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Contingency Theory: Some Suggested Directions

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Common to all contingency approaches is the proposition that performance is a consequence of the fit between several factors: structure, people, technology, strategy, and culture. Unfortunately, unwarranted generalizations and fragmented and conflicting findings exist. These approaches need a greater theoretical grounding of key concepts and richer, more complex models to capture the process by which organizations adapt and change. A model is presented which argues that complex relationships exist among environmental, organizational, and individual/group variables, and that these relationships and their salience change with the strategic and organizational design choices made by members of the dominant coalition.

Contingency theories have been an important part of the management literature for the past twenty years. They were developed and their acceptance grew largely because they responded to criticisms that the classical theories advocated "one best way" of organizing and managing. Contingency theories, on the other hand, proposed that the appropriate organizational structure and management style were dependent upon a set of "contingency" factors, usually the uncertainty and instability of the environment.

Initially, contingency theories were widely accepted for at least two reasons. First, the logic underlying them was very compelling. It makes good sense that there is not one best way to manage. Second, the early research of Burns and Stalker (1961), Woodward (1965), and Lawrence and Lorsch (1967) produced, at first glance, seemingly convergent results. Later theoretical developments by Thompson (1967) and Galbraith (1977) provided theoretical foundations within which these early findings could be explained.

As expected with any theoretical model, later work suggested some problems that needed resolutions. The conceptual structure of contingency theory has been

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attacked on several grounds. Perrow (1980) is critical of its deterministic assumptions and the concept of effectiveness. Schoonhoven (1981) articulated the weaknesses due to a fuzzy conceptualization of the variables and the lack of specificity in the relationships among them. Child (1981) has argued strongly that the effects of culture must be integrated into contingency theory.

The results of later research based on contingency models also began to produce divergent results. Studies by Pennings (1975), Shortell (1977), Tung (1979), Schoonhoven (1981), and Fry and Slocum (1984) examined the relationship between uncertainty (a summative concept in contingency theory) and organizational characteristics. All these studies reached the same conclusion. At best, contingency hypotheses received limited support. A similar conclusion has been reached by others (Dalton, Tudor, Spendolini, Fielding, & Porter, 1980; Dewar & Werbel, 1979; Miller, 1981; Van de Ven & Drazin, in press).

The conceptual problems and the empirical results have led Schoonhoven (1981) to say that contingency theory

> is not a theory at all, in the conventional sense of a well developed set of interrelated propositions. It is more of an orienting strategy . . . suggesting ways in which a phenomenon ought to be conceptualized or an approach to the phenomenon ought to be explained. (p. 350)

The empirical and conceptual problems, however, are not of such magnitude to warrant rejection of the contingency model. There are serious empirical weaknesses in much of the research which purports to test contingency approaches (Aldrich, McKelvey, & Ulrich, 1984). There are also important conceptual weaknesses that have not been adequately treated. We argue that it is necessary to do two things so that the contingency models are more complete and alternative explanations are explored. First, key concepts must be more fully developed and relationships between these clearly explicated. Second, the scope of contingency theory needs to be broadened.

The depth and scope of this task are far beyond what can be done here. Nevertheless, we believe the ideas suggested in the following sections provide a valuable starting point for further theoretical thinking. We hope to explore some key issues surrounding the contingency notions and to propose a broader paradigm which considers how the scope of inquiry and thought could be widened.

Conceptualization of Key Variables

Most criticisms of contingency theory can be summarized into two major points (Miller, 1981; Schoonhoven, 1981; Van de Ven & Drazin, in press). First, the concepts are not clear. Second, the relationships between the concepts are not adequately specified. The first criticism is paramount because without clearly defined concepts (i.e., those which have achieved some degree of consensual definition), the relationships among variables are not discoverable by empirical research. There are three key dimensions that need to be sharpened: (a) effectiveness, (b) environment, and (c) congruency.

Effectiveness

Contingency theories construe organizational effectiveness either too broadly or too narrowly. Effectiveness is broadly conceived when it refers to organizational adaptation and survival. This view of effectiveness is proposed by population or natural systems theorists (Aldrich et al., 1984). Organizations that come to terms with their environment(s) survive and are effective. Organizations, however, may survive at different levels. Adaptation, as a construct, does not speak to the issue of the organizations's level of effectiveness. Adaptation takes place over time, but the time variable is rarely used in studies of organizational adaptation (Van de Ven, Hudson, & Schroeder, 1984). As the Kimberly (1984) study of the school system and the Van de Ven et al. (1984) study of software firms indicate, if environmental uncertainty is accompanied by successful adaptation, the organization may decide to enter still further uncertain environments as a result of the motivational predilections of the founders. The level of adaptation changes as the organization enters new environments and adopts new strategies and infrastructures.

