, the degree of success for a participative manager at all levels of management is 3.3 (after mathematical transformation from Fiedler's figure of $-.67$, which was located on a scale from -1.00 to $+1.00$), while an autocratic manager scores 12.3 (transformed). Using similar criterion from five other related studies, Fiedler's median measure of success for all six investigations is 4.8 (transformed) for participative management at all levels of management, and 14.2 (transformed) for autocratic management. Heller and Yukl^{40-pp. 236-237} have investigated the impact of varying styles of management in utilitarian organizations and collected some significant data on one common attribute, i.e., size. When group size increases, a style of management, such as participative, becomes less eufunctional (more dysfunctional) since it requires "considerable time-consuming interaction and communication between group members." Heller and Yukl have substantiated this fact with the transformed data presented in Table II. Information about group size "was available for all of the industrial leaders, but first line supervisors were omitted since their subordinates were workers rather than supervisors and the variance in their span of control was extremely small."

TABLE II
HELLER-YUKL DATA

Specific Attrib- ute	Lev- els of Mgmt.	STYLES OF MGMT.			L max
		A	P	D	
Size	F	-	-	-	-
	M	10.0	8.6	8.3	10.0
	E	13.3	8.0	12.2	13.3
	$\sum L$	23.3*	16.6	20.5	

*Indicates the vector value of autocratic management for this attribute at all levels of management.

Table V contains additional empirical data which was selected from the archives of the University of Michigan Institute for Social Research. This data was derived from recent ISR research which was directed towards the further investigation of specific attributes of utilitarian organizations. The data contained in Table V is previously unpublished and was made available to this student by the ISR specifically for use in this dissertation.

Symbology, as well as planar and overall analysis of this type of data are described later in this chapter. Actual data such as the values contained in Table II and Table V are obtained through long hours of personnel interviews, surveys and questionnaires. In the absence of sufficient actual data for illustrative purposes the values presented in Table III have been assumed and are not intended to represent real data

associated with the attributes of actual utilitarian organizations.

Subjective selection and weighting by importance of the critical attributes of utilitarian organizations are also a part of data analysis, and, clearly, some of the most demanding tasks associated with the overall procedure. Attribute selection and weighting is discussed in the final chapter on application of findings.

The remainder of this chapter contains a detailed explanation describing the mathematical analyses of this type of empirical data to determine the overall preferred style of management for all levels of management when certain critical attributes are considered.

Symbology

Before proceeding, it is appropriate to introduce the notation used in the mathematical analyses of the five assumed data sets presented in Table III.

V_{NSL} = the vertical vector value of a particular combination of one or all specific attributes in conjunction with one or all styles and/or levels of management, where:

N = all of the attributes considered from 1 to N

S = all of the three styles of management with:

A = autocratic style

P = participative style

D = delegatory style

L = all of the three levels of management with:

F = first line level

M = middle level

E = executive level

The vertical axis of each spatial model is a vector which represents the propensity of a specific attribute, and which extends from $V_{NSL} = 0$ (100% dysfunctional) to $V_{NSL} = 20$ (100% eufunctional), i.e., $0 \leq V_{NSL} \leq 20$. The horizontal plane where $V_{NSL} = 10$ represents the division between the eufunctional or dysfunctional classification of an attribute.

Planar Analysis

There are three levels of management being considered for each spatial model; therefore, there are also three Iso-Level planes associated with each model. Using planar analysis, it can be determined that for each level of management-specific attribute combination, there is only one style of management which is preferred, i.e., there exists a style of management which either maximizes the eufunctionality or minimizes the dysfunctionality of the consequences of that attribute. Since there is a preferred style of management for each of the three Iso-Level planes in each model, one can also objectively select the preferred style for all three Iso-Level planes. This selection is the preferred style of management for the complete tripartite spatial model of the specific attribute being evaluated.

Planar analysis of the three Iso-Level planes in each spatial model (for each attribute) is accomplished by inspection of the row vector values of each spatial model data set which represent the extent of an attribute's propensity to cause either eufunctional or dysfunctional consequences. The far right column of each data set in Table III is composed of the

TABLE III
ASSUMED DATA FOR ANALYSIS

Specific Attrib- ute	Lev- els of Mgmt.	STYLES OF MGMT.			L _{max}
		A	P	D	
1	F	5	11	8	11
	M	2	12	15	15
	E	1	14	19	19
	\sum L	8	37	42*	
2	F	12	6	15	15
	M	12	4	17	17
	E	6	2	3	6
	\sum L	30	12	35*	
3	F	8	9	11	11
	M	19	18	15	19
	E	8	6	2	8
	\sum L	35*	33	28	
4	F	5	3	1	5
	M	6	16	15	16
	E	10	12	11	12
	\sum L	21	31*	27	
5	F	16	20	19	20
	M	13	20	16	20
	E	13	12	14	14
	\sum L	42	52*	49	

