

AD-A155 247

SYMBOLIC AND INTERACTIONAL PERSPECTIVES ON LEADERSHIP:

1/1

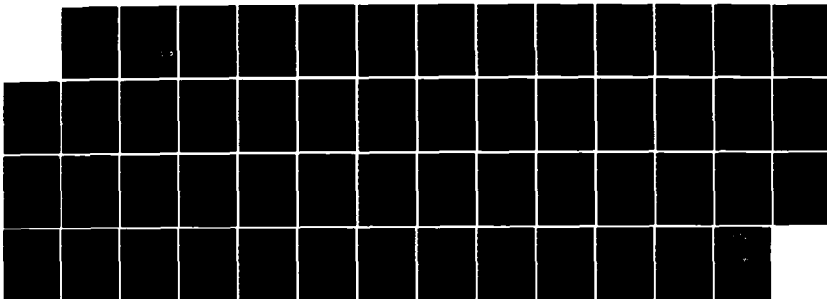
AN INTEGRATIVE FRA. (U) TEXAS A AND M UNIV COLLEGE

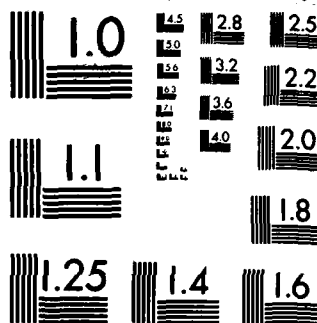
STATION DEPT OF MANAGEMENT R W GRIFFIN ET AL. MAY 85

UNCLASSIFIED TR-DNR-DG-15 N00014-83-C-0025

F/G 5/10

NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

②

Organizations As Information Processing Systems

Office of Naval Research
Technical Report Series

Symbolic and Interactional
Perspectives on Leadership:
An Integrative Framework

Ricky W. Griffin
Kristen Dahlen Skivington
Gregory Moorhead

TR-ONR-DG-15

May 1985

Department of Management
Texas A&M University

DTIC
ELECTE
JUN 18 1985
S D E

Richard Daft
and
Ricky Griffin
Principal Investigators

This document has been approved
for public release and sale; its
distribution is unlimited.

85 5 28 210

AD-A155 247

DTIC FILE COPY

Symbolic and Interactional
Perspectives on Leadership:
An Integrative Framework

Ricky W. Griffin
Kristen Dahlen Skivington
Gregory Moorhead

TR-ONR-DG-15

May 1985

DTIC
ELECTE
S JUN 18 1985 D
E

This document has been approved
for public release and sale; its
distribution is unlimited.

Office of Naval Research
N00014-83-C-0025
NR 170-950



Organizations as Information Processing Systems

Richard L. Daft and Ricky W. Griffin
Co-Principal Investigators

Department of Management
College of Business Administration
Texas A&M University
College Station, TX 77843

Accession For	
NTIS GRA&I	☒
DTIC TAB	☒
Unannounced	☐
Justification	
By _____	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	

- TR-ONR-DG-01 Joe Thomas and Ricky W. Griffin. The Social Information Processing Model of Task Design: A Review of the Literature. February 1983.
- TR-ONR-DG-02 Richard L. Daft and Robert H. Lengel. Information Richness: A New Approach to Managerial Behavior and Organization Design. May 1983.
- TR-ONR-DG-03 Ricky W. Griffin, Thomas S. Bateman, and James Skivington. Social Cues as Information Sources: Extensions and Refinements. September 1983.
- TR-ONR-DG-04 Richard L. Daft and Karl E. Weick. Toward a Model of Organizations as Interpretation Systems. September 1983.
- TR-ONR-DG-05 Thomas S. Bateman, Ricky W. Griffin, and David Rubenstein. Social Information Processing and Group-Induced Response Shifts. January 1984.
- TR-ONR-DG-06 Richard L. Daft and Norman B. Macintosh. The Nature and Use of Formal Control Systems for Management Control and Strategy Implementation. February 1984.
- TR-ONR-DG-07 Thomas Head, Ricky W. Griffin, and Thomas S. Bateman. Media Selection for the Delivery of Good and Bad News: A Laboratory Experiment. May 1984.
- TR-ONR-DG-08 Robert H. Lengel and Richard L. Daft. An Exploratory Analysis of the Relationship Between Media Richness and Managerial Information Processing. July 1984.
- TR-ONR-DG-09 Ricky Griffin, Thomas Bateman, Sandy Wayne, and Thomas Head. Objective and Social Factors as Determinants of Task Perceptions and Responses: An Integrative Framework and Empirical Investigation. November 1984.

- TR-ONR-DG-10 Richard Daft and Robert Lengel. A Proposed Integration Among Organizational Information Requirements, Media Richness and Structural Design. November 1984.
- TR-ONR-DG-11 Gary A. Giroux, Alan G. Mayper, and Richard L. Daft. Toward a Strategic Contingencies Model of Budget Related Influence in Municipal Government Organizations. November 1984.
- TR-ONR-DG-12 N. B. Macintosh and R. L. Daft. Technology, Personal Attributes and the Perceived Amount and Focus of Accounting and Information System Data. March 1985.
- TR-ONR-DG-13 N. B. Macintosh and R. L. Daft. Management Control Systems and Interdependencies: An Empirical Study. March 1985.
- TR-ONR-DG-14 Thomas C. Head, Valerie L. Yates, Ricky W. Griffin, and Thomas S. Bateman. The Priming Effect in Task Design Research. April 1985.
- TR-ONR-DG-15 Ricky W. Griffin, Kristen Dahlen Skivington and Gregory Moorhead. Symbolic and Interactional Perspectives on Leadership: An Integrative Framework. May 1985.

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER TR-ONR-DG-15	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Symbolic and Interactional Perspectives on Leadership: An Integrative Framework		5. TYPE OF REPORT & PERIOD COVERED Technical Report
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR Rocky W. Griffin, Kristen Dahlen Skivington, and Gregory Moorhead		8. CONTRACT OR GRANT NUMBER (if N00014-83-C-0025
9. PERFORMING ORGANIZATION NAME AND ADDRESS College of Business Administration Texas A&M University College Station, TX 77843		10. PROGRAM ELEMENT PROJECT TASK AREA & WORK UNIT NUMBERS NR170-950
11. CONTROLLING OFFICE NAME AND ADDRESS Organizational Effectiveness Research Programs Office of Naval Research Arlington, VA 22217		12. REPORT DATE May 1985
		13. NUMBER OF PAGES
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		15. SECURITY CLASS. (of this report) Unclassified
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approval for public release: distribution unlimited		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. FURTHER WORK (if continues on reverse side if necessary and identify by block number)		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This paper presents the development of a Symbolic Interactional Leadership model. The model integrates three emergent streams of thought, symbolic action, reciprocal interactions, and interactional psychology, into a fresh approach which offers considerable advancement over simple, unidirectional, bivariate, static models. Implications for future theory and research are discussed.		

- 2 -

**Symbolic and Interactional Perspectives on Leadership:
An Integrative Framework**

Abstract

This paper presents the development of a Symbolic Interactional Leadership model. The model integrates three emergent streams of thought, symbolic action, reciprocal interactions, and interactional psychology, into a fresh approach which offers considerable advancement over simple, unidirectional, bivariate, static models. Implications for future theory and research are discussed.

7 sec p - 23 -

Symbolic and Interactional Perspectives on Leadership: An Integrative Framework

Without doubt, leadership is one of the most studied and least understood constructs in organizational science. Reviews of the literature continue to draw different conclusions about its meanings and utilities, with some (cf., Bass, 1981) suggesting that understanding is progressing in a fairly orderly and systematic fashion and others (cf., Pfeffer, 1977) arguing that major redirections are needed. In recent years the study of leadership has become fragmented with some researchers continuing to test and refine other models (e.g., Field, 1982) and others proposing new perspectives (e.g., Wofford & Srinivasan, 1983). Unfortunately, the continued tests of older models frequently yield contradictory evidence with little new insight and the newer formulations are often little more than restatements of older viewpoints or else are not supported by empirical work.

