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In these cases, through lack of experience or training, the set evoked by a stimulus is actually smaller than that desired.

These "pathological" processes—the evocation of unanticipated associations, the unanticipated provision of stimuli, and failures of stimuli to evoke the anticipated set—underlie the phenomena we shall discuss in this chapter. Hence, the problems discussed here partly stem from, and are aggravated by, the use of the "machine" model by the organizational hierarchy in governing its own behavior. We shall be interested particularly in how these unanticipated consequences restrict the adaptiveness of the organization to the goals of the top administrative hierarchy. This interest will lead us to consider the direction and control of large-scale bureaucratic organizations, problems of morale, and the relation between morale and productivity. We shall see that there exist in these areas at least some empirical data for testing hypotheses about the unanticipated consequences of treating employees in terms of the simple "machine" model.

3.2 Theories of Bureaucracy

Modern studies of "bureaucracies" date from Weber (1946, 1947) as to both time and acknowledged intellectual debt. But, in a sense, Weber belongs more to the preceding chapter than he does to the present one. His major interests in the study of organizations appear to have been four: (1) to identify the characteristics of an entity he labelled "bureaucracy"; (2) to describe its growth and the reasons for its growth; (3) to isolate the concomitant social changes; (4) to discover the consequences of bureaucratic organization for the achievement of bureaucratic goals (primarily the goals of a political authority). It is in the last-named interest that Weber most clearly differentiates himself from the other writers who will be considered here. Weber wishes to show to what extent bureaucratic organization is a rational solution to the complexities of modern problems. More specifically, he wishes to show in what ways bureaucratic organization overcomes the decision-making or "computational" limits of individuals or alternative forms of organization (i.e., through specialization, division of labor, etc.).

Consequently, Weber appears to have more in common with Urwick, Gulick, and others than he does with those who regard themselves as his successors. To be sure, Weber goes beyond the "machine" model in significant ways. In particular, he analyzes in some detail the relation between an official and his office. But, in general,

Weber perceives bureaucracy as an adaptive device for using specialized skills, and he is not exceptionally attentive to the character of the human organism.

When we turn from Weber to the more recent students of bureaucracy, however, we find them paying increasing attention to the "unanticipated" responses of the organization members (Merton, 1936; Gouldner, 1957). Without denying Weber's essential proposition that bureaucracies are more efficient (with respect to the goals of the formal hierarchy) than are alternative forms of organization, the research and analyses of Merton (1940), Selznick (1949), and Gouldner (1954) have suggested important dysfunctional consequences of bureaucratic organization. In addition—explicitly in the case of Gouldner and implicitly in the other two authors—they have hypothesized that the unintended consequences of treating individuals as machines actually encourage a continued use of the "machine" model.

The general structure of the theoretical systems of all three writers is remarkably similar. They use as the basic independent variable some form of organization or organizational procedure designed to control the activities of the organization members. These procedures are based primarily on what we have called the "machine" model of human behavior. They are shown to have the consequences anticipated by the organizational leaders, but also to have other, unanticipated, consequences. In turn, these consequences reinforce the tendency to use the control device. Thus, the systems may be depicted as in Figure 3.1.

The several systems examined here posit different sets of variables and theoretical relations. However, their structures are sufficiently similar to suggest that these studies in "bureaucracy" belong to a single class of theories.

The Merton model. Merton (1940) is concerned with dysfunctional organizational learning: organization members generalize a re-

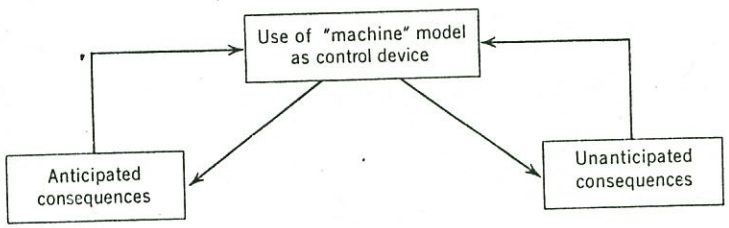

Figure 3.1. The general bureaucracy model.

sponse from situations where the response is appropriate to similar situations where it results in consequences unanticipated and undesired by the organization. Merton asserts that changes in the personality of individual members of the organization stem from factors in the organizational structure. Here personality refers to any fairly reliable connection between certain stimuli and the characteristic responses to them. The label "personality" is attached to such a response pattern when the pattern does not change easily or rapidly.