*Indicates the vector value of the preferred style of management for a specific attribute at all levels of management.

greatest vector value for each row (L_{\max}). These values are indicative of the preferred style of management for a specific attribute and level of management. The following illustration is intended to clarify this concept:

$$\left. \begin{array}{l} V_{1AF} = 5 \\ V_{1PF} = 11 \\ V_{1DF} = 8 \end{array} \right\} \Rightarrow V_{1PF} = 11 \text{ is the vector value of the preferred style of management for the F Iso-Level plane}$$

$$\left. \begin{array}{l} V_{1AM} = 2 \\ V_{1PM} = 12 \\ V_{1DM} = 15 \end{array} \right\} \Rightarrow V_{1DM} = 15 \text{ is the vector value of the preferred style of management for the M Iso-Level plane}$$

$$\left. \begin{array}{l} V_{1AE} = 1 \\ V_{1PE} = 14 \\ V_{1DE} = 19 \end{array} \right\} \Rightarrow V_{1DE} = 19 \text{ is the vector value of the preferred style of management for the E Iso-Level plane}$$

Planar analysis of the three Iso-Style planes in each spatial model (for each attribute) is based on the assumption that all V_{NSL} values are linearly additive and is accomplished by summing the columnal vector values in each data set such as those in Table III. An inspection of the three resulting sums reveals the greatest value and, therefore, the vector value of the preferred style of management for a specific attribute at all levels of management. For example:

$$V_{1SL} = \max (V_{1AL} = 8; V_{1PL} = 37; V_{1DL} = 42)$$

Therefore, $V_{1SL} = V_{1DL} = 42$, is the vector value of the preferred style of management for spatial model data set (attribute) 1.

The assumption that all V_{NSL} values are linearly additive is an

arbitrary, but quite important, decision based on Seashore's statement (see Appendix A, paragraph 4) that:

... some of the variables [attributes], such as size, span of control, conformity, have curvilinear relationships with systemic variables [attributes] of other kinds and can not be used efficiently for testing propositions ... unless converted to scales of deviation from optimum.

Since it is not always possible to limit attention to known linear relationships, it sometimes becomes necessary (for the sake of simplifying calculations) to treat critical attributes which have been empirically established as being non-linear, as linear, after having properly converted them.

Overall Analysis

One aspect of this process has not yet been described. This is the overall determination of the preferred style of management which will provide optimal goal accomplishment throughout the organization. It is achieved by judiciously selecting an organization-wide management style which, when applied, maximizes eufunctional consequences or minimizes dysfunctional consequences of all the critical attributes of the utilitarian organization being studied.

Having previously determined the preferred style of management for each assumed attribute for each level of management, as well as for all three levels, the vector value of the overall preferred style of management (V_{NSL}^*) for all attributes and all levels of management requires investigation. The overall preferred style of management is that style which,

when consistently used throughout an organization, is able to minimize the dysfunctional consequences or maximize the eufunctional consequences of all the critical attributes considered. V_{NSL}^* is determined by a four-step paradigm which assumes equality of importance among the attributes considered to be critical, i.e., equal weight is given to the total consequences of each attribute which has been subjectively determined to be critical in terms of organizational goal achievement.

First, establish a four-column tabular format, as below:

<u>Attribute</u>	<u>ΔA</u>	<u>ΔP</u>	<u>ΔD</u>
where:	ΔA = the deviation between the vector value of V_{NAL} and that of V_{NSL}		
	ΔP = the deviation between the vector value of V_{NPL} and that of V_{NSL}		
	ΔD = the deviation between the vector value of V_{NDL} and that of V_{NSL}		

Second, enter the appropriate values and perform the necessary calculations, as follows:

<u>Attribute</u>	<u>ΔA</u>	<u>ΔP</u>	<u>ΔD</u>
1	8-42 = -34	37-42 = - 5	42-42 = 0
2	30-35 = - 5	12-35 = -23	35-35 = 0
3	35-35 = 0	33-35 = - 2	28-35 = - 7
4	21-31 = -10	31-31 = 0	27-31 = - 4
5	42-52 = -10	52-52 = 0	49-52 = - 3

Third, algebraically sum the second, third and fourth columns:

$$\Delta A = -59 \qquad \Delta P = -30 \qquad \Delta D = -14$$

Fourth, by inspection, it is clear that $\Delta D = -14$ represents the minimization of dysfunctional consequences to the pseudo utilitarian

organization whose attributes were assumed earlier. This is interpreted to mean that selection of a delegatory style of management is preferred because its application is in the best interests of the organization's goal(s). Based on the assumption of equality of importance among the critical attributes selected, no other style of management is likely to do so much to enhance these goals.