Effectiveness can be construed too narrowly to mean only profitability. Lawrence and Lorsch (1967) used this measure to distinguish between effective and ineffective organizations in three different industries. Snow and Hrebiniak (1980), Mott (1972), and Perrow (1980) have argued that such a view is too narrow because other performance criteria exist. Some of these may be more appropriate than profit, such as market share, morale, growth, flexibility, efficiency, and quality. Organizations in the not-for-profit sector may be ineffective regarding the delivery of services yet still be highly effective at attracting resources. As Mott's studies of the not-for-profit agencies indicate, resource acquisition may become an end in itself. Ultimately the effectiveness of not-for-profit organizations should be based on the effective use of the resources they acquire in providing services to their clients and to the general public. Notwithstanding problems in the not-for-profit sector, profitability fits nicely with the free market, capitalistic view of the economy shared by most organizational theorists. To the extent that an organization operates in a capitalistic society, profitability seems to be quite a logical criterion. Profitability is the primary indicator of effective adaptation if the social context of the organization is structured along capitalistic, free market lines. We take this position because organizational effectiveness criteria should reflect broad social values consistent with the prevailing economic philosophy. When there are other dominant social referents, these should be incorporated into the criteria for effectiveness.

The more serious problem with effectiveness is that it is a multidimensional concept (Becker & Neuhauser, 1975; Quinn & Rohrbaugh, 1983; Steers, 1977). Given divergent perspectives and emphases, there are at least three dimensions, or outcomes, that have been used to measure the phenomena of effectiveness. The first is efficiency, which refers to the way in which the resources of the organization are arranged and the amount of resources used to produce a unit of output. The second dimension is generally some outcome preference of organizational members such as pay, job satisfaction, quality of work life, or security. A third dimension is usually some general, socially responsible outcome (e.g.,

being a good citizen). While writers recognize the multidimensional nature of organization outcomes, they do not suggest how these multiple outcomes are interrelated or how characteristics which comprise the dimensions of the organization (e.g., formalization, centralization, complexity) affect each outcome.

Effectiveness is generally the degree to which an organization obtains a very limited number of highly desirable outcomes. Judging the effectiveness of any organization involves a question of values. Managers and researchers, by selecting one or more concepts for assessment, have usually not made explicit the tradeoffs with respect to other outcomes that were not selected. If each outcome is preferred by a different constituency, an important question is the transitivity of outcomes. For example, if profit maximization is the stockholders' preferred outcome, what is the lower limit for salaries before workers and managers refuse to join the firm (Connolly, Conlon, & Deutsch, 1980)? An organization is not likely to maximize the outcome preferences of its multiple constituencies. At any given time, there are likely to be tradeoffs between criteria. Dewar and Werbel (1978), for example, found that lack of enforcement of rules and regulations was associated with increased intergroup conflict, but that tight surveillance and rule enforcement was associated with decreased job satisfaction. Fry and Slocum (1984) found that effective police workgroups were characterized by an unquestioning belief in and acceptance of the organization with little participation in decision making. However, highly committed workgroups (another desired outcome) operated under few rules and had supervisors who encouraged participation in decisions affecting their workgroup.

The theoretical and pragmatic implications of this idea are important. Organizational equilibrium, "the organization's success in arranging payments to its participants adequate to maintain their continued participation" (March & Simon, 1958, p. 92), is not static; it is dynamic. Elements of structure and managerial practice probably shift as organizational elites first attempt to maximize one outcome, find another waning, and then shift their attention. Prediction of the relationship between organizational characteristics and outcomes, therefore, deserves attention. To the extent managers are able to manipulate "independent" variables to affect outcomes (or dependent variables), the issue becomes salient.

Let's assume there are three general classes of organization outcomes: (a) profitability, (b) quality of work life, and (c) social responsibility; and that each of these outcomes bears a different, but curvilinear, relationship to managerial control (see Figure 1). An organization's elite develops alternative ways to achieve member predictability. This is the function of the control structure (Daft & Macintosh, 1984). It is the set of constraints which ensure that organization members direct activities toward desired organization purposes. These constraints may be external and internal. External controls are policies, procedures, rules, and leader behaviors intended to minimize (a priori) or correct (post hoc) deviations from desired outcomes. Internal controls are values, attitudes, and skills of the members developed through socialization prior to and after entry to the organization (Kerr & Slocum, 1981).