During this same period, several new streams of research have been developed which have the potential to substantively alter prevailing views on the construct of leadership. Some of these streams have emerged at the fringes of existing leadership theory and research, while others rest outside the traditional domain of leadership work. The purpose of this paper is to draw together three of these emerging streams into an integrated framework of leadership. This framework, while far from being a fully-formulated theory, may offer considerable utility for future theory-building as well as serving as a useful guide for empirical research. The three streams of research are symbolic action, reciprocal interactions, and interactional psychology. First, the historical foundations of leadership are briefly acknowledged. Next, the three emergent streams are introduced and summarized. A limited model is then described as an organizing framework for subsequent discussion.

The constructs and processes represented in this limited model are then further developed and explicated into a more complete and dynamic Symbolic Interactional Leadership (SIL) model. Finally, implications for future theory and research are discussed.

Historical Foundations

The ability to lead is presumed to be a valuable commodity. Hence, to be able to form it and reproduce it from ordinary materials has become a quest of organizational scientists equivalent to the alchemist's search for gold. Leadership research has followed just such a quest with three major streams of research forming the foundation of knowledge. This research can be categorized in three viewpoints: (1) the study of the leader to determine the traits necessary for leadership, (2) the study of the behavior and actions of leaders to determine the best style to follow, and (3) the study of the situation and context as influencing the emergence and style of a leader. Each approach will be briefly reviewed to provide a base from which to propose the interactional model.

Trait Approach

Trait theories of leadership center around determining which personal characteristics of the leader separate him/her from non-leaders. The objective of this approach was that by identifying the personality and/or physical traits of leaders, tests or profiles could be taken of people and leaders selected from those possessing the traits. The traits considered ranged from height, age, and beauty to ambition, popularity, and talkativeness (Bass, 1981). Stogdill's (1974) review of trait studies concluded that leaders probably do possess personal characteristics which set them apart from non-leaders, but that those characteristics are related to the situation. Each

person identified as a leader was operating in a context with other individuals, and characteristics of those group members were presented as influencing the actions and results of the person identified as a leader. Trait theories declined in their acceptance in the 1950's as the behavioral theories began to emerge.

Behavioral Approach

Behavioral theories of leadership proposed to study what leaders actually do, the actions they take, and their manner of working with subordinates. Two major centers of leadership behavior studies emerged, one at Ohio State University and the second at the University of Michigan. Both centers focused attention on the actions of leaders which appeared to lead to high productivity and morale among the work group. Two basic categories of behavior were identified: (1) leader emphasis on task accomplishment and (2) leader concern for group maintenance, or a concern for the needs of subordinates. The behavior theories acknowledged that leader behavior was actually more complex than those two dimensions, but argued that the inclusion of other forms of behavior detracted from parsimony and did little to explain additional variance. Behaviorists also began to realize that a leader's style might vary depending on the type of organization, the goals, the group, and other situational factors. Theorists next began to explore the context in which the leader existed, bringing an understanding of traits and behaviors to bear on the development of more refined situational models.

Situational Approach

As reminded by Bass (1981), leaders and groups interact, providing a situation in which leadership emerges and exists. The situational studies focused on the characteristics of leaders, subordinates, and the situation,

including the reward system, task and work flow, and the dynamics of the group. The first situational theory was Fiedler's contingency model (1967). Path-goal theory of leadership (House, 1971) is also situational, predicting the behavior of the leader given the type of followers and the degree of clarity needed in goals and directions. Situational theories are also beginning to include contextual factors such as organization size, degree of formalization, and other dimensions of organizations (Kerr and Jermier, 1976).

The three categories of leadership research have almost invariably focused on immediate and observable traits, actions, and interactions. In his review, Pfeffer (1977) broadly criticized this research in general and the construct of leadership in particular for the ambiguity of the meaning of leadership and lack of understanding regarding the extent of the effect of the leader on organization performance. Pfeffer (1977) advocated addressing leadership as a phenomenological construct, the leader being responsible for assisting with the construction of meaning and understanding of social or organizational events. Leadership can be developed as symbolic in itself and in the actions performed by one who is attributed the role of leader. Recasting leadership as a role responsible for interacting with followers and influencing meanings of situations underlies recent conceptualizations of leadership.

Emerging Concepts

As noted earlier, three emerging streams of research are seen as having considerable utility for enhancing our understanding of the leadership phenomenon: symbolic action, reciprocal interaction, and interactional psychology. These areas will be briefly summarized in the following paragraphs. While each represents a unique area of study, they share a significant common dimension: interaction in terms of an interpretive perspective (Burrell and

Morgan, 1979). Thus, the leader, follower, and situation change and are changed by interaction.

Symbolic action has, in recent years, become a very popular concept in the macro literature. Pfeffer (1981) proposes that leadership is a symbolic position in which one person is attributed the role of leader. The position is a symbol of rights and responsibilities to the followers. The actions performed by the leader also become symbolic and are the leader's interpretation of the situation, giving meaning to actions. In this sense, the leader becomes responsible for instilling meaning in organization action and events. More specifically, Pfeffer states that it is the function of the leader to construct reality for the followers. Symbols, and actions as symbols, become tools of meaning in the situation (Martin and Powers, 1983).

In contrast, the concept of reciprocal interaction has evolved from traditional leadership theory. Leadership has often been proposed as unidirectional, from leader to follower, but recent work by Greene (1975) and others (Greene and Schriesheim, 1980) indicates that actions of the follower also influence the leader. In a study conducted by Greene (1975), for example, leader behavior (initiation or consideration) resulted in performance by the group. The perceived quality of the followers' performance, in turn, elicited a subsequent reaction on the part of the leader. The study concluded that behaviors were actually interactions of action, response, and reaction. Reciprocal relationships provide insight into action and reaction on the part of both the leader and the follower.

Interactional psychology (Schneider, 1983) describes group and individual perceptions and behaviors as a function of the surrounding situation. Interactional psychologists propose that in studying individuals and groups, researchers must include the situation in the analysis because elements of the

situation and the individual interact (Terborg, 1981). Over time, the individuals in the situation become homogeneous as they select themselves into and out of situations (Schneider, 1983). The selection process includes the leader, with the potential of a developing homogeneity between leader and group. As perceptions of the situation are developed by individuals over time, a group tending toward homogeneity might also tend toward similar perceptions. Through interaction, selection, and time, the situation, leader, and followers develop similar perceptions and understandings. Behaviors may become more predictive based on shared beliefs and norms.

These three approaches to understanding behavior (symbolic action, reciprocal interaction, and interactional psychology) have several common implications for understanding leadership. First, each presents the situation in which leadership occurs as a dynamic and evolutionary process. Leaders and followers act within a context which must be interpreted and understood. Secondly, each of the perspectives acknowledges interaction between leader and follower, that interaction influencing the subsequent actions of each. The third implication is that leadership and followership are interdependent in both content and process. Thus, the actions taken by either a leader or a follower are undertaken at least partially in response to the presumed expectations and possible reactions of the other as defined by previous interactions.

The Limited Model

Using the areas of symbolic action, reciprocal interaction, and interactional psychology, and their common themes delineated above, Figure 1 presents the limited form of the SIL model. The upper portion of the model reflects the leader characteristics of decision effectiveness and symbolic action. It is suggested that leaders make decisions and perform actions which

are then interpreted by the followers (lower half of Figure 1) in terms of effects on performance and result in reactions in some symbolic manner. The reactions and performance on the part of the follower are then interpreted by the leader, influencing the next interchange of actions and responses.

The arrow running through the center of the model represents the interaction between leader and follower. The interaction acts as a filter influencing the interpretations of previous events and formation of response. The arrow also represents the element of time in that interactions and interpretations are dynamic, reciprocal, and continuous.

Though the model indicates initial action on the part of the leader, the process can, of course, be initiated by either party. The critical point is that neither leader nor follower is acting in isolation, but is influenced by the other. The behavior of the leader will be directed in terms of the actions and performance of the follower. Based on the actions of the follower, the leader can modify actions on his/her part and provide resources required by the follower. Attitudes of the leader will be shaped by perceptions of cause for follower performance (Mitchell, Green, and Wood, 1981) and by self-evaluation of decision effectiveness. The symbolic actions can be manifestations of the leader's attitude. Follower's respond to decisions and the interpreted impact of the decision via performance and symbolic actions which might indicate attitudes and feelings regarding the leader and situation.