The preceding decision is verified by planar analysis, i.e., by summing the summed vector values of each attribute by style of management, as in the following computation:

$V_{1AL} = 8$	$V_{1PL} = 37$	$V_{1DL} = 42$
$V_{2AL} = 30$	$V_{2PL} = 12$	$V_{2DL} = 35$
$V_{3AL} = 35$	$V_{3PL} = 33$	$V_{3DL} = 28$
$V_{4AL} = 21$	$V_{4PL} = 31$	$V_{4DL} = 27$
$V_{5AL} = 42$	$V_{5PL} = 52$	$V_{5DL} = 49$
$V_{NAL} = 136$	$V_{NPL} = 165$	$V_{NDL} = 181$

The conclusion of the overall analysis that a delegatory style of management is preferred over either participative or autocratic styles is not precluded by the preceding planar analyses. With $V_{NDL} > V_{NPL} > V_{NAL}$, it can be concluded that using the assumed data for a fictitious utilitarian organization yields $V_{NSL}^* = V_{NDL} = 181$. Therefore, delegatory management should be recommended as the overall preferred style in the manner described in the final chapter. It should be noted, however, that these analyses were performed on assumed data and so no pragmatic conclusions concerning actual utilitarian organizations should be drawn.

At the beginning of the mathematical analysis, it was pointed out that the four-step paradigm is based on the assumption of equality of importance among all the attributes considered. This is a most subjective and arbitrary decision since proportional weighting may be required to reach a rational decision concerning V_{NSL}^* and the overall preferred style of management. It is, of course, possible to weight the consequences of each attribute so that the final decision regarding choice of style of management is based on proportioned vector values for each attribute. If, for example, the consequences of the assumed attributes whose values are cited in Table III were not equal, but instead were weighted in proportion to their importance in determining the overall preferred style of management, then the following procedure is necessary in lieu of the four-step paradigm already presented.

First, based on previously made, subjective determinations regarding the weighting of attribute importance (criticality), attribute equalities are developed using any one of the critical attributes as a point of reference. In this case it is assumed for purposes of illustration that the following algebraic equalities express this weighting of attribute importance:

Let $X_2 = 1 =$ the level of importance of attribute 2,

and $X_1 = 2X_2$

$$X_4 = 2X_2$$

$$X_5 = 2X_2$$

$$X_3 = 4X_2$$

By expressing weightings in this manner, it has been indicated that the greater the X value, the higher the level of importance of an attribute.

Second, establish a table of V_{NSL} values by attribute and style of management.^{41-pp. 31-33} The previously assumed weights reflect the importance of each attribute. Larger numbers (weights) show greater importance, e.g., according to the weightings in Table IV, attribute 3 is deemed the most important characteristic of the assumed utilitarian organization being considered.

TABLE IV
 V_{NSL} VECTOR VALUES

V_{NSL}	ATTRIBUTES				
	1	2	3	4	5
V_{NAL}	8	30	35	21	42
V_{NPL}	37	12	33	31	52
V_{NDL}	42	35	28	27	49
Importance Level	2	1	4	2	2

Third, sufficient information is now available to conduct an overall evaluation. Ratios are formed from corresponding V_{NSL} vector values for all the critical attributes and are raised to a power corresponding to their

rated importance. Thus the V_{NAL}/V_{NPL} ratio for attribute 1 is treated as:

$$\left(\frac{8}{37}\right)^2 = (.216)^2 = .0467$$

and the V_{NDL}/V_{NPL} ratio for attribute 3 is treated as:

$$\left(\frac{28}{33}\right)^4 = (.848)^4 = .5171$$

then all the raised ratios are multiplied as follows:

$$\begin{aligned} \frac{V_{NAL}}{V_{NPL}} &= \left(\frac{8}{37}\right)^2 \left(\frac{30}{12}\right)^1 \left(\frac{35}{33}\right)^4 \left(\frac{21}{31}\right)^2 \left(\frac{42}{52}\right)^2 \\ &= (.216)^2 (2.500)^1 (1.060)^4 (.678)^2 (.808)^2 \\ &= (.0467)(2.5000)(1.2625)(.4597)(.6529) \\ &= .0442 \end{aligned}$$