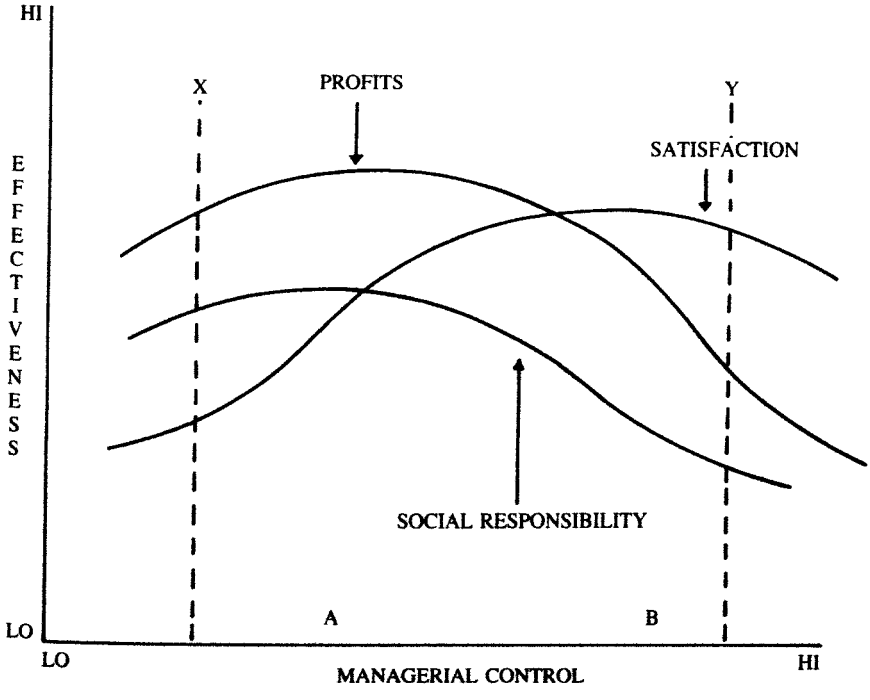
Managerial control may range from high to low and may be increased or

decreased at the discretion of managerial elites. External constraints may be altered by modifying the level of, the specificity of, and the number of rules, policies and procedures or by varying the degree of leader direction. Internal controls may be altered through selection and socialization strategies; the use of standardized selection tests and some forms of training increase the homogeneity of employee attitudes and behavior, thus reducing the need for imposition of external controls (Etzioni, 1964).

If managerial control (or any other factor) can be manipulated, then one must decide how much there should be. Assume that the firm survives as long as it operates between points X and Y in Figure 1. In that range, it provides adequate, though less than preferred, outcomes to all constituencies. The specific point at which a firm operates on the managerial control continuum is a function of managerial choice. To survive, it must operate between points X and Y; to be profitable, it must operate at point A (see Figure 1). At point A profits are maximized, quality of work life is low, and social responsibility is high. This outcome configuration may be very attractive to stockholders and to the general public, but unacceptable to the employees. They may prefer to operate at point B, where profits and satisfaction are high, but social responsibility is low.

This framework emphasizes that salient facets of effectiveness may oppose one another when each is embedded in competing values held by different constituencies. Judging the effectiveness of any organization ultimately in-

Figure 1. Hypothetical relationships between managerial control and organizational outcomes.



volves individual values. In making such judgments, managers use certain criteria (often unarticulated), weigh them, and try to integrate them meaningfully.

Environment

The seminal studies of Burns and Stalker (1961) and Lawrence and Lorsch (1967) were based on the premise that organizations interact with several environments. These studies examined how the characteristics (e.g., uncertainty and rate of change) of market and technological environments affected the internal structure of an organization. Later writings ignored specific environmental sectors (markets, government, etc.) and sought to describe them in terms of certainty, complexity, etc. Thompson (1967), for instance, described environments along two continua, homogeneous/heterogeneous and stable/shifting. An elaborate classification of environmental characteristics was presented by Jurkovich (1974) covering 64 different types of environments.

A fundamental premise of these approaches is that a particular environmental characteristic affects all organizations in a similar fashion. However, Child (1972) and Hambrick (1984) clearly point out that researchers who ignore the strategic choice dimension neglect a key factor. Instead of the simple sequence of environment→organization, Miller (1981) proposes a model in which strategy interacts with these two factors.

We discuss an expanded model later. Here we argue that it is important that the relationship of the organization to the environment be framed in more precise ways. A theory must include both the array of environmental sectors with which an organization interacts and the attributes of specific sectors. From a systemic perspective (Katz & Kahn, 1978), the environmental sectors can be specified as (a) users of output, (b) input sources, and (c) external regulators. For a business organization, some specific sectors might be:

Customers (or users) of a single or multiple output(s). Some organizations produce a single product or service, like a farmer who grows only one type of grain. Other organizations, like conglomerates, produce many products.

Capital sources. Stockholders, bondholders, banks, and other creditors may be sources of funds for business organizations. Many public agencies rely on government funds. Not-for-profit organizations may find capital supplied by government and private contributors as well as customers.