Followers do not act in isolation, but usually are part of a work group, including the leader. Research on group development indicates that over time and through interaction among members, groups may develop cohesiveness (Janis, 1983). Group members also develop a solidarity and identity as a group (Alderfer, 1977). Another outcome of group interaction is the development of group norms and values. Groups come to a shared consensus on the meaning of

certain actions (Schneider, 1983), enabling a code of behavior to develop guiding the actions of group members. The group, then, can be a consequence of the interactions between and among the leader and individual followers. The individuals coalesce and perceive themselves as a unit with norms, values, and shared beliefs. These outcomes are not shown in the limited model presented in Figure 1, but will be more fully developed in the discussion of the extended model that follows.

The Extended Model

Using the limited model as an organizing framework for discussion, it is now possible to more systematically develop the extended model. First, the boundaries of the model will be established through a statement of critical definitions. The constructs of leadership and followership, as used here, will then be discussed in detail. A more complete description of the dynamics of interaction will then be presented. Finally, the consequences of interaction will be explored.

Boundaries of the Model

One problem occasionally encountered in early theories was a lack of boundary specifications. In particular, concepts are seldom defined and their boundaries never specified. The construct of leadership as used in this paper identifies those in positions of formal, or appointed, leadership. The person in the appointed position does not emerge as a leader by consensus of the group, but by position assumes a leadership role. Furthermore, because the position is a part of the organizational structure, the leader is a formal leader, in contrast to an informal leader who may or may not emerge in the group. Formal leadership, then, as a process or set of behaviors, refers to those actions ascribed to a position for the purpose of accomplishing the organization's goals.

Followers are those who are assigned to positions reporting to the formal leader. The followers have official positions in the organization and, together with the leader, form a work group responsible for specified organizational goals. Interactions between leader and followers are those that occur in the organizational context. These may be formal (such as the follower's performance review by the leader), informal (such as a question from the leader about the follower's planned week-end activities), or both. Moreover, interactions may be dyadic (leader with one follower), full-group (leader with all followers), or some variation in between. The point, simply, is that interactions are seen as multidimensional and multidirectional.

The Construct of Leadership

Pfeffer (1981) suggests that there are two levels of analysis of leadership. One level is that of symbolic outcomes, or those attitudes, values, and sentiments which are a result of leadership. The second level is substantive outcomes, or the physical referents to decisions or allocations. Given the two levels of analysis, we propose that there are two primary dimensions to the construct of leadership: symbolic action and decision effectiveness.

The symbolic activities of leaders relate to the belief that organizations are patterns of actions, actions which must be interpreted and given meaning in order to be understood. One task of leaders is to define the activities of the organization, rationalizing and legitimating the actions for subordinates (Pfeffer, 1981; Huff, 1984). The relationship between leader and subordinate is one of developing a mutual and shared meaning for the activities. Leaders infuse activities with symbols which, when vested with a shared consensus of meaning, become legitimate interpretations. Symbols in the form of stories, myths, rituals, and words are mechanisms for framing an understanding (Martin and Powers, 1983). The shared consensus results in a sense

of belonging and cohesion between leader and subordinates. Thus, leadership activities can be seen as providing explanations for organization actions by the use of symbols. The symbols become a means of communication and an organizing framework for interpretation and understanding and developing cohesion between the individuals and the leader.

The second dimension of leadership, decision effectiveness, rests on the premise that leaders are responsible for making choices, or decisions (March and Simon, 1958). These decisions may be related to resource allocations, personnel, strategy, or choice of business. Selected researchers have addressed the nature of decision making (Mintzberg, Raisinghani, and Theoret, 1979; McMillan, 1982), but, as Perrow (1973, p. 26) points out, organizational behavior rarely studies the "wisdom or technical adequacy" of these decisions. Yet, since the leader is usually held responsible for the decisions he or she makes, determining the effectiveness of the leader may be related to the effectiveness of the decisions. Studies of managerial effectiveness have taken this approach.

Morse and Wagner (1978) determined nine roles of managers, one of which was strategic problem solving. Moreover, each of the other eight roles (e.g., resource managing, coordinating) would demand decisions by the manager. The relevant conclusion reached by Morse and Wagner (1978) was that effectiveness might be determined by the outcome of the decisions demanded by different activities of the roles.

Studies of decision effectiveness as an aspect of leadership/management tend to agree on three issues. First, the effectiveness of decisions may depend on the type and difficulty of the problem (Field, 1982). Roskin and Margerison (1983) indicate that managers with a more complex view of human behavior and situations tended to be more effective in handling various types

of problems and decisions. Effectiveness varied by difficulty of problem for those with less complex views. Second, effectiveness is a perception of others. Decisions are deemed to be more effective if the leader's perception of the situation matched that of the work team (Roskin and Margerison, 1983). Similarly, Vroom and Yetton (1975) found that decision effectiveness was related more to the acceptance of the decision by the group than to objective measures of decision quality. Third, decisions are evaluated by their outcomes (Pfeffer, 1981; Morse and Wagner, 1978). That is, since decisions have substantive outcomes, these may be used to determine effectiveness. Integrating these views, then, followers may determine the effectiveness of decisions in terms of the substantive outcomes of such decisions and whether these outcomes are acceptable to the followers. The followers are on the receiving end, or affected by decisions made by leaders, and are likely to be one significant set of constituents evaluating the leader's decision making.

Thus, the two dimensions of leadership incorporated into this model are symbolic actions and decision effectiveness. The leader is regarded as instrumental in framing the actions of the organization into rationalized and legitimate meanings. Actions by the organization and the leader take on symbolic meaning in light of the shared beliefs and interpretations of the group. Symbolic action by the leader is a manner of communication between leader and follower, the reciprocal to be discussed below. The decision effectiveness of the leader is the degree to which the outcomes of decisions are judged to be what is expected and acceptable by followers. The degree of similarity is the degree of effectiveness. Both symbolic actions and decision effectiveness have been described in terms of followers' interpretations. Leadership actions are perceived and interpreted on the part of followers, as the actions of the followers are perceived and interpreted by the leaders.

The Construct of Followership

The extended SIL model similarly proposes two dimensions of followership which correspond to the leadership dimensions of symbolic action and decision effectiveness. The followership dimensions are termed symbolic reaction and performance effectiveness.

As described earlier, the leader is responsible for developing a framework of symbols in which organization actions can be interpreted and understood. In addition to the framework itself, the actions of the leader themselves become symbolic and are tools for further interpretation and understanding of the context. The actions of the followers, however, can also be symbolic and can be used to interpret and understand attitudes and behaviors. Actions can be used by followers to symbolize pleasure, compliance (or lack of), need for assistance, and agreement or disagreement with some decision. One study of mechanisms used for influencing subordinates, peers, and superiors indicated subordinates are likely to use ingratiation tactics to influence superiors (Kipnis, Schmidt, and Wilkinson, 1980). Included as ingratiation tactics are symbolic actions such as acting friendly and acting humbly (Kipnis et al., 1980). These actions could be interpreted as symbolizing the relationship between the supervisor and subordinate or the attitudes of the followers.

Crozier (1964) described the French machinists who, upon learning of changes in plant policies, refused to repair any of the machines. The action was a reaction against the decisions of management and was used by the machinists to symbolize their power and as a strong statement against management. Other examples of symbolic reactions include "blue flu" when entire divisions of police personnel call in ill after an unpopular regulation is established. The action is a statement of reaction against the regulation and a symbol of group solidarity.

The actions of the followers are symbolic in that the acts represent values, feelings, and interpretations of events and decisions. Over time, the group develops a shared meaning for the actions, using the symbolism as communication with the leader and within the group. The symbolic reactions become one form of output from the followers which is subsequently interpreted by the leader.

The second form of followership, corresponding to the leader's decision effectiveness, is performance effectiveness. Each person in an organization is assigned specific duties and responsibilities to perform in order for the organization to achieve its goals. Standards are set to determine how effectively each person performs these responsibilities. When actual and expected behavior are coincident, performance is effective. When there is disagreement between expected behavior and actual behavior, performance is ineffective.