Merton's system of propositions begins with a *demand for control* (3.1) made on the organization by the top hierarchy. This demand takes the form of an increased *emphasis on the reliability of behavior* (3.2) within the organization [3.2:3.1].* From the point of view of the top hierarchy, this represents a need for accountability and predictability of behavior. The techniques used to secure reliability draw upon what has been called here the "machine" model of human behavior. Standard operating procedures are instituted, and control consists largely in checking to ensure that these procedures are, in fact, followed.

Three consequences follow from this emphasis on reliability in behavior and the techniques used to install it:

1. There is a reduction in the *amount of personalized relationships* (3.3) [3.3:3.2]. The bureaucracy is a set of relationships between offices, or roles. The official reacts to other members of the organization not as more or less unique individuals but as representatives of positions that have specified rights and duties. Competition within the organization occurs within closely defined limits; evaluation and promotion are relatively independent of individual achievement (e.g., promotion by seniority).

2. *Internalization of the rules of the organization* (3.4) by the participants is increased [3.4 3.2]. Rules originally devised to achieve organizational goals assume a positive value that is independent of the organizational goals. However, it is important to distinguish two phenomena, both of which have been called the "displacement of goals." In one case, a given stimulus evokes an activity perceived as leading to a preferred state of affairs. In a series of such situations, the repeated choice of the acceptable alternative causes a gradual transfer of the preference from the final state of affairs to the instrumental activity. In the other case, the choice of a desired alternative reveals additional desirable consequences not originally anticipated.

* See pp. 8–9 for an explanation of the numbering system used for the propositions.

The instrumental activity has, therefore, positively valued consequences even when it does not have the originally anticipated outcomes. It is this latter phenomenon (secondary reinforcement) that is operating in the present situation: the organizational setting brings about new personal or subunit consequences through participation in organizationally motivated actions.

3. There is increased *use of categorization as a decision-making technique* (3.5) [3.5:3.2]. To be sure, categorizing is a basic part of thinking in any situation. The special feature involved here is a tendency to restrict the categories used to a relatively small number and to enforce the first formally applicable category rather than search for the possible categories that might be applied and choose among them. An increase in the use of categorization for decision-making decreases the *amount of search for alternatives* (3.6) [3.6:3.5].

The reduction in personalized relationships, the increased internalization of rules, and the decreased search for alternatives combine to make the behavior of members of the organization highly predictable; i.e., they result in an increase in the *rigidity of behavior* (3.7) of participants [3.7:3.3, 3.4, 3.6]. At the same time, the reduction in personalized relationships (particularly with respect to internal competition) facilitates the development of an *esprit de corps*, i.e., increases the *extent to which goals are perceived as shared among members of the group* (3.8) [3.8:3.3]. Such a sense of commonness of purpose, interests, and character increases the *propensity of organization members to defend each other against outside pressures* (3.9) [3.9:3.8]. This, in turn, solidifies the tendency toward rigid behavior [3.7:3.9].

The rigidity of behavior has three major consequences. First, it substantially satisfies the original demands for reliability [3.2:3.7]. Thus, it meets an important maintenance need of the system. Further needs of this sort are met by strengthening in-group identification, as previously mentioned [3.2:3.8]. Second, it increases the *defensibility of individual action* (3.10) [3.10:3.7]. Simple categories rigorously applied to individual cases without regard for personal features can only be challenged at a higher level of the hierarchy. Third, the rigidity of behavior increases the *amount of difficulty with clients* (3.11) of the organization [3.11:3.7] and complicates the achievement of client satisfaction—a near-universal organizational goal. Difficulty with clients is further increased by an increase in the *extent of use of trappings of authority* (3.12) by subordinates in the organization [3.11:3.12], a procedure that is encouraged by the in-group's defensiveness [3.12:3.9].

The maintenance of part of the system by the techniques previously outlined produces a continuing pressure to maintain these techniques, as would be anticipated. It is somewhat more difficult to explain why the organization would continue to apply the same techniques in the face of client dissatisfaction. Why do organizational members fail to behave in each case in a manner appropriate to the situation? For the answer one must extend Merton's explicit statements by providing at least one, and perhaps two, additional feedback loops in the system. (It is not enough to say that such behavior becomes a part of the "personality." One must offer some explanation of why this apparently maladaptive learning takes place.)