Raw product supplies. Organizations may have simple and limited input requirements, such as the metal requirements of a steel fabricator; or the requirements may be complex and many, such as would be the case for the raw materials needs of an aircraft manufacturer.

Technology and science. Some basic scientific or conceptual base underlies the logic and form of the production activities, or other support systems, that transform inputs to outputs.

There must be a link between the environmental sectors and the organization, but it must be a link between specific environmental subsectors and specific parts of the organization. To achieve this link, a theory must also include a rationale of

how organizational subsystems (e.g., production, maintenance, adaptive, and managerial) interface with each environmental sector and with each other. The interaction between an environmental sector and an organizational subsystem will be an important determinant of each subsystem's attributes (e.g., division of labor in the production subsystem and form of reward used to attract members and recognize high performance in the maintenance subsystem).

Moreover, specific environmental sectors will have different effects on organizations, even though the different sectors may have similar uncertainty characteristics. For example, the stable market environment will have a different effect on the marketing subsystem than a stable technological environment will have on an R & D subsystem. While each organizational unit is responding to specific environmental sectors, the resultant departmental forms (formalization, complexity, centralization) will be different.

The identification of specific sectors also allows for a theoretical consideration of the different types and effects of environmental complexity. Consider the following two cases:

1. An organization faces an environment in which there are strong, uncertain influences from the customers, from several government agencies, and from the society in general.

2. An organization faces an environment in which there is little pressure from the government and few general social pressures. Yet, it produces several very different products using very different technologies for a varied set of changing customers.

According to Thompson (1967), Duncan (1972), and Lawrence (1981), both environments are complex and heterogeneous. Whether these two organizations would develop similar infrastructures, even if their strategies were similar, is subject to theoretical debate and empirical verification. We do not believe they would. The systems concept of equifinality recognizes that multiple, equally effective design alternatives may exist.

Congruency

Deeply embedded in the contingency literature is the construct of congruency, or fit. Improving congruency between the environment and the organization supposedly leads to improved effectiveness; fit or congruency is the central theme in most contingency studies. Although clearly a construct of central importance, there are two major problems with the congruency concept: (a) methodological and (b) theoretical.

Contingency theories hypothesize that the relationship between two variables is contingent upon some third variable. The methodological problems with testing for this contingency, or fit, have been addressed by Schoonhoven (1981), Dewar and Werbel (1979), Arnold (1982), Fry and Slocum (1984), Miller (1981), and Van de Ven and Drazin (in press). According to Arnold (1982, p. 144), confusion in testing contingency theories rests on two different statistical assumptions. First, some researchers (Argote, 1982) tested for fit by drawing a distinction between the degree of relationship between two variables, measured

by the magnitude of correlation coefficients. The degree of relationship between a predictor and a criterion for different values of a moderator variable indicates nothing about whether the correlations are significantly different for different subgroups or the interaction between contingency factors. There is also a potential loss of information when predictor variables are dichotomized. Suffice it to say that bivariate statistics to draw conclusions about potentially complex relationships present obvious problems. Multiplicative interaction terms in regression analysis (Schoonhoven, 1981; Dewar & Werbel, 1979; Fry & Slocum, 1984) test for the form of the relationship, as indicated by the beta coefficients in the regression equation. Regression analysis, while it cannot test for significant differences between correlation coefficients and hence cannot be applied to test for differential validity, can be used to test for the interaction of two independent variables in determining a dependent variable. Miller (1981) and Van de Ven and Drazin (in press) propose other statistical techniques for testing contingency propositions. They propose that multivariate techniques, such as cluster and pattern analyses, can potentially test multiple contingencies because these approaches do not assume certain conditions of fit. These new approaches are especially noteworthy because of their ability to test the systems concept of equifinality. Statistical techniques have frustrated researchers' attempts to test for the interaction effects being modeled because each technique has implied biases. Researchers need to compare the utility of each of these statistical techniques using the same data set.

Another important consideration is the theoretical rationale that posits congruency is related to effectiveness. In general, the congruency model implicit in contingency theory is what Joyce, Slocum, and Von Glinow (1982) call the *effects model*. The model suggests that "more is better." That is, the proportion of explained variance in organizational effectiveness will increase when there are higher (or lower) levels of organizational dimensions present. For example, effectiveness in mechanistic organizations will be higher in those firms with more rigidly defined jobs and with greater adherence to rules and regulations than in those firms with less task definition and less enforcement of rules.