Organizational behaviorists have long been concerned with understanding the causes of effective and ineffective performance (cf., Mitchell, Green, and Wood, 1981). The person determining the effectiveness of performance is usually the leader. The leader is also responsible for assisting the employee in improving performance which is not meeting standards. In order to improve performance, the leader must logically determine the cause of ineffective performance. Studies of leaders, followers, and performance evaluation indicate that leaders attribute causality of performance to internal or external causes, i.e., the follower is unskilled (internal) or the training was inadequate (external) (Mitchell et al., 1981). Additional information used by leaders to assess causality of performance effectiveness includes informational cues based on previous work history and cues from the immediate circumstances of the event (Mitchell et al., 1981).

As with decision effectiveness of the leader, there are substantive measures of performance effectiveness. For example, effectiveness can be measured by control mechanisms such as outputs (quality and quantity), adherence to rules and procedures (behavior control), and/or the internalization of norms and values of the internal culture of the organization and profession (Ouchi, 1977; Ouchi, 1980).

Leadership, Followership, and Reciprocal Interaction

Recent research trends in leadership include an interaction element between leader and follower (Ashour, 1982; Huff, 1984; Sims and Manz, 1981; Zahn and Wolf, 1981) and the inclusion of situational characteristics as interacting with leader and follower (Schneider, 1980; Terborg, 1981). Preliminary work on interaction between leader and follower focused on understanding reciprocal actions.

The vertical dyad linkage model of leadership (Dansereau, Graen, and Haga, 1975) postulates that leaders develop relationships with individual members of the subordinate group, rather than treating the entire group as a whole. The relationships develop such that some workers are favored and receive a "leader" style of direction while others are perceived as less able and receive a subordinate-superior style of interaction. The basic contributions are that leaders and followers interact and that the actions of the leader influence actions of the subordinate, which again influence the leader.

Zahn and Wolf (1981) propose that leadership is a dynamic process, that leadership is a result of two-way interaction between leader and follower. The interaction between leader and follower forms the relationship. In analyzing the interaction between leader and follower, Zahn and Wolf (1981) focus on two behavioral domains: task and relationship. The task domain includes behaviors which are initiation or response behaviors related to task.

For example, the superior threatens (initiation), the subordinate rejects (response); the subordinate sabotages (initiation), the superior punishes (response). The relationship domain is composed of initiation and response behaviors which are related to the expressive or affect dimension of the leader-follower interaction. Either leader or follower could ignore the other (initiate), with the response being indifference. The use of the two domains allows the researchers to explore beyond the verbal interactions related to tasks used in prior research.

In addition to the recognition of two dimensions of leader-follower interaction, Zahn and Wolf (1981) recognize that interaction can be initiated by either leader or follower. The focus is on the relationship which develops between leader and follower; varying the locus of initiation is not of concern. Additionally, interactions occur over time and assume some consistency in behaviors and responses over time. Indications were given that, categorizing initiations and responses at matching levels, leaders and followers may cycle through different levels, indicating variations in leadership and followership style. The variations in style, in turn, may be due to the subordinates or the situation.

Ashour (1982) concurs that leaders influence follower actions, but believes that the situation impacts upon the follower as well. The leader is described in terms of two influence behaviors: (1) experimental influence behavior in which the situational opportunities and constraints (tasks, resources, work flow, rewards) are manipulated and (2) cognitive influence behavior when leaders set goals, clarify rewards, and use models on which subordinates can imitate and learn accepted behaviors. The situation is regarded as influencing the relationship between leader and follower and the leader as being able to manipulate the environment.

The Leadership-Environment-Follower Interaction theory of leadership (LEFI) (Wofford and Srinivasan, 1983) proposes that leader behavior influences the follower's motivation and ability to perform. The leader is responsible for assessing the work environment for deficiencies which would interfere with the follower's task performance. The leader is to remedy these deficiencies in order to facilitate the follower's behavior within environmental constraints. Leader behavior is also directed towards clarifying roles, increasing goal commitment, and setting high goals.

In these initial studies of leader-follower-situation, the leader and follower interaction has been split between unidirectional [leader influences follower (Ashour, 1982; Wofford and Srinivasan, 1983)] and bidirectional or reciprocal (Zahn and Wolf, 1981; Graen, 1975). The situation may be viewed as a barrier between the leader and follower, the leader acting to modify the context to be supportive of the follower's task. The situation may also be either task facilitating or inhibiting or even as a dimension independent of the interaction between leader and follower. The situation, however, is a function of the leader, as evidenced by the studies examining altering the situation (Ashour, 1982; Wofford and Srinivasan, 1983). By altering the context, relations with the follower are altered.

These studies, however, do not address the logical extension in which the situation becomes a variable interacting with the leader and follower. As the situation changes due to actions and interactions, the influence and impact of the situation changes. Interactional psychology offers an avenue for further refinement of the interactions among leader, follower, and situation.

Interactionalism

Interactional psychology is the study of behavior as a function of personal characteristics, situational characteristics, and the interaction of

both on a continuous and multidirectional basis. Interactional psychology regards the situation as a determinant of behavior. Elements of the situation include the psychological meaning of situations for individuals and the behavior potential of situations for individuals (Terborg, 1981). Personal characteristics identified as determinants of behavior include the cognitive, affective, motivational, and individual abilities of the person (Terborg, 1981).

Situations are a result of the people and people a result of the situation (Schneider, 1983). Situations are altered by the actions and perceptions of those in the situation, resulting in change to the situation. In turn, individuals are changed or influenced by the situation, e.g., their behavior may be modified. Those individuals not willing or able to adjust will leave. Specifically, individuals are seen as having the ability and determination to select themselves into and out of situations, implying that, over time, situations will consist of homogeneous sets of individuals and those individuals will have similar perceptions of the situation. Thus, the interaction between individual and situation is reciprocal.

The theories of interactional psychology relating individuals and situations in dynamic reciprocal interaction provide several insights into leadership, followership, and situation. Leader, followers, and situations will be characterized by attributes which interact and mutually influence each other. As with followers, the leader will self-select into and out of situations, thus resulting in effective leadership given a situation which matches leader attributes, follower characteristics, and situation conditions. If leader and followers are mutually selecting themselves into and out of the same situations and the followers become homogeneous with the situation, the leader homogeneous with the situation, then leader and followers would become

homogeneous as a group in interpreting and reacting to situations. The situation becomes defined by the interactions and becomes instrumental in determining the behaviors of leaders and followers and their collective perceived reality. Reality, then, is a social construction depending on the cues and clues picked up in the environment (Schneider, 1983). Each person may have a different reality, thus a different base for interaction. Over time, however, the leader and followers would develop a shared reality as to what the situation is and what it means.

The SIL Model

The interaction of situation, leader, and follower provides the framework for the proposed Symbolic Interactional Leadership model. The extended model is presented in Figure 2. As shown, leadership and followership are presumed to interact with one another along a multidirectional and continuous basis in terms of symbolic action/decision effectiveness and symbolic reaction/performance effectiveness, respectively. The nature of these interactions is mediated by its situational context. That situational context, in turn, is defined by the various consequences accrued to the leader, the follower, and the group through previous interactions.

The situation is a dominant variable influencing and mediating interaction between the leader and follower. The situation is the context in which interaction takes place and as such, becomes a part of the interaction, i.e., can be changed by or changes the other components. The model in Figure 2 presents the situation as including the leader and follower, so that the leader becomes a part of the follower's situation and the follower an element of the leader's situation. Changes in the leader and/or follower are essentially changes in one element of the situation. The situation changes, or is influenced by, modifications in the leader and follower. The situational elements, other

than leader and follower, are also subject to change and have the potential to influence other elements of the context. The specific point is, congruent with interactional psychology, the situation is a result of the various components and the components are a result of the situation.