The second major consequence of rigidity in behavior mentioned above (increased defensibility of individual action) is a deterrent to discrimination that reinforces the emphasis on reliability of behavior [3.2:3.10]. In addition, client dissatisfaction may in itself reinforce rigidity. On the one hand, client pressure at lower levels in the hierarchy tends to increase the *felt need for the defensibility of individual action* (3.13) [3.13:3.11]. On the other hand, remedial action demanded by clients from higher officials in the hierarchy may be misdirected. To the extent to which clients perceive themselves as being victims of discrimination (a perception that is facilitated in American culture by the importance attached to "equal treatment"), the proposals of clients or of the officials to whom they complain will probably strengthen the emphasis on reliability of behavior. This conflict between "service" and "impartiality" as goals for public organizations seems to lie behind a good deal of the literature on public bureaucracies.

We see that Merton's model is a rather complex set of relations among a relatively large number of variables. A simplified version of the model, designed to illustrate its major features, is provided in Figure 3.2.

The Selznick model. Where Merton emphasizes rules as a response to the demand for control, Selznick (1949) emphasizes the delegation of authority. Like Merton, however, Selznick wishes to show how the use of a control technique (i.e., delegation) brings about a series of unanticipated consequences. Also, like Merton, Selznick shows how these consequences stem from the problems of maintaining highly interrelated systems of interpersonal relations.

Selznick's model starts with the demand for control made by the top hierarchy. As a result of this demand, an increased *delegation of authority* (3.14) is instituted [3.14:3.1].

Delegation, however, has several immediate consequences. As intended, it increases the *amount of training in specialized competences* (3.15) [3.15:3.14]. Restriction of attention to a relatively small number of problems increases experience within these limited areas and improves the employee's ability to deal with these problems. Operating through this mechanism, delegation tends to decrease the *difference between organizational goals and achievement* (3.16) [3.16:3.15], and thus to stimulate more delegation [3.14:3.16]. At the same time, however, delegation results in departmentalization and an increase in the *bifurcation of interests* (3.17) among the subunits in the organization [3.17:3.14]. The maintenance needs of the subunits dictate a commitment to the subunit goals over and above their contribution to the total organizational program. Many individual needs depend on

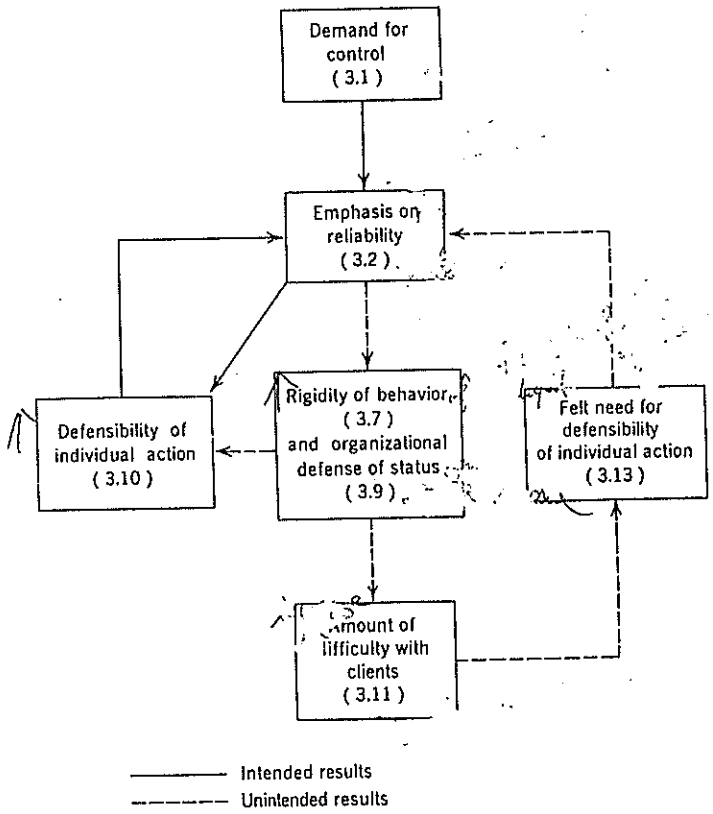

Figure 3.2. The simplified Merton model.

the continued success and even expansion of the subunit. As in the previous example, the activities originally evaluated in terms of the organization goals are seen to have additional important ramifications for the subunits.

Bifurcation of interests is also stimulated by the specialized training that delegation (intendedly) produces. Training results in increased competence and, therefore, in increased *costs of changing personnel* (3.18) [3.18:3.15] and this results, in turn, in further differentiation of subunit goals [3.17:3.18].