The product of less than one indicates a preference for participative management over autocratic management, because the denominator (V_{NPL}) is larger than the numerator (V_{NAL}), and a preference for larger V_{NSL} values has already been expressed.

$$\begin{aligned} \frac{V_{NDL}}{V_{NAL}} &= \left(\frac{42}{8}\right)^2 \left(\frac{35}{30}\right)^1 \left(\frac{28}{35}\right)^4 \left(\frac{27}{21}\right)^2 \left(\frac{49}{42}\right)^2 \\ &= (5.250)^2 (1.167)^1 (.800)^4 (1.286)^2 (1.167)^2 \\ &= (27.5625)(1.167)(.4096)(1.6538)(1.3619) \\ &= 29.638 \end{aligned}$$

The product of greater than one indicates a preference for delegatory management over autocratic management because the denominator (V_{NAL}) is smaller than the numerator (V_{NDL}). As a result of these two mixed-

rating comparisons, it is now clear that both delegatory and participative management are preferred over autocratic management. One additional comparison is necessary to determine a preference between delegatory and participative management.

$$\begin{aligned}\frac{V_{\text{NDL}}}{V_{\text{NPL}}} &= \left(\frac{42}{37}\right)^2 \left(\frac{35}{12}\right)^1 \left(\frac{28}{33}\right)^4 \left(\frac{27}{31}\right)^2 \left(\frac{49}{52}\right)^2 \\ &= (1.135)^2 (2.917)^1 (.848)^4 (.871)^2 (.942)^2 \\ &= (1.2882)(2.917)(.5171)(.7586)(.8874) \\ &= 1.308\end{aligned}$$

The product of greater than one indicates a preference for delegatory management over participative management because the denominator (V_{NPL}) is smaller than the numerator (V_{NDL}). These three comparisons demonstrate that $V_{\text{NDL}} > V_{\text{NPL}} > V_{\text{NAL}}$.

By inspection it is clear that $V_{\text{NSL}}^* = V_{\text{NDL}}$ and represents the minimization of dysfunctional consequences based on the assumed inequality of weighting by importance of the five assumed critical attributes. In this particular case the overall preferred style of management has again been determined to be delegatory management; however, it should be noted that different importance weightings yield varying values of V_{NSL}^* and may result in the selection of other styles of management. Whatever the decision regarding the overall preferred style of management, it should be recommended for organization-wide adaption as discussed in the next chapter.

CHAPTER V

APPLICATION OF FINDINGS

Having concluded that both the concepts and predictive model set forth in previous chapters are valid, attention is now turned to a method for the application of these findings. As has been stated earlier, one of the purposes of this thesis is to demonstrate a practical application of the integrated theories and conclusions of many social scientists in the form of the tripartite spatial model described in Chapter IV. This chapter is devoted to an explanation of such a method, with whatever comments are necessary to convey the importance of positive attribute transference in the composite of all utilitarian organizations commonly referred to as "American industry."

This method is a five-step sequential process requiring, for its practical application, the attention of an experienced team of organizational and management analysts. The precise team composition is not vital; however, as a minimum, the presence of certain skills and experience is necessary. This multi-disciplinary team requires participation by the team leader, and industrial psychologists, sociologists, and engineers, all of whose scope of understanding includes the application and importance of human relations skills.

This sequential process can be used whenever and wherever it is necessary to increase the vector value of the overall preferred style of management (V_{NSL}^*). This is the style of management which, when applied at all levels of management, minimizes the dysfunctional consequences and maximizes the eufunctional consequences of all the critical attributes considered. This is achieved through maximum positive attribute transference, i.e., causation of dysfunctional attributes to become eufunctional through the judicious selection and application of a style of management which maximizes V_{NSL}^* . The five steps, which are explained in this chapter, are:

1. Climate Analysis
2. Management Style Determination
3. Heuristic Search for Critical Attributes
4. Decision to Actuate Attribute Transference
5. Introduction of Optimal Management Style

Climate Analysis

The first step in the sequential process is climate analysis. Referring to managerial and organizational climate, discussed in Chapter I, Kaczka and Kirk used the former concept to describe a composite of the predominate style of management and the general attitude regarding subordinates which prevails throughout all levels of management. In order to make an objective determination of the existing managerial climate in a particular utilitarian organization, it is necessary for a multi-disciplinary

analyst team to accomplish a dimensional analysis of the type suggested by Kaczka and Kirk. The five dimensions of managerial climate selected for analysis were: grievance behavior; cost emphasis; leadership style; congruence of leadership style; and attitudes of industrial engineering departments.