Interactions between leader, follower, and situation occur over time. As the components interact, a degree of homogeneity emerges in terms of similarity of perceptions and symbolic representations. As indicated in the limited model, shared norms and values develop from continuous interaction. Homogeneity in the situation occurs as a matter of self-selection into and out of the context, thus the people staying over time may be somewhat similar along any number of salient characteristics. The perception of the situation and the others with whom the group interacts may also become shared. Beyond the shared perceptions, norms, and values, the situation becomes homogeneous with the individual elements in it.

When shared realities exist and situational elements become similar, a dynamic equilibrium results. This stability, however, is not fixed, but instead adapts to minor variations. Further, major changes in one or more elements would disrupt this equilibrium. Examples would include a change in leadership, an introduction of new followers, and a change in the contextual situation (e.g., revised work flow, new technology, change in evaluation policies). The equilibrium, which is based on shared meanings and perceptions, can therefore be disrupted by elements which are not congruent with the shared meanings and perceptions or else which are not explainable with the current assumptions. The process of interaction will gradually result in incorporating the changes by revising perceptions and understandings to take into account the new elements. Thus, the dynamic equilibrium will be established again.

The individual actions of the participants in establishing that equilibrium vary depending on the situation. The relative importance of the decision effectiveness/performance effectiveness and symbolic actions/reactions may also vary over time. When leaders, followers, and situations experience upheaval and change, the symbolic actions and reactions may be of prime importance in establishing the meaning and interpretations of what occurs (Martin and Powers, 1983). As the situation, leader, and follower stabilize and the dynamic equilibrium emerges, the performance and decision effectiveness issues may become relevant. Decisions and performance have the potential to alter situations and the individuals in them. The effect of the performance and decisions is then critical to the continued stability and homogeneity of the group and situation. Symbolic actions, then, may be of more importance during periods of change, while the effectiveness issues gain importance with the establishment of norms and values. The overall effectiveness of the group may thus be affected by the very norms and values which stabilize it.

A variety of consequences may accrue to the leader, follower, and group as a result of the continued interactions. For the leader, his or her attitudes, perceptions, and motivation may all be initially formed and subsequently modified or refined as a result of the interactions. Similarly, the same processes are likely to characterize the follower.

Group-level consequences are also likely to emerge as a function of the continuous interactions among the leader and the set of followers. In particular, such group dimensions as cohesion, norms, and role systems are likely to develop. Over time, the dimensions should continue to coalesce or else individuals in the group will self-select themselves out of the group via transfer or withdrawal. In instances where self-selection is costly, an alternative set of consequences might include conflict, power struggles, and in-fighting.

As suggested in the model, these consequences, most of which might accrue after each interaction, play a role in defining the situational context for the next interaction. For example, suppose a leader makes a decision and announces it via a memo. The follower will see the decision and attribute additional meaning to it because of the symbolic nature of the memo as a vehicle for announcement. He may then implement the decision with a low level of enthusiasm. The leader will become aware of the follower's reaction by the observed level of performance and cues provided by the follower as a part of his symbolic reaction.

Subsequently, the leader may experience various levels of satisfaction and motivation as a function of how he perceives and evaluates the follower's response. These attitudes will then play a role in the next decision to be made and the avenues through which it is communicated. Thus, the situation affects symbolic action/decision effectiveness by the leader and symbolic reaction/performance effectiveness by the subordinate and the processes associated with their reciprocal interactions. The consequences of those behaviors, in turn, become a part of the situational context for subsequent interactions.

Discussion and Implications

There are numerous implications that can be drawn from the SIL model proposed here. One of the most significant of these is its relationship to previous leadership theory. Early theories, such as the behavioral approaches, looked at simple, bivariate and/or unidirectional relationships. For example, a logical research question might have been to investigate the effects of a simple leadership behavior on a single follower attitude. To the extent that the proposed SIL model is a more accurate representation of the leadership

phenomenon, there is little wonder that earlier research failed to discover meaningful patterns of co-variation between leader behavior and follower response.

Even more recent research of a reciprocal nature can also be seen as being perhaps overly-simplistic. This research opened the door for consideration of two-way interaction between leader and follower, but failed to shed much useful insight on the nature, form, and consequences of this reciprocal interaction. Moreover, its associated theoretical framework is also relatively simplistic when compared with the more complex domain of interactional psychology.

The proposed model may also provide a useful vehicle for improved operationalization of many of the elements of organizational symbolism. That emerging body of literature has attracted considerable attention (cf., Pondy et al., 1983) of late, but has also been criticized as being overly abstract and of having little operational value. The SIL model may provide useful avenues for refining and improving the operational base of symbolic management.

There are also critical implications for research that can be drawn from the proposed model. In particular, these relate specifically to interactional psychology, a critical dimension of the SIL model. As described by Terborg (1981) and Schneider (1983), research undertaken from an interactional perspective must be longitudinal (in order to capture interactions across time) and involve multiple samples (to avoid range restrictions associated with homogeneous groups in single organizations). Moreover, research must be designed to account for four categories of variables: person, physical-technological, social-interpersonal, and time.

In summary, this paper has developed and proposed a Symbolic Interactional Leadership model. The SIL model draws from and builds upon emerging work in

the areas of symbolic action, reciprocal interaction, and interactional psychology. The model, while not yet a fully articulated theory, does represent a significant advancement over simple unidirectional, bivariate, static models. While likely to be subject to further refinement and development, the SIL model, then, may provide a useful framework for organizing existing theory and serving as a blueprint for future research.

References

- Aderfer, C.P. Group and Intergroup Relations. In J.R. Hackman and J.L. Suttle (eds.), Improving Life at Work (Santa Monica, CA: Goodyear Press, 1977), 227-296.
- Ashour, A.S. A Framework of a Cognitive-Behavioral Theory of Leader Influence and Effectiveness. Organizational Behavior and Human Performance, 1982, 30, 407-430.
- Bass, B. Stogdill's Handbook of Leadership (New York: Free Press, 1981).
- Burrell, G. and Morgan, G. Sociological Paradigms and Organizational Analysis (London: Heinemann, 1979).
- Crozier, M. The Bureaucratic Phenomenon (Chicago: University of Chicago Press, 1964).
- Dansereau, F. Jr., Graen, G., and Haga, W.J. A Vertical Dyad Linkage Approach to Leadership within Formal Organizations. Organizational Behavior and Human Performance, 1975, 13, 46-78.
- Fiedler, F. A Theory of Leadership Effectiveness (New York: McGraw Hill, 1967).
- Field, R.H.G. A Test of the Vroom-Yetton Normative Model of Leadership. Journal of Applied Psychology, 1982, 67, 523-532.
- Greene, C.N. The Reciprocal Nature of Influence Between Leader and Subordinate. Journal of Applied Psychology, 1975, 60, 187-193.
- Greene, C.N. and Schriesheim, C.A. Leader-Group Interactions: A Longitudinal Field Investigation. Journal of Applied Psychology, 1980, 65, 50-59.
- House, R.J. A Path Goal Theory of Leader Effectiveness. Administrative Science Quarterly, 1971, 16, 321-338.
- Huff, A.S. Situation Interpretation, Leader Behavior, and Effectiveness. In Leaders and Managers (New York: Pergamon Press, 1984), 253-262.
- Janis, I.L. Groupthink, 2nd ed. (Boston: Houghton Mifflin, 1982).
- Kerr, S. and Jermier, J.M. Substitutes for Leadership: Their Meaning and Measurement. Organization Behavior and Human Performance, 1978, 22, 375-403.
- Kipnis, D., Schmidt, S.M., and Wilkinson, I. Intraorganizational Influence Tactics: Explorations in Getting One's Way. Journal of Applied Psychology, 1980, 65, 440-452.
- McMillan, C.J. Qualitative Models of Organizational Decision-Making. Journal of General Management, 1980, 5, 22-39.
- 30