The bifurcation within the organization leads to increased *conflict among organizational subunits* (3.19) [3.19:3.17]. As a consequence, the *content of decisions* (3.20) made within the organization depends increasingly upon considerations of internal strategy, particularly if there is little *internalization of organizational goals by participants* (3.21) [3.20:3.19, 3.21]. As a result there is an increase in the difference between organizational goals and achievement [3.16:3.20] and this results in an increase in delegation [3.14:3.16]. (The general subject of intraorganizational conflict is discussed in Chapter 5.)

This effect on daily decisions is accentuated by two other mechanisms in Selznick's system. The struggle for internal control not only affects directly the content of decisions, but also causes greater *elaboration of subunit ideologies* (3.22) [3.22:3.19]. Each subunit seeks success by fitting its policy into the official doctrine of the large organization to legitimize its demands. Such a tactic increases the *internalization of subgoals by participants* (3.23) within subunits [3.23:3.22].

At the same time, the internalization of subgoals is reinforced by a feedback from the daily decisions it influences. The necessity for making daily decisions creates a system of precedents. Decisions depend primarily on the operational criteria provided by the organization, and, among these criteria, subunit goals are of considerable importance [3.20:3.23]. Precedents tend to become habitual responses to the situations for which they are defined as relevant and thus to reinforce the internalization of subunit goals [3.23:3.20]. Obviously, internalization of subgoals is partially dependent on the *operationality of organizational goals* (3.24). By operationality of goals, we mean the extent to which it is possible to observe and test how well goals are being achieved. Variations in the operationality of organizational goals affect the content of daily decisions [3.20:3.24] and thus the extent of subunit goal internalization.

From this it is clear that delegation has both functional and dysfunctional consequences for the achievement of organizational goals.

It contributes both to their realization and to their deflection. Surprisingly, the theory postulates that both increases and decreases in goal achievement cause an increase in delegation. Why does not normal learning occur here? The answer seems to be that when goals are not achieved, delegation is—within the framework of the "machine" model—the correct response, and the model does not consider alternatives to simple delegation. On the other hand, the model offers explicitly at least two "dampers" that limit the operation of the dysfunctional mechanisms. As is indicated in Figure 3.3, where the skeleton of the Selznick model is outlined, there are two (not entirely

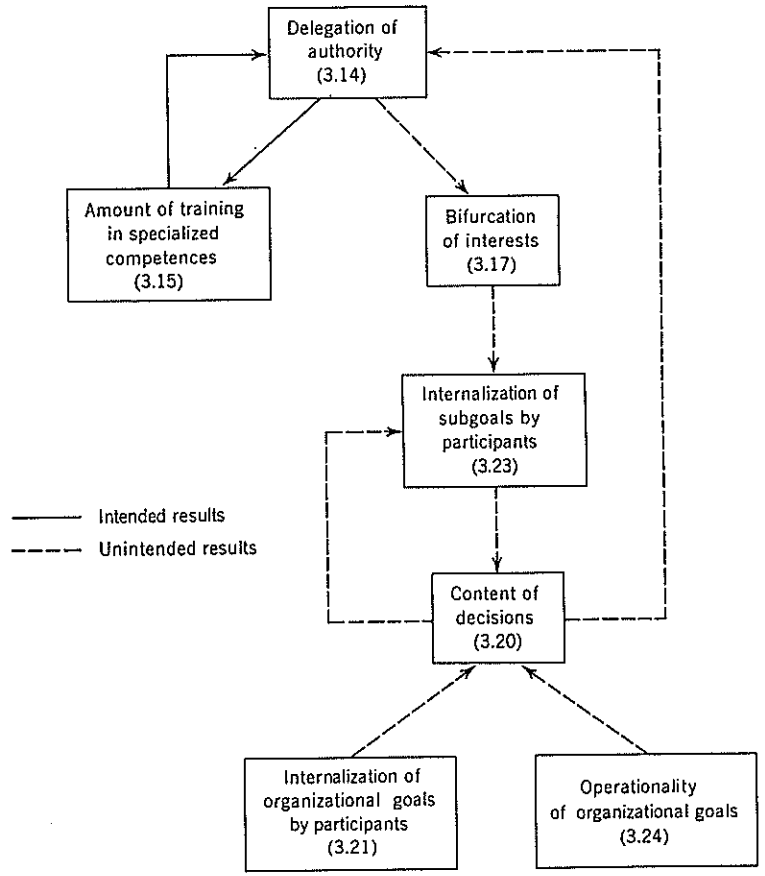

Figure 3.3. The simplified Selznick model.

independent) variables treated as independent but potentially amenable to organizational control, each of which restrains the runaway features of daily decision-making. By suitable changes in the extent to which organizational goals are operational or in the internalization of organizational goals by participants, some of the dysfunctional effects of delegation can be reduced. (To be sure, this ignores the possible effect of such procedures on the maintenance problems of the subunits and the consequent results for the larger organizations, but these are problems we are not prepared to attack at the moment.)