In this thesis special attention is given to the third and fourth dimensions, i. e., leadership style and congruence of leadership style. Once parametrical analysis of a utilitarian organization's managerial climate has been completed, information required for the second step of this sequential process is already available.

Management Style Determination

The Likert "Profile of Organizational Characteristics" questionnaire 15-pp. 196-211 provides a means for objective determination of the predominant style of management at every level of management. The validity of this instrument for determining management style has been previously confirmed by its originator and other members of the Institute for Social Research in tests conducted during the period 1947-1967. This was accomplished through its extensive use in surveys of utilitarian, as well as other types of organizations.

For example, Table V contains additional empirical data in support of the hypotheses put forth in this thesis. The values presented herein were selected from the archives of the University of Michigan Institute for Social Research (hereinafter referred to as "ISR"), and were derived

from recent ISR research which was directed toward the further investigation of specific attributes of utilitarian organizations. These data are previously unpublished and were made available to this student by the ISR specifically for use in this dissertation.

Data for the following specific attributes of utilitarian organizations are presented in Table V: resistance to change, aggrandizement effect; and exaggeration of authority demands. These are attributes four, eight and ten respectively from the listing presented in Chapter III, Table I. The raw data provided by the ISR has been linearly transformed to fit the mathematics of the tripartite spatial model described in Chapter IV. Symbolology, as well as planar and overall analysis of this type of data is also explained in Chapter IV. Information about delegatory management was not available from the ISR due to the variance between their concept of the management style continuum and that of Tannenbaum (as described in Chapter II).

The original data was obtained using a specially adapted form of the Likert "Profile of Organizational Characteristics" questionnaire. Using multiple regression as the basis of its data analysis, the ISR collected the original data as part of its evaluation of a large manufacturing plant (over 1000 men) in a small, mid-western town (population 50,000) in 1969. A statistically valid sampling of the work population of this utilitarian organization resulted in the compiled data from which the values in Table V were obtained. The name and location of the utilitarian organization that participated in this evaluative study must remain confidential, as

agreed to by the ISR.

TABLE V
INSTITUTE FOR SOCIAL RESEARCH DATA

Specific Attrib- ute	Lev- els of Mgmt.	STYLES OF MGMT.			L _{max}
		A	P	D	
Resistance to change	F	2	8	-	8
	M	5	7	-	7
	E	2	13	-	13
	\sum L	9	28*	-	
Aggrandize- ment effect	F	5	9	-	9
	M	7	8	-	8
	E	4	12	-	12
	\sum L	16	29*	-	
Exaggeration of authority demands	F	2	6	-	6
	M	6	4	-	6
	E	8	4	-	8
	\sum L	16*	14	-	

*Indicates the vector value of the preferred style of management for a specific attribute at all levels of management.

In order to validate the three original hypotheses introduced on page 12 of this thesis, a comprehensive data analysis of the transformed ISR values is presented here.

Planar Analysis

Initially, consider only the F Iso-Level plane (the first line level of management). A participative style of management appears superior to autocratic management for all three of the attributes supported by the ISR empirical data. These values vary from nearly double (participative = 9; autocratic = 5) for aggrandizement effect to quadruple (participative = 8; autocratic = 2) for resistance to change. Note that all the F Iso-Level plane values are less than ten and so are classified as being dysfunctional. Since the L_{\max} values (the greatest vector value for each row) for the F Iso-Level plane for all three attributes are participative management values, it can be concluded that for the F Iso-Level plane, participative management is more beneficial (with reference to the goals of a utilitarian organization) than is autocratic management.

Next, examine the M Iso-Level plane (the middle level of management). As previously noted for the F Iso-Level plane, all the M Iso-Level plane values are also less than ten and, therefore, categorized as being dysfunctional. For the M Iso-Level plane, L_{\max} values are not all drawn from a single style of management column. For resistance to change, $L_{\max} = 7$ and for aggrandizement effect, $L_{\max} = 8$, both of which are participative management values; however, for exaggeration of authority demands, $L_{\max} = 6$, an autocratic management value. With empirical evidence such as this, it is necessary to proceed further in the data analysis before drawing any final conclusions.

Finally, inspect the E Iso-Level plane (the executive level of

management). Unlike the previously discussed planes, the E Iso-Level planes contain some vector values greater than ten. Since the L_{max} values for both resistance to change and aggrandizement effect are more than ten, it can be concluded that application of a participative management style will yield moderately eufunctional results relative to these two attributes only. Conversely, if participative management were applied at the executive level of management, it would result in a vector value for exaggeration of authority demands which is one-half of the value achievable by the application of autocratic management (participative = 4; autocratic = 8).