- March, J.G. and Simon, H.A. Organizations (New York: John Wiley & Sons, 1958).
- Martin, J. and Powers, M.E. Organizational Stories: More Vivid and Persuasive than Quantitative Data. In B. Staw (ed.), Psychological Foundations of Organizational Behavior (Glenview, IL: Scott, Foresman, 1983), 161-168.
- Mintzberg, H., Raisinghani, D., and Theoret, A. The Structure of "Unstructured" Decision Processes. Administrative Science Quarterly, 1976, 21, 246-275.
- Mitchell, T.R., Green, S.G., and Wood, R.E. An Attributional Model of Leadership and Poor Performing Subordinate: Development and Validation. In Research in Organizational Behavior, vol. 5 (Greenwich, CT: JAI Press, 1981), 197-234.
- Morse, J.J. and Wagner, T.R. Measuring the Process of Managerial Effectiveness. Academy of Management Journal, 1978, 21, 23-35.
- Ouchi, W.G. A Conceptual Framework for the Design of Organizational Control Mechanisms. Management Science, 1979, 25, 833-848.
- Ouchi, W.G. The Relationship between Organizational Structure and Organizational Control. Administrative Science Quarterly, 1977, 22, 95-113.
- Perrow, C. The Short and Glorious History of Organizational Theory. Organizational Dynamics, 1973, 2-15.
- Pfeffer, J. The Ambiguity of Leadership. Academy of Management Journal, 1977, 2, 104-112.
- Pfeffer, J. Management as Symbolic Action: The Creation and Maintenance of Organizational Paradigms. In Research in Organizational Behavior, vol. 3 (Greenwich, CT: JAI Press, 1981), 1-52.
- Pondy, L., Frost, P., Morgan, G., and Dandridge, T. Organizational Symbolism (Greenwich, CT: JAI Press, 1983).
- Roskin, R. and Margerison, C. The Effectiveness of Some Measures of Managerial Effectiveness. Human Relations, 1983, 36, 865-882.
- Schneider, B. Interactional Psychology and Organizational Behavior. In Research in Organizational Behavior, vol. 5 (Greenwich, CT: JAI Press, 1983), 1-31.
- Sims, H.P. Jr. and Mang, C.C. Social Learning Theory: The Role of Modeling in the Exercise of Leadership. Journal of Organizational Behavior Management, 1981, 3, 55-63.
- Stogdill, R. Handbook of Leadership (New York: Free Press, 1974).
- Terborg, J.R. Interactional Psychology and Research on Human Behavior in Organizations. Academy of Management Journal, 1981, 6, 569-576.

Vroom, V.H. and Jago, A.G. Decision Making as a Social Process: Normative and Descriptive Models of Leader Behavior. Decision Sciences, 1974, 5, 743-769.

Wofford, J.C. and Srinivasan, T.N. Experimental Tests of the Leader-Environment-Follower Interaction Theory of Leadership. Organizational Behavior and Human Performance, 1983, 32, 35-54.

Zahn, G.L. and Wolf, G. Leadership and the Art of Cycle Maintenance: A Simulation Model of Superior-Subordinate Interaction. Organizational Behavior and Human Performance, 1981, 28, 26-49.

Figure 1
The Limited Form of the Symbolic Interactional Leadership Model

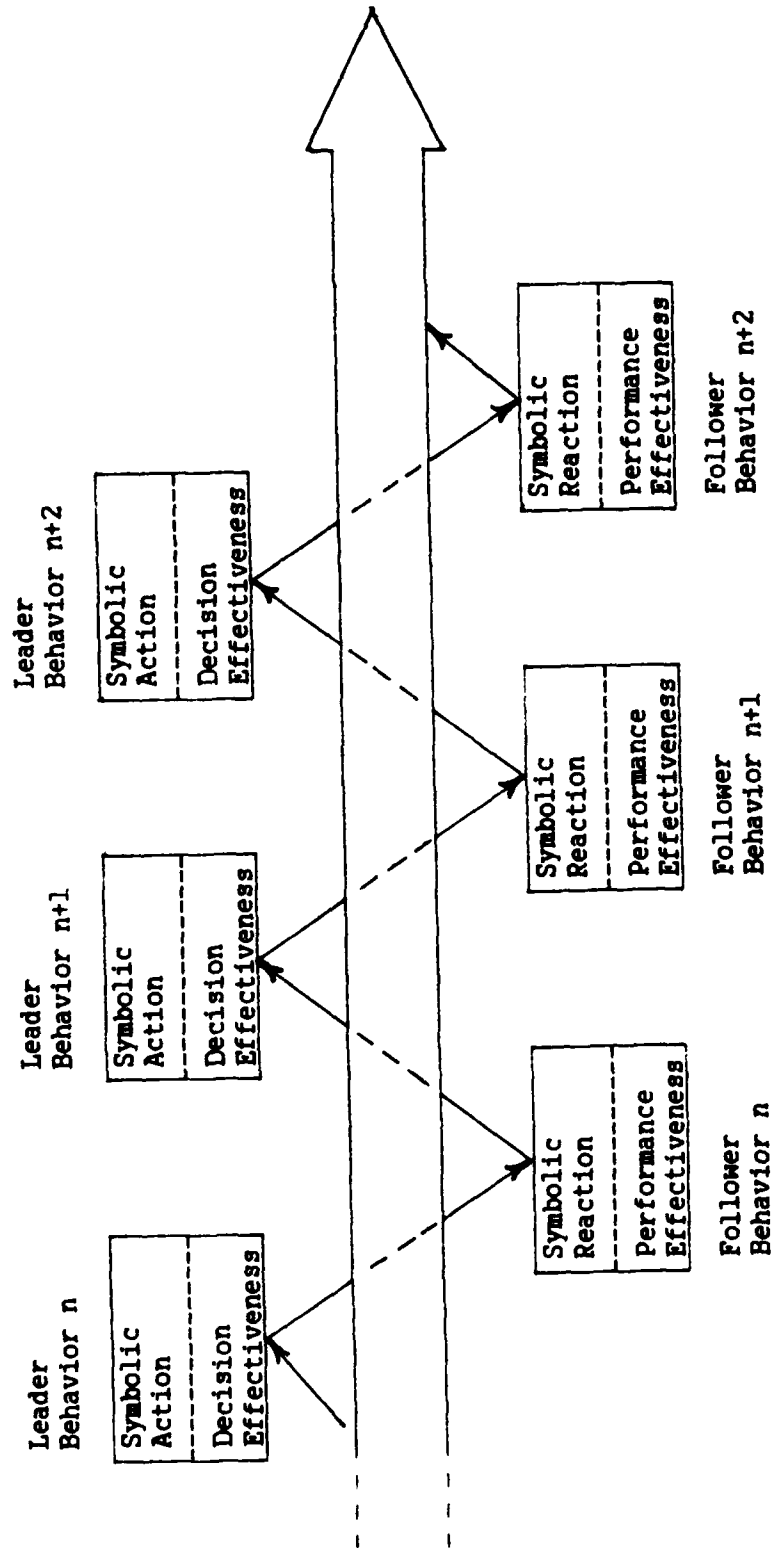
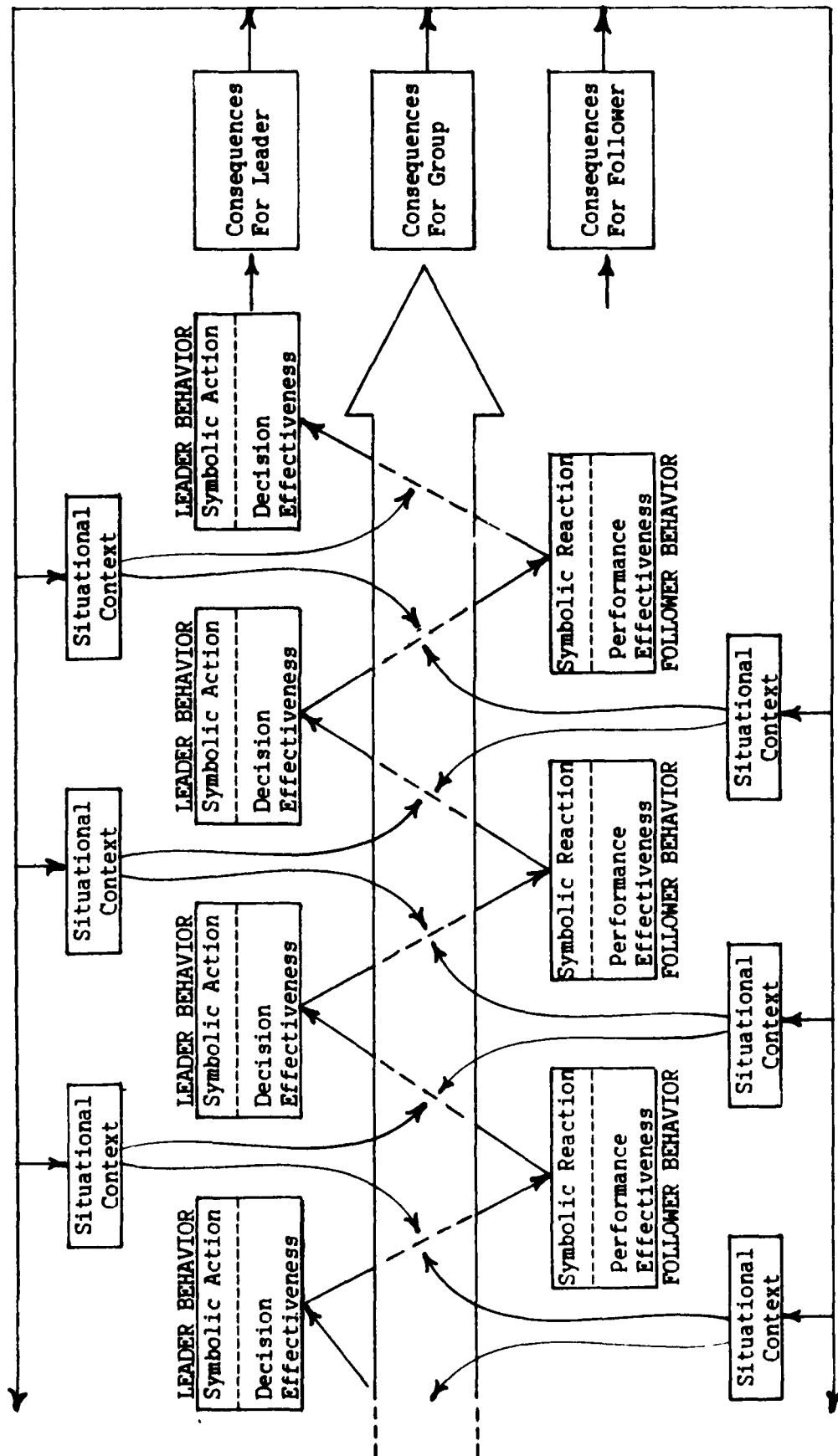