The Gouldner model. In terms of number of variables and relations, Gouldner's model (1954) is the simplest of the three presented here; but it exhibits the major features of the two previous systems. Like Merton, Gouldner is concerned with the consequences of bureaucratic rules for the maintenance of organization structure. Like both Merton and Selznick, he attempts to show how a control technique designed to maintain the equilibrium of a subsystem disturbs the equilibrium of a larger system, with a subsequent feedback on the subsystem.

In Gouldner's system, the *use of general and impersonal rules* (3.25) regulating work procedures is part of the response to the demand for control from the top hierarchy [3.25:3.1]. One consequence of such rules is to decrease the *visibility of power relations* (3.26) within the group [3.26:3.25]. The visibility of authority differences within the work group interacts with the *extent to which equality norms are held* (3.27) to affect the *legitimacy of the supervisory role* (3.28) [3.28:3.26, 3.27]. This, in turn, affects the *level of interpersonal tension* (3.29) in the work group [3.29:3.28]. In the American culture of egalitarian norms, decreases in power visibility increase the legitimacy of the supervisory position and therefore decrease tension within the group.

Gouldner argues that these anticipated consequences of rule-making do occur, that the survival of the work group as an operating unit is substantially furthered by the creation of general rules, and that consequently the use of such rules is reinforced [3.25:3.29].

At the same time, however, work rules provide cues for organizational members beyond those intended by the authority figures in the organization. Specifically, by defining unacceptable behavior, they increase *knowledge about minimum acceptable behavior* (3.30) [3.30:3.25]. In conjunction with a low level of internalization of organizational goals, specifying a minimum level of permissible behavior increases the disparity between organization goals and achievement by depressing behavior to the minimum level [3.16:3.21, 3.30].

Performance at the minimum level is perceived by hierarchical superiors as a failure. In short, the internal stabilizing effects of the rules are matched by the unbalance they produce in the larger organization. The response to the unbalance is an increase in the *closeness of supervision* (3.31) over the work group [3.31:3.16]. This response is based on the "machine" model of human behavior: low performance indicates a need for more detailed inspection and control over the operation of the "machine."

In turn, however, close supervision increases the visibility of power relations within the organization [3.26:3.31], raises the tension level in the work group, and thereby upsets the equilibrium originally based on the institution of rules. The broad outline of the model is shown in Figure 3.4.

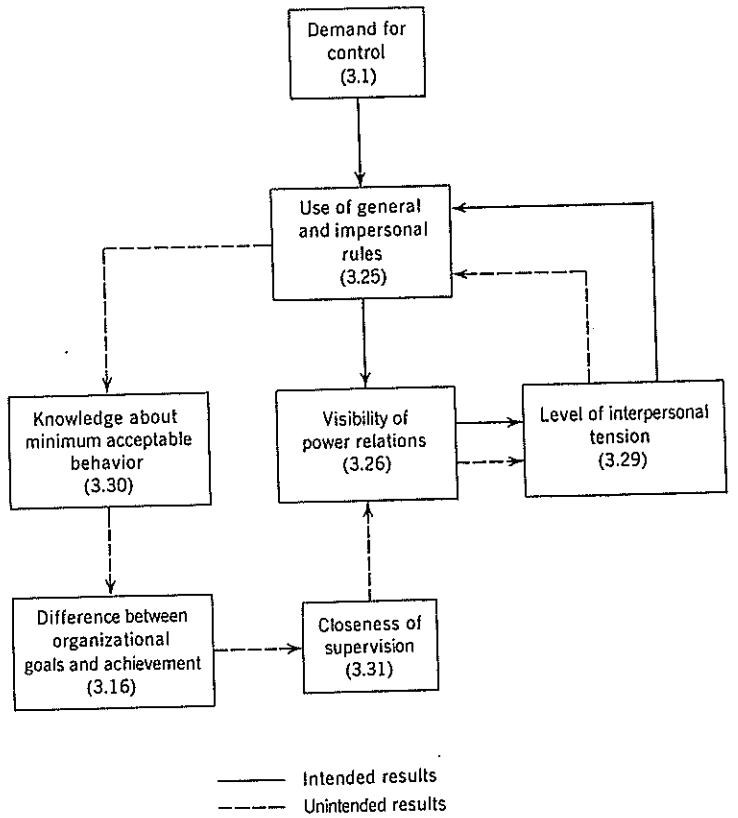

Figure 3.4. The simplified Gouldner model.