We question the effects model for two reasons. First, as implied in an earlier argument, congruency may be necessary for an organization to adapt and survive; but it is not an adequate condition for high performance on narrower criteria, such as profitability. For instance, a congruent relationship between the structure of authority and task definition may be a necessary condition for a firm to operate somewhere between the X and Y boundary in Figure 1, but not a sufficient condition for it to operate at point A, or for that matter, point B. Thus, a congruency hypothesis cannot be adequately specified until theory differentiates between different types of effectiveness, that is, survival (conceptually broad) and profitability (conceptually more narrow). Second, the effects model has a symmetry bias, implicit in most contingency theory and reflected in models that describe the independent variables as polar opposites under different conditions. Consider, for example, the different conditions of environmental uncertainty, high (X_H) and low (X_L), and the nature of organizational dimensions under each in the typical model shown in Table 1.

Table 1. Environmental Uncertainty and Organizational Dimensions in Typical Model

Organizational Dimensions	Environmental Uncertainty X_H	X_L
Task Definition	Loose	Tight
Authority	Decentralized	Centralized
Rules and Regulations	Few	Many
Formalization	Low	High

The effects model assumes that under either condition of X, task definition, authority, formalization, and rules and regulations would be correlated in a similar way. The higher the correlation, the more effective the organization. It also implies that any one of the independent variables (e.g., task definition) would be negatively correlated between different levels of X. Further, any independent variable would be linearly related to the contingency variable (X), though it may be positive or negative.

An alternative view to the effects model is the *functional model*. It does not suggest that more is better or that symmetry is implicit in all the independent variables. The functional model suggests that the joint occurrence of two independent variables (e.g., *a* and *b*) may do little to change the level of a dependent variable. Rather, a change in *a* or in *b* alone may be sufficient to induce changes in the dependent variable.

Haas, Hall, and Johnson (1966) suggest a fruitful approach for developing alternative congruency models. They sought to develop profiles of different types of organizations. In 75 organizations they found that "seemingly strange combinations of organizations" shared similar characteristics and that "characteristics that appear quite trivial" frequently are the basis for differentiation.

> The organizations in each class shared a combination of characteristics that are not found in the same pattern among the rest of the organizations included in the study. While organizations in the different classes may have many characteristics in common, these characteristics are not common in a common configuration. Each class (in the taxonomy) contains organizations with a homogeneous set of characteristics found only in the specific configuration among organizations in each class. The result is a taxonomy not unlike that found in zoology. The "adding-on" of an additional characteristic may completely differentiate mammals from amphibious creatures. The same thing *may* be true for organization (Haas et al., p. 167).

The Need for More Theoretical Scope

The basic structure of contingency theory was described earlier. The environment and its characteristics are treated in relationship to organization and its structure. We propose that the theoretical structure be broadened to include systematically three classes of variables: (a) individuals and groups, (b) strategic and design choices, and (c) cultural factors. Our expanded contingency model is

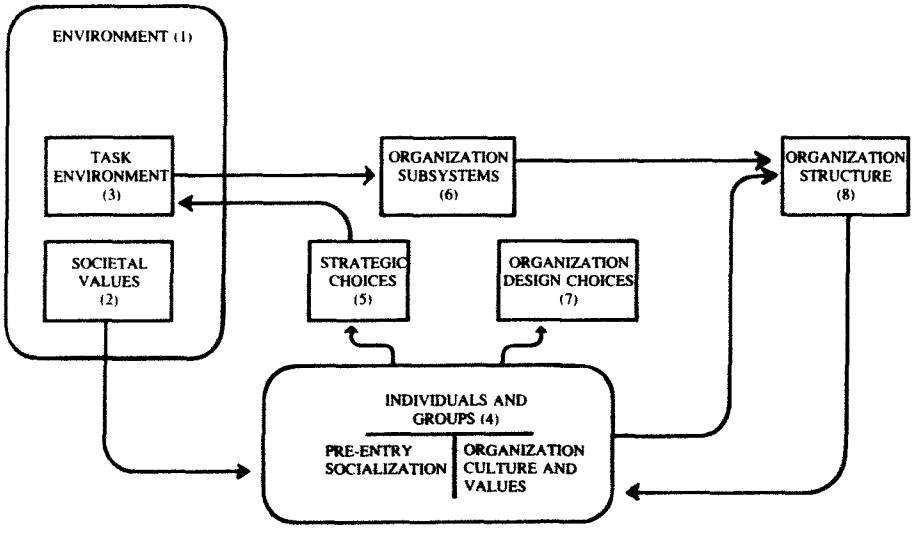
shown in Figure 2. Below, we show where and how some of these links may be drawn. Basically, the model suggests that culture (2), an element of the general environment (1), affects individual and group preferences and values (4). Culture also has an important socialization effect on individuals prior to any work experience. Individuals and groups make strategic choices (5) about risk avoidance, diversification, and expansion. These choices are made with some knowledge about the task environment (3) of the organization. Decisions are made about what to produce and the arrangement of the organization's task subsystems (6) to arrive at desired levels of effectiveness. These subsystem activities may be differentiated and integrated along different modes. The choice of departmentation is a key organizational design decision (7) that reflects individual and group preferences. The subsystems, the design choice, strategy, and individual and group factors interact to form the organization's structure (8). The organizational structure, in turn, reinforces the organization's culture.