Overall Analysis

Using the mathematical analysis techniques described on pages 56-58, it is concluded that participative management is preferred for both the resistance to change and aggrandizement effect attributes; however, autocratic management is slightly better than participative management (16 versus 14 respectively) for exaggeration of authority demands.

If these three attributes were the only critical attributes for a specific utilitarian organization being evaluated, and were of equal importance (criticality) regarding this organization's goals, it would be concluded that a participative style of management is preferred over autocratic management for this organization.

Conclusion

The hypotheses presented on page 12 of this thesis are completely supported by the ISR data values and the subsequent analysis. The validation of these hypotheses opens the way for the remainder of the sequential process. With the results of the Likert questionnaire available for use, sufficient information is available to the analyst team for the determination of data points on the two horizontal axes of the tripartite spatial model. This leaves only the third, vertical axis open to investigation. This takes the analyst team to the next, and most difficult step of the five-step sequential process.

Heuristic Search for Critical Attributes

By definition, an attribute of a utilitarian organization is any of a group of dichotomous properties which characterize such a bureaucracy and whose presence is inherent therein. Capable of either dysfunctional or eufunctional consequences on the goals of utilitarian organizations, certain of these attributes qualify as being critical if their propensity for dysfunctionality are highly deleterious to these goals, and extremely critical if it is determined that they are especially important.

It is up to a competent analyst team (composed of experienced industrial psychologists, sociologists and engineers) to isolate these critical attributes which are reducing organizational efficiency and effectiveness. These critical attributes may be any of the ones presented and discussed in Chapter III, or some lesser luminaries which have previously gone

undetected. In any case, the search for critical attributes is likely to be heuristic in nature.

Many of the attributes of utilitarian organizations are interrelated, one upon another, and it is this non-orthogonal interrelationship which makes the search heuristic. The presence and identification of an attribute which is determined to be critical acts as a stimulus to the analyst team, i.e., it encourages their further investigation of other related attributes, which may, in turn, be identified as critical. This revelation of critical attributes is, therefore, a self-guiding and subjective process which, at least at present, is a most difficult assignment for any team.

The search for critical attributes, while heuristic in nature, is still, today, a subjective process which is based almost entirely on the experience and knowledge of teams of skilled organizational and management analysts. Specific attributes are designated as critical when their consequences, whether eufunctional or dysfunctional, are determined to have some significant effect on the achievement of the goal(s) of the utilitarian organization being examined. The extent to which each of these critical attributes subjectively appears to influence goal achievement defines their proportional weighting relative to the importance of the other critical attributes. For example, the vector values of a specific critical attribute which seems to be twice as important as another critical attribute receive the square of two or four times as much weight in the calculation of the value of the overall preferred style of management. This procedure is explained in detail on pages 59-62.

Decision to Actuate Attribute Transference

Once the search for and weighting of critical attributes is determined to be complete, the analyst team possesses sufficient information to innovate within the utilitarian organization being studied, thus improving both its efficiency and effectiveness. To do this, however, members of the managerial organization within the utilitarian organization must agree to submit themselves to the fourth step of the process, i.e., to alter their style of management, thereby causing actuation of maximum positive attribute transference.

Since two of the three dimensions of each tripartite spatial model-- levels of management and a specific attribute of a utilitarian organization-- are fixed, only the third dimension--styles of management--can be varied to bring about attribute transference. Attribute transference can be either positive or negative, i.e., the propensity of a specific attribute of a utilitarian organization can be caused to be either eufunctional or dysfunctional for a given level of management by varying management style.

Having isolated certain attributes whose dysfunctional propensity at particular levels of management are critical, the analyst team submits this information to appropriate personnel within the utilitarian organization. The decision to actuate attribute transference is not easy to advise or make. Therefore, the team of organizational and management analysts, with a knowledge of human resistance to change (see page 29), must provide more than just a recommended overall preferred style of management. In addition, it must supply the management organization with extensive

supporting documentation in the form of a final report to sufficiently convince the members of the management organization of the importance and necessity of introducing a specific uniform style of management throughout the utilitarian organization. A well-organized, illustrated presentation at the conclusion of an organizational evaluation may seem unnecessary and anti-climatic, but without complete understanding and agreement on the part of the management organization, there should be no expectation for worthwhile results, i.e., the adaption of a specific uniform style of management throughout the utilitarian organization which will maximize the V_{NSL}^* (see pages 56-57).