Gouldner's model leaves some puzzles unexplained. In particular, why is increased supervision the supervisory response to low performance? It seems reasonable that the tendency to make such a response is affected both by role perceptions and by a third equilibrating process in the system—the individual needs of the supervisors. Thus, the intensity of supervision is a function of the *authoritarianism* of supervisors (3.32) and a function of the *punitivity of supervisory role perception* (3.33) [3.31:3.32, 3.33].

As in the Selznick model, the existence of "dampers" on the system poses the question of their treatment as external variables. Appropriate manipulation of equality norms, perceived commonality of interest, and the needs of supervisors will restrict the operation of the dysfunctional features of the system. The failure of top management to use such techniques of control suggests that the system may be incompletely defined.

Problems of verification. We have sketched three major "models" of bureaucratic behavior. To what extent are the hypotheses empirically verified? Both Selznick and Gouldner base their propositions on extended observations of single organizations in the field. The data on which Merton relies are somewhat less specific but appear to be distilled from a set of generally accepted characterizations of organizational behavior.

Such evidence raises two major problems. First, what is the role of field research in verifying hypotheses about organizational behavior? The field situation fails to meet many of the major assumptions underlying standard techniques of statistical inference. The second problem is distinctly related to the first. What is the standing of the single case as evidence? For example, one of the knottier complications in this area is deciding what the sample size really is.

At least some of the propositions advanced by these three writers will be re-examined below in different contexts. Some hypotheses relating the closeness of supervision to employee satisfaction are considered later in the present chapter, and some hypotheses concerning organizational conflict can be found in Chapter 5. As we will suggest in those passages, there is evidence for some of the propositions over and above the single field studies discussed here. The evidence is scarcely conclusive and far from complete, but on the whole tends to be consistent with the general models used by Merton, Selznick, and Gouldner. What little we can say beyond that is indicated below.

Implications of the bureaucracy models. Other quite comparable models could be added to those examined here. Bendix (1947) has discussed limits on technical rationality within an organization and pointed out the intriguing complications involved in the use of spy systems as systems of control. Dubin (1949) has presented a model quite similar to that of Merton. Blau (1955) has examined the changes in operating procedures that occur at a relatively low level in the hierarchy under the pressure of work group needs.

In the sample of three cases from the "bureaucracy" literature we have presented (as well as in the others mentioned), complications arise in each of the three ways predicted from the influence model outlined previously. The elaboration of evoking connections, the presence of unintended cues, and organizationally dysfunctional learning appear to account for most of the unanticipated consequences with which these theories deal.

Many of the central problems for the analysis of human behavior in large-scale organizations stem from the operation of subsystems within the total organizational structure. The sociological studies of the work group analyzed here have focussed on the ways in which the needs of individuals, the primary work group, and the large organization interact to affect each other. We now turn to the study of morale and productivity, where we also find that the study of the psychology of work has focussed on the same interactions, with perhaps a greater emphasis on the relations between the needs of individual personalities and the needs of the organization.

3.3 Satisfaction and Productivity

Few aspects of organizational behavior have been subject to as much speculation as have morale, productivity, and turnover. They are obviously important to the operating executive's day-to-day operations. Indeed, if we accept the economist's characterization of the administrator, productivity is one of the fundamental secondary criteria (after profit) for his success. At the same time, propositions relating such achievement variables as productivity to the characteristics of the organization are basic to the student of organizations.

The model of individual behavior implicit in the "traditional" approach to productivity recognizes only those constraints on performance that have obvious machine analogues (Taylor, 1911). To organize efficiently is to define the physiological capacity of the human organism and to program activities to make full use of that capacity. More recently, students of individual behavior in an organizational setting have introduced into the model of organizational behavior a series of concepts like morale, satisfaction, and cohesiveness. At-