Cultural Considerations

Cultural variations affect cognitive styles, attitudes, values, and the way that much human behavior is organized (Bhagat & McQuaid, 1982). Since Abegglen's (1958) study of the social organization of a Japanese factory, there has been considerable interest in value systems, culture, and work. Unfortunately, contingency theories fail to consider the role of culture in structure. Child (1980, 1981) and Barrett and Bass (1976), among others, argue that underlying symbols and values which vary from one culture to another have a significant effect on organizational structures and on the constitution of organizational effectiveness.

Culture may be integrated into contingency models by examining its relationships to three different sets of variables. It may be related to: (a) individual

Figure 2. Expanded contingency model.



responses, group factors, and organization culture, and through these to (b) organizational design, and (c) strategic choices.

For example, assume that the basic auto manufacturing technology is exactly the same regardless of geography, that is, the same task activities must be performed to make a car and get it to market. What differs is the way the work is organized. For example, cars can be built by work teams (as at Volvo) or on an assembly line (as at General Motors). Important cultural differences between the United States and Sweden must be considered to understand why work (the production subsystem) is designed differently by Volvo and General Motors. In Sweden, government social support programs are so extensive that there is no direct wage cost to an absent worker. At Volvo, prior to the redesign of work, absenteeism was so high it became a significant manufacturing cost (Gyllenhammar, 1977). Jobs were redesigned to lure workers back to the plant. Although this raised the price of cars, it is consistent with the predominant Swedish values. The large numbers of auto purchasers in the United States would be unlikely to pay the price for automobiles manufactured under such a system, although we recognize that Volvo has a loyal and a reasonable U.S. market share. Neither does it seem reasonable to expect that, in the short run, the public would support a work force with social benefits at the level which exists in Sweden.

Cultural differences may also account for differences in organizational design and processes (Pascale & Athos, 1981). Early individual development of attitudes toward authority, employment practices that reduce worker job insecurity, and higher levels of employee and managerial commitment to the organization reflect major differences that exist between Japan and the United States. Such cultural variations give rise to differences in managerial control strategies. For example, assume that to achieve the maximum rate of return on investment, a specific degree of managerial control must be present (see Figure 1, point A). This level of control may be achieved by different combinations of the internal and formal controls. In some cultures (Japan, for example) internal control plays a substantial and legitimate part in the organization's control system. In the United States formal controls may be more critical in the total system of control. Thus, while the same total amount of control is equal across cultures, different combinations of formal and internal controls are used to achieve desired performance.

Finally, culture may have significant effects on strategic considerations. This is a result of the effects of culture on individual choices, especially those related to organizational effectiveness. Perhaps culture is the most important determinant of which organization outcomes are chosen for maximization by managerial elites. In those societies where social outputs are more valued than profitability, a firm's control system will operate to maximize social outputs, not profitability (Tannenbaum, Kavčič, Rosner, Vianello, & Wieser, 1974).

The Integration of Individual and Group Concepts

The main concepts in organization theory are about organizational structure, its antecedents and consequences. Individuals tend to be treated as reactors with behavior molded or controlled by the organization. Thus, organizations are

instruments of control that stifle individual initiative and constrain choice.

The domain of organizational behavior is the individual and the workgroup. Its concepts and processes (e.g., perception, motivation, leadership, and reinforcement) are embedded mainly in the disciplines of psychology and sociology. The organizational context within which these concepts and processes occur is largely ignored. Except for a few theoretical efforts (e.g., see Lorsch & Morse, 1974) most work in this area focuses on some structural factor, usually as an independent variable, and on some individual affective or behavioral factor as a dependent variable. The work of Fiedler (1965), House (1971), and Brass (1981) are examples. In these works a single structural factor, generally the nature of work, is related to individual or group effects. In no instance is the structural factor related to other organizational characteristics (complexity, formalization, centralization), strategic choice, or environmental variables.

Organizations may be construed as a configuration of different characteristics. The *mechanistic* organization has highly centralized decision making. Typically the work is routine and repetitive. *Organic* organizations are, generally, quite the opposite. Routine work generally lends itself to easier measurement than nonroutine work. If so, it is likely that pay may be more easily associated with task activities and outputs in mechanistic organizations than in organic ones. Thus, reward systems (i.e., what behaviors are reinforced through pay) would be quite different, leading to different behavioral patterns. Similarly, nonroutine work generally requires higher cognitive skills than does routine work. If a particular type of training is required to perform a nonroutine task,then those hired to perform the task may have experienced some pre-entry socialization practices (e.g., schooling, state examinations for licenses). Thus, these different structural characteristics and organizational practices would result in very different outcomes.