Once this understanding and agreement has been achieved, the analyst team is ready to proceed with the fifth and last step of the sequential process of applying the findings previously described.

Introduction of Preferred Management Style

Having determined the critical attributes of the utilitarian organization being studied, the analyst team then isolates the particular level(s) of management involved for each critical attribute. With prior knowledge that there is a most appropriate management style for each level of management and attribute of utilitarian organizations, an examination of the tripartite spatial model for each critical attribute will reveal that a particular style of management will be superior to any other, given a specific attribute and level of management. This was previously discussed in Chapter IV.

Provided that the decision to actuate attribute transference has been

made, supervisors at every level of management, where an attribute's consequences can be significantly improved by attribute transference, should receive appropriate encouragement, instruction and assistance to alter whatever their present styles of management may be. In lieu of the styles used in actual practice, mathematical analysis of the various models for each critical attribute provide an obvious management style recommendation for each level of management-specific attribute combination (iso-level plane) considered. Each of these style recommendations has been empirically substantiated and should provide the least dysfunctional or most eufunctional consequences for that level-attribute combination. When this recommendation has been determined, then maximum positive attribute transference can take place, thereby providing an environment more conducive to goal accomplishment. If, on the other hand, the wrong management style is effected, then negative attribute transference may occur. This is the worsening effect of increasing the dysfunctionality or reducing the eufunctionality of the existing situation. Having objectively determined which management style is in fact preferred, it is then up to the managerial organization to apply it throughout the entire utilitarian organization.

It is worthy of mention before concluding, to note once again that even when an overall preferred style of management is adapted throughout an organization, it is not effected continuously. Rather it predominates at all levels of management and may be replaced by another style of management from time to time, depending on: managerial motivation;

managerial capability (including perception of the following); task; situation (including the work environment); the workers' educational level; the workers' socio-economic origin (initial social status); and the workers' concept of the formally appointed managers' capabilities and motivations. 10-p.95

T.N. Whitehead has pointed out that:

No society or organization is averse to change, provided the initiative for that change takes place at the relevant level--at that level where the daily activities have shown the need. Under those conditions, change will present itself not as an interruption, but as the natural law of social living. 42-p.115

With this in mind it is clear that all levels of management of utilitarian organizations should actuate maximum positive attribute transference through the timely and thoughtful introduction of the overall preferred style of management. This is necessary to produce optimal realization of the goals of utilitarian organizations.

CHAPTER VI
RECOMMENDATIONS FOR FURTHER
INVESTIGATION

Some concluding statements regarding future research are needed here. The question "Where do we go from here?" deserves consideration and definite projections for future activity in this area of inquiry. It is suggested that there are at least five major areas requiring extensive investigation and documentation--they are: use of the entire management style continuum in the development of future attribute data sets; identification of more attributes; collection of more attribute data; a method for determining the level of attribute importance (criticality) in individual utilitarian organizations; and development and testing of a more complete evaluative instrument for studying utilitarian organizations.

Discussion

Management Style Continuum

Figure 1 on page 15 presents seven distinct points on the management style continuum. As noted on page 44, only three styles of management were used in the tripartite spatial model in the interest of demonstrational clarity. This end having been accomplished, it is recommended

that the entire management continuum be used in future data development. For practical purposes the limitation to only three styles of management is too restrictive and not truly representative of reality.

Attribute Identification

Table I on page 24 identifies 15 attributes of utilitarian organizations; however, this listing is not exhaustive. There are many attributes of utilitarian organizations which have not yet been identified or studied. These attributes must be conceptually isolated and empirically researched and analyzed so that a more complete understanding of this type of organization can be achieved.

Attribute Data Collection

Only a few of the attributes already identified have conclusive data and even these data sets are not complete for the demonstrational tripartite model presented in Chapter IV. In order for the sequential process outlined in Chapter V to proceed without qualification, extensive data collection must be accomplished. This will require a combination of extensive literature search and empirical data collection and analysis.

Determination of Criticality

A method for determining the level of attribute importance (criticality) in individual utilitarian organizations is needed. The mathematical procedure detailed on pages 59-62 cannot be accomplished without a valid

estimate of attribute criticality. This method must result in positive integers which can be applied to the mathematical procedure just noted.

Evaluative Instrument

There is a clear cut need for the development and testing of a more complete evaluative instrument with which to study utilitarian organizations. The Likert questionnaire previously referred to is complete only to a point. Recognition of the attributes discussed herein and incorporation of judicious questions to determine their presence, and possibly their level of importance in selected utilitarian organizations, would considerably enhance this evaluative instrument.