Figure 2
The Extended Form of the Symbolic Interactional Leadership Model



LIST 1
MANDATORY

Defense Technical Information Center (12 copies)
ATTN: DTIC DDA-2
Selection and Preliminary Cataloging Section
Cameron Station
Alexandria, VA 22314

Library of Congress
Science and Technology Division
Washington, D.C. 20540

Office of Naval Research (3 copies)
Code 4420E
800 N. Quincy Street
Arlington, VA 22217

Naval Research Laboratory (6 copies)
Code 2627
Washington, D.C. 20375

Office of Naval Research
Director, Technology Programs
Code 200
800 N. Quincy Street
Arlington, VA 22217

Psychologist
Office of Naval Research
Detachment, Pasadena
1030 East Green Street
Pasadena, CA 91106

LIST 2
OPNAV

Deputy Chief of Naval Operations
(Manpower, Personnel, and Training)
Head, Research, Development, and
Studies Branch (OP-01B7)
1812 Arlington Annex
Washington, DC 20350

Director
Civilian Personnel Division (OP-14)
Department of the Navy
1803 Arlington Annex
Washington, DC 20350

Deputy Chief of Naval Operations
(Manpower, Personnel, and Training)
Director, Human Resource Management Division
(OP-15)
Department of the Navy
Washington, DC 20350

Chief of Naval Operations
Head, Manpower, Personnel, Training
and Reserves Team (Op-964D)
The Pentagon, 4A478
Washington, DC 20350

Chief of Naval Operations
Assistant, Personnel Logistics
Planning (Op-987H)
The Pentagon, 5D772
Washington, DC 20350

LIST 3
NAVMAT & NPRDC

NAVMAT

Program Administrator for Manpower,
Personnel, and Training
MAT-0722
800 N. Quincy Street
Arlington, VA 22217

MANPOWER REPORTS ONLY

Naval Material Command
Management Training Center
NAVMAT 09M32
Jefferson Plaza, Bldg #2, Rm 150
1421 Jefferson Davis Highway
Arlington, VA 20360

Naval Material Command
Director, Productivity Management Office
MAT-00K
Crystal Plaza #5
Room 632
Washington, DC 20360

Naval Material Command
Deputy Chief of Naval Material, MAT-03
Crystal Plaza #5
Room 236
Washington, DC 20360

Naval Personnel R&D Center
Technical Director
Director, Manpower & Personnel
Laboratory, Code 06
Director, System Laboratory, Code 07
Director, Future Technology, Code 04
San Diego, CA 92152-6800

(4 copies)

Navy Personnel R&D Center
Washington Support Office
Ballston Tower #3, Room 171
Arlington, VA 22203-1923

E

LIST 4
MEDICAL

Naval Hospital
Psychology Department
San Diego, CA 92134

Commanding Officer
Naval Submarine Medical
Research Laboratory
Naval Submarine Base
New London, Box 900
Groton, CT 06349

Commanding Officer
Naval Aerospace Medical
Research Lab
Naval Air Station
Pensacola, FL 32508

Naval Medical R&D Command
Program Manager for Human
Performance (Code 404)
National Naval Medical Center
Bethesda, MD 20014

Wilkins Biomedical Library
Naval Health Research Center
P.O. Box 85122
San Diego, CA 92138-9174

LIST 5
NAVAL ACADEMY AND NAVAL POSTGRADUATE SCHOOL

Naval Postgraduate School (3 copies)
ATTN: Chairman, Dept. of
Administrative Science
Department of Administrative Sciences
Monterey, CA 93940

U.S. Naval Academy
ATTN: Chairman, Department
of Leadership and Law
Stop 7-B
Annapolis, MD 21402

Superintendent
ATTN: Director of Research
Naval Academy, U.S.
Annapolis, MD 21402

LIST 6
HRM

Commanding Officer
Organizational Effectiveness Center
Naval Training Center
San Diego, CA 92133-9000

Commanding Officer
Organizational Effectiveness Center
Naval Submarine Base New London
P.O. Box 81
Groton, CT 06349

Commanding Officer
Organizational Effectiveness Center
Naval Air Station
Mayport, FL 32228

Commanding Officer
Organizational Effectiveness Center
Pearl Harbor, HI 96860

Commanding Officer
Organizational Effectiveness Center
Naval Base (Bldg. NH-46)
Charleston, SC 29408

Commanding Officer
Leadership & Organizational Effectiveness
School
Naval Air Station Memphis
Millington, TN 38054-5099

Commanding Officer
Organizational Effectiveness Center
1300 Wilson Boulevard, rm 114A8
Arlington, VA 22209

Commanding Officer
Organizational Effectiveness Center
5621-23 Tidewater Drive
Norfolk, VA 23509

Commander
Organizational Effectiveness Center
5621 Tidewater Drive
Norfolk, VA 23509

Commanding Officer
Organizational Effectiveness Center
Naval Air Station Whidbey Island
Oak Harbor, WA 98278-9000

Commanding Officer
Organizational Effectiveness Center
Box 23
FPO New York 09510

Commanding Officer
Organizational Effectiveness Center
Box 60
FPO San Francisco 96651

Commanding Officer
Organizational Effectiveness System, Pacific
Pearl Harbor, HI 96860

Commanding Officer
Organizational Effectiveness System, Atlantic
5621 Tidewater Drive
Norfolk, VA 23509

Commanding Officer
U.S. Navy Organizational Effectiveness System, Europe
FPO New York 09510

Commanding Officer
U.S. Navy Organizational Effectiveness Center
Box 4
FPO Seattle 98762-2920

LIST 7
NAVY MISCELLANEOUS

Naval Military Personnel Command (2 copies)
HRM Department (NMPC-6)
Washington, DC 20350