There are two theoretical developments that would facilitate the integration of organizational behavior and organization theory. The first would be linking the concept of "structure" in the organization literature with the concept of "task structure" in the organizational behavior literature. For example, the concept of centralization seems logically related to the task characteristics of autonomy. Likewise, formalization seems easily related to task variety.

The second useful theoretical development would be the introduction and refinement of concepts that reflect individual differences and organizational differences. To take the simplest case, for example, there is not much argument that organic organizations are differently structured than mechanistic ones. There is also agreement that differences among individuals are important factors in how they respond to stimuli. There is, for example, literature that shows the effects of a manager's personality on the design of an organization (Mitroff, 1983). The question is this: Is there any systematic relationship between a class of individual difference variables and type of organization?

This question has not been adequately addressed. Assume, for the argument, that members of work organizations can be classified as either "locals" or "cosmopolitans" (Gouldner, 1957). There are some rather logical questions that may be asked when these individual orientations are related to the type of

organization (see Van de Ven et al., 1984). Do mechanistic organizations differ from the organic ones with respect to the proportion of cosmopolitans and locals? What are the modes of accommodation of cosmopolitans and locals in the different types of organizations? One way to frame these hypotheses (and others) is in terms of reinforcement approaches. The different types of organizations may be characterized as different patterns of stimuli (or reinforcements) and the different individual orientations (cosmopolitan or local) may be thought of as differentially susceptible to these reinforcements. The collective effect of systematic attraction, selection, and retention of a particular type of individual interacting within a set of organizational conditions (i.e., technology and structure) gives rise to an organization's culture.

Organizational culture is the shared set of beliefs that bind individual values to actions through company rites, rituals, and stories (Deal & Kennedy, 1982; Martin, Feldman, Hatch, & Sitkin, 1983). It can be a powerful agent for guiding behavior (Sathe, 1983; Schneider & Reichers, 1983). Organizational cultures may vary from one firm to another. Two successful firms in the electronics industry have very different organizational cultures (Deal & Kennedy, 1982). In one, effective individual adaptation requires that persons work at a frantic pace on the job and at play. The other firm is characterized by a sense of deliberateness, an emphasis on respect within one's peer group and deference to authority. Managers who transfer from one firm to the other are likely to experience some adjustment problems.

Organizational cultures are antecedents and consequences of particular designs. The dominant values of top management are reflected in the choice of the general form of structure. For example, where individual accountability, deference to the authority of top management, and financial controls are dominant values (e.g., General Motors), the product form of organization may be chosen over functional or matrix forms due to the ease of establishing cost and profit centers for major organizational units. The choice of design will reinforce certain values and behaviors more strongly than others. For example, because more specialists with similar training and experience are likely to work together in a functional organization than in the product form, one would expect to find higher levels of professional commitment in a functional organization (Duncan, 1979; Daft, 1983). Similarly, an organization that values individual performance over group acceptability is more likely to use a control system that relates compensation to accounting and financial ratios (Daft & Macintosh, 1984), rather than to more global assessment factors (e.g., subjective); thus, the corporate culture and individual values are, indeed, self-reinforcing.

The theoretical integration of micro and macro levels of analysis is required for contingency theory to be forthcoming. Ignoring the context within which human behavior occurs results in an inadequate conceptual framework for study of human behavior in organizations. If these two levels can be integrated, hypotheses about the affective and behavioral responses of individuals and groups in organizations may be sharpened over their current form.

Strategic and Design Choices

Some have criticized contingency theory because it is deterministic; that is,

organizational structure is driven by the environment. Theoretical criticisms raised by Miller (1981), Van de Ven and Drazin (in press), and Tushman and Romanelli (in press), maintain that the deterministic assumption is simplistic. Organizations become what they are because of the environment and choices made by members, especially choices about strategy and organizational design.

Thompson (1967) points out:

> Organizations are not determined simply by their environments. Administration may innovate on any or all of the necessary dimensions, but only to the extent that innovations are acceptable to those on whom the organization can and must depend. (p. 27)

The concept of strategic choice should be separate from organizational design considerations. Organizational design is the process of specifying combinations of organizational characteristics to achieve desired outcomes. Strategic choices are those decisions which (a) seek to locate the organization with respect to the specific environment, and (b) choose methods to operate within that environment (Tosi & Carroll, 1977; Hambrick, 1984). According to Child (1972), Chandler (1962), Cyert and March (1963), and Thompson (1967), top managers make decisions that are critical to resolving these questions.