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APPENDIX

LETTER FROM PROFESSOR SEASHORE

ISR

SURVEY RESEARCH CENTER/Institute for Social Research/The University of
Michigan/P.O. Box 1248/Ann Arbor, Michigan 48106

February 11, 1970

Mr. Jack B. Re Velle
Industrial Engineering and Management
Oklahoma State University
Engineering North, Room 322
Stillwater, Oklahoma 74074

Dear Mr. Re Velle:

I find your thesis proposal interesting and significant, and I have a few suggestions that may be helpful.

1. The measurement of the autocracy-delegation (autocracy-participation?) dimension probably should not include reference to environment, personal background of members, task, and the like, but should focus exclusively on properties of the organizational system itself, even though properties of the system may be in turn determined by these and other extraneous variables. There exist several handy instruments for your purpose, one of which is the Likert questionnaire enclosed herewith.

2. Your design, as I understand it, allows partial testing of your propositions by cross-sectional (one-time) measurements. E.g. organizations high on the autocracy-delegation scale should display somewhat lower rates of the various dysfunctions. However, a longitudinal study would be necessary to assess the efficacy of such "high" organizations in moderating the side effects of dysfunctions or in achieving eufunctional consequences.

3. Your problem might be better described and conceptualized in systemic terms. For example, what you call a dysfunction could be more objectively and parsimoniously defined as any system disturbance

which exceeds the homeostatic capabilities of the organization (and which thus results in either malfunction, or in systemic adaptation). Such a shift in your conceptual scheme would release you from the logical circularity of defining a dysfunction as anything with potentially dysfunctional consequences.

4. There are horrible booby traps in some of your suggested dysfunctions. An example of such a difficulty is that some of the variables, such as size, span of control, conformity, have curvilinear relationships with systemic variables of other kinds and can not be used efficiently for testing propositions of the kind you like unless converted to scales of deviation from optimum. "Optimum" is not easily determined without a lot of extra work. Suggestion: If you can, stick with the nice, clean, linear, unidimensional concepts.

5. You should have a strong preference for data sources that are independent as between your measures of dysfunction and your measures on the autocracy-delegation dimension, as obtaining both classes of data from a single survey questionnaire or interview would raise unresolvable issues of contamination.

It seems to me unlikely that our archived data would provide satisfactory information for your purposes. We can easily provide values for the autocracy-delegation scale for many work groups and organizations in many diverse kinds of organizations, but we could provide only partial data at best for a few of your dysfunction variables as we have not concentrated on them. Some of the dysfunction-related variables would be relatively easy to deal with (size, span of control, status, conflict) others could be approximated by inference (e.g. conformity could be roughly estimated from the variances on attitudinal and evaluative questions), and on others we have no relevant data at all (e.g. co-optation, acceptance of rationality ...). A factor in my view is that the complexity and cost of using archived data increases with the number of variables involved at such a rate that a new and tailor-made field study soon becomes the preferred strategy. I'd guess that with your need for longitudinal data and data of rare kinds, a small-scale field study would generate more and better information than would a large-scale exploitation of available archives. I'd like to be persuaded otherwise, so feel free to try.

Cordially,

[signed]

Stanley E. Seashore

/mc

Enclosure (1)

VITA

Jack Boyer Re Velle

Candidate for the Degree of

Doctor of Philosophy

Thesis: A CONCEPTUAL ANALYSIS AND PREDICTIVE MODEL OF THE RELATIONSHIPS BETWEEN CRITICAL ATTRIBUTES OF UTILITARIAN ORGANIZATIONS AND VARYING LEVELS AND STYLES OF MANAGEMENT

Major Field: Industrial Engineering and Management

Biographical:

Personal Data: Born in Rochester, New York, August 2, 1935, the son of Mr. and Mrs. Mark A. Re Velle; married to the former Brenda L. Newcombe in Alexandria, Virginia, August 2, 1968.

Education: Graduated from Irondequoit High School, Rochester, New York, in June 1953; received the Bachelor of Science degree from Purdue University in 1957, with a major in Chemical Engineering; received the Master of Science degree from Oklahoma State University in 1965, with a major in Industrial Engineering and Management; completed requirements for the Doctor of Philosophy degree at Oklahoma State University in July, 1970.

Professional Experience: Chemical Engineer, Shell Chemical Company/Union, New Jersey, summer 1957; commissioned officer (Second Lieutenant to Major), U.S. Air Force, 1957-1968.

Professional Memberships: Associate member, American Institute of Industrial Engineers; Alpha Pi Mu; Sigma Tau.