Dr. Ann O'Keefe
Naval Military Personnel Command
(MNPC-6Q)
Washington, DC 20350

Commander
Naval Training Equipment Center
(Code 1 - Resource Center)
Orlando, FL 32813

Commanding Officer
ATTN: TIC, Bldg. 2068
Naval Training Equipment Center
Orlando, FL 32813

Chief of Naval Education & Training (N-22)
Naval Air Station
Pensacola, FL 32508

Chief of Naval Technical Training
ATTN: Code D17
NAS Memphis (75)
Millington, TN 38D54

Navy Recruiting Command
Director, Recruiting Advertising Dept.
Code 43
801 North Randolph Street
Arlington, VA 22203

Naval Weapons Center
Code 094
China Lake, CA 93555

LIST 8
USMC

Headquarters, U.S. Marine Corps
Code MPI-20
Washington, DC 20380

Headquarters, U.S. Marine Corps
ATTN: Scientific Adviser,
Code RD-1
Washington, DC 20380

Director
Education Center (E 032B)
MCDEC
Quantico, VA 22134-5050

Commanding Officer
Education Center (EO31)
MCDEC
Quantico, VA 22134

Marine Corps Command and
Staff College
Education Center
Quantico, VA 22134

LIST 9
OTHER FEDERAL GOVERNMENT

Defense Advanced Research
Projects Agency
Director, Cybernetics
Technology Office
1400 Wilson Blvd, Rm 625
Arlington, VA 22209

Professor Douglas E. Hunter
Defense Intelligence School
Washington, DC 20374-6111

Dr. Brian Usilaner
GAO
Washington, DC 20548

School Management Unit
National Institute of Education
1200 19th Street, N.W.
Mail Stop 17
Washington, DC 20208

National Institute of Mental Health
Division of Extramural Research Programs
5600 Fishers Lane
Rockville, MD 20852

Information Analyst
Center for Studies of Minority Group
Mental Health
Parklawn Building, Rm 11-94
5600 Fishers Lane
Rockville, MD 20857

Chief, Personnel Policy Analysis Branch
U.S. Coast Guard (G-P-1/2)
Washington, D.C. 20593

Social and Developmental Psychology
Program
National Science Foundation
Washington, D.C. 20550

Dr. Earl Potter
Department of Economics & Management
U.S. Coast Guard Academy
New London, CT 06320

Division of Industrial Science
& Technological Innovation
Productivity Improvement Research
National Science Foundation
Washington, D.C. 20550

Douglas B. Blackburn, Director
National Defense University
Mobilization Concepts Development
Center
Washington, D.C. 20319

Chairman, Dept. of Medical Psychology
School of Medicine
Uniformed Services University of
the Health Sciences
4301 Jones Bridge Road
Bethesda, MD 20814

LIST 10
ARMY

Headquarters, FORSCOM
ATTN: AFPR-HR Ltc. Sellards
Ft. McPherson, GA 30330

Army Research Institute
Field Unit - Ft. Leavenworth
P.O. Box 290
Leavenworth, TX 66048

Technical Director
Army Research Institute
5001 Eisenhower Avenue
Alexandria, VA 22333

(3 copies)

Head, Department of Behavior
Science and Leadership
U.S. Military Academy, New York 10996

LTC. Frederick J. Manning
Deputy Director
Division of Neuropsychiatry
Walter Reed Army Institute
Washington, DC 20307-5100

Army Military Personnel Command
Attn: DAPC-OE
200 Stovall Street
Alexandria, VA 22322

Army Research Institute
Attn: PERI-SF (Mr. Dennis Leedom)
5001 Eisenhower Avenue
Alexandria, VA 22333

Commandant
USA OECS
Attn: ATXW-RMA-S
Ford Ord, CA 93941-7300

LIST 11
AIR FORCE

Air University Library
LSE 76-443
Maxwell AFB, AL 36112

Head, Department of Behavioral
Science and Leadership
U.S. Air Force Academy, CO 80840

Major Robert Gregory
USAFA/DFBL
U.S.A.F. Academy
Colorado Springs, CO 80840-5941

A. R. Fregley
AFOSR/NL
Building 410
Bolling Air Force Base
Washington, DC 20332-6448

Technical Director
AFHRL/MO(T)
Brooks AFB
San Antonio, TX 78235

AFMPC/MPCYPR
Randolph AFB, TX 78150

LIST 12
MISCELLANEOUS

Australian Embassy
Office of the Air Attache (S3B)
1601 Massachusetts Avenue, N.W.
Washington, D.C. 20036

British Embassy
Scientific Information Office
Room 615
3100 Massachusetts Avenue NW
Washington, DC 20008

Canadian Defense Liaison Staff,
Washington
ATTN: CDRD
2450 Massachusetts Avenue, N.W.
Washington, DC 20008

Commandant, Royal Military
College of Canada
ATTN: Department of Military
Leadership and Management
Kingston, Ontario K7L 2W3

National Defense Headquarters
ATTN: DPSRSC
Ottawa, Ontario K1A 0K2

Sequential by Principal Investigator

LIST 13
CURRENT CONTRACTORS

Dr. Clayton P. Alderfer
Yale University
School of Organization and Management
New Haven, Connecticut 06520

Dr. Janet L. Barnes-Farrell
Department of Psychology
University of Hawaii
2430 Campus Road
Honolulu, HI 96822

Dr. Jomills Braddock
John Hopkins University
Center for the Social Organization
of Schools
3505 N. Charles Street
Baltimore, MD 21218

Dr. Sara Yogev
Northwestern University
Graduate School of Management
2001 Sheridan Road
Evanston, IL 60201

Dr. Terry Connolly
University of Arizona
Department of Psychology, Rm. 312
Tucson, AZ 85721

Dr. Richard Daft
Texas A&M University
Department of Management
College Station, TX 77843

Dr. Randy Dunham
University of Wisconsin
Graduate School of Business
Madison, WI 53706

List 13 (continued)

Dr. J. Richard Hackman
School of Organization
and Management
Box 1A, Yale University
New Haven, CT 06520

Dr. Wayne Holder
American Humane Association
P.O. Box 1266
Denver, CO 80201

Dr. Daniel Ilgen
Department of Psychology
Michigan State University
East Lansing, MI 48824

Dr. David Johnson
Professor, Educational Psychology
178 Pillsbury Drive, S.E.
University of Minnesota
Minneapolis, MN 55455

Dr. Dan Landis
The University of Mississippi
College of Liberal Arts
University, MS 38677

Dr. Frank J. Landy
The Pennsylvania State University
Department of Psychology
417 Bruce V. Moore Building
University Park, PA 16802

Dr. Bibb Latane
The University of North Carolina
at Chapel Hill
Manning Hall 026A
Chapel Hill, NC 27514

Dr. Cynthia D. Fisher
College of Business Administration
Texas A&M University
College Station, TX 77843

Dr. Thomas M. Ostrom
The Ohio State University
Department of Psychology
116E Stadium
404C West 17th Avenue
Columbus, OH 43210

Dr. William G. Ouchi
University of California,
Los Angeles
Graduate School of Management
Los Angeles, CA 90024

Dr. Robert Rice
State University of New York at Buffalo
Department of Psychology
Buffalo, NY 14226

Dr. Benjamin Schneider
Department of Psychology
University of Maryland
College Park, MD 20742

Dr. H. Wallace Sinaiko
Program Director, Manpower Research
and Advisory Services
Smithsonian Institution
801 N. Pitt Street, Suite 120
Alexandria, VA 22314

Dr. Eliot Smith
Psychology Department
Purdue University
West Lafayette, IN 47907

Dr. Barbara Saboda
Public Applied Systems Division
Westinghouse Electric Corporation
P.O. Box 866
Columbia, MD 21044

Dr. Harry C. Triandis
Department of Psychology
University of Illinois
Champaign, IL 61820

Dr. Anne S. Tsui
Duke University
The Fuqua School of Business
Durham, NC 27706

Dr. Andrew H. Van de Ven
University of Minnesota
Office of Research Administration
1919 University Avenue
St. Paul, MN 55104

Dr. Sabra Woolley
SRA Corporation
901 South Highland Street
Arlington, VA 22204

END

FILMED

7-85

DTIC