Let's consider the choice of the environmental niche first. Publishing companies may produce books for many different markets. One may choose to publish only college textbooks, while another may operate in the collegiate and in the trade markets. For all practical purposes, selecting one environmental sector over another minimizes adaptation problems; that is, variations in the sector not selected will have no direct effects on the focal firm.

Not only may a firm choose one or more niches, but also managers can change the environment through proactive tactics. Market environments may be made increasingly volatile through advertising, new product introduction, aggressive pricing, or a change in governmental legislation (e.g., airline and trucking deregulation). For example, in the brewing industry the introduction of light beer and heavy advertising increased Miller's market share from 4.2% to 20% in seven years. Another way to affect the environment is by extensive research efforts which, if successful, may increase the uncertainty of the technological and market environments for firms in the same industry. If an organization can shift the character of the environment in a comparative advantage direction, it stands to become more successful than less proactive firms.

Another strategic choice issue is the selection of the tactics for competing in a business. According to Miles and Snow (1978), all organizations must resolve three issues before choosing a tactic: the *entrepreneurial,* the *engineering,* and the *administrative* issues. The entrepreneurial issue is the search for a specific good or service for a target market. The engineering issue is the choice of the appropriate technology for production and distribution of the goods or services to the market place. The administrative issue involves stabilizing and rationalizing those problems faced in the entrepreneurial and engineering phases, then developing and implementing strategies that enable the organization to grow.

Organizations can be classified into four types, depending upon how they

solve these three problems: defenders, prospectors, analyzers, and reactors. Each type has its own configuration of technology, structure, corporate culture, and organizational design dimensions which are consistent with its enacted environment (see Hambrick, 1983a, for a partial test of this taxonomy). A study by Meyer (1982) examined the relationships between these types of strategies and organizational performance in three hospitals operating in the same environment. Essentially he found that different types of organizational strategy (i.e., defenders, prospectors, analyzers, and reactors) can occur contemporaneously in the same environment. He concludes that the environment is not deterministic of the type of strategies.

A different formulation of the strategic and tactical issues could be based upon an environmentally specific model. Strategy and tactics could then be described in terms consistent with the complexity of the relevant environmental sectors. Hambrick (1983b) has recently described eight different types of environments. Within each environment there are distinguishing characteristics. For example, in the roller-coaster commodity environment, the distinguishing characteristics are low product dynamism and high demand instability. For the orderly producers of mundane supplies, the distinguishing characteristics of the environment are strong leaders, weak customer bargaining power (since they infrequently purchase the product), low product dynamism, and little market share instability. The next step would be to examine various firms that compete in these different environments and to examine how these organizations design themselves to cope with the uncertainties generated by these environmental characteristics (Randolph & Dess, 1984).

There are also decisions to be made about organizational design, the second major choice area. Such design is the set of decisions that determine the manner in which organizational subsystems are differentiated and then integrated. For any organization, the formal design is restricted to that set which is compatible with the organizational systems (Katz & Kahn, 1978). This means that general structural form of the subsystem activities (i.e., production, maintenance, etc.) is driven by an environmental sector, but the specific departmental form is a managerial choice. Recent history at General Motors is a good case in point. In the 1960s each car division had its own design, production, and assembly division. Under such a form, it was a simple matter to make each a profit center for accountability purposes. In the 1970s GM reorganized. Activities were reassigned until they were organized on a functional basis, though still having the car divisions on paper. In January of 1984 GM announced a plan to reorganize once more (Holusha, 1984). This time it will have a large car division and a small car division. Once again, GM will be a product-organized firm. The point is: GM will do what has to be done to manufacture and distribute autos; but the arrangement of the work, that is, the organizational design, will be determined by the organization's elites.

Summary and Discussion

The early potential for contingency theories to become dominant models in the study of management has failed to materialize. This is not surprising. First,

whether a theory in any social science can be tested empirically depends upon the existence of clearly understood concepts within the theory, adequate statements of how these concepts are related to each other, and the availability of adequate measurement instruments. Contingency theory does not meet any of these conditions. In fact, to find only partial support for the contingency notions, as some of the researchers cited in this paper have found, is quite promising indeed.

Second, there has been little development of the contingency theory qua theory. Rather than subject the concepts proposed by Lawrence and Lorsch, Burns and Stalker, Woodward, and others to further clarification and elucidation, we have been remarkably content to test narrow facets of the models which they proposed. Later research has led to rejection of some of the models, but to little incremental theoretical improvement. Instead of refining measurement instruments, we need stronger theory. This may be accomplished by sharper definition of concepts and by broadening the scope of our theoretical inquiry. We hope this paper points in a direction which future work can take.

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