Research and Development report no. 1/2003

Organizational Communication

A review

Maria Therese Jensen

Title	Organizational Communication – a review
Author	Maria Therese Jensen
Report	R & D report no. 1/2003
ISBN-number	82-7602-083-6
ISSN-number	0803-8198
Printing Office	Edgar Høgfeldt, 4626 Kristiansand

Ordering information:

Publisher:

Agderforskning
Serviceboks 415,
N-4604 Kristiansand
Norway

Phone: 38 14 22 00
Fax: 38 14 22 01
E-mail: post@agderforskning.no

Homepage: http://agderforskning.no

Abstract

The core aim of the present article was to give a review of studies and theory within organizational communication. In the first part of the article four influential approaches used in the study of organizational communication are presented; the mechanistic perspective, the psychological perspective, the interpretive symbolic perspective and the systems interaction perspective. In the second part methodological issues related to the study of organizational communication are discussed, and an overview of the most valid and reliable communication research measures are presented. The study of organizational communication is most often related to three different aspects of the organization: structure, context, and process. In the following the article follows this pattern. In part three the significance of both formal (e.g. organizational size) and informal communication (communication networks) for organizational communication is elaborated in part three, and studies taking this approach are presented. Context, being the second aspect, is defined and elaborated in part four. Communication climate and superior-subordinate communication, are important concepts related to the aspect of context, and studies done within this foci of research are thus presented under this heading. The final aspect being the aspect of process is elaborated in part five. The primary focus is on organizational change, and studies and theory concerning the relation between communication and organizational change are presented. The conclusion is given in part six, and it is emphasized that future studies within the field of organizational communication should perhaps attempt taking a more complex approach in order to achieve the goal of capturing the full and whole essence of organizational communication.

Content

Tables

1 Introduction

Organizational communication as a discipline grew tremendously over the 20th century, but accompanying that growth was a struggle to establish a clear identity of the field. Today scholars still continue to define and redefine the focus, boundaries and future of the field (Thompkin & Wanka-Thibault, 2001). Why is it that organizational communication is such an interesting concept for researchers to study? Apparently, a great deal of the answer to this question can be found in the importance communication has been revealed having for the success of organizations. Open communication has for example been found to be positively correlated with employees' satisfaction with the organization (Koike, Gudykunst, William, Lea & Ting-Toomey, 1989). Moreover, research shows that quality of communication in organizations is associated with employees' job satisfaction and motivation (e.g. Orpen, 1997). Communication has further been found playing an important role in the process of organizational change. In situations where an open dialogue between superiors and subordinates is present, a high degree of trust to the change process will be created (Mac, 1999). Moreover, several studies show that communication will be important for employees' organizational commitment. Welsch and La Van (1981) found communication variables to explain as much as 38 % of the variance in organizational commitment, while Gusley (1992) found that organizational clarity, participation and superior-subordinate communication accounted for 41 % of the variance in organizational commitment. The importance of commitment can be found in the association it has with several organizational factors as turnover, absence and performance (Mowday, Porter & Steers, 1982). Conclusively, organizational communication is an important concept to investigate further.

The present paper will attempt to give a brief review of studies done within the field of organizational communication. Studies done within this field is often placed into three different categories; (1) Structure; (2) Context (3) Process. First communication studies that have been conducted within the frame of organizational structure will be reviewed, and also some suggestions for future research will be mentioned. Structure refers to the building blocks of organizational life, whereas context refers to the framework that embeds behavioral and structural aspects of organizations, meaning the environment. Environments can be both external and internal to the organization. In the present paper it will be focused primarily on the internal environment, more specifically on the importance of organizational and communicational climate. Also a presentation of studies done on superior-subordinate communication will be presented under this heading. Finally, in the third section,

I will turn from looking at organizational structure factors that both affect and are affected by communication, to processes within organizations that are related to communication. This is important considering a focus on process helps to provide a dynamic as opposed to a static view of communication in the organizational context. More specifically, it will be focused primarily on the process of organizational change, and to what extent communication is a determinant of successful change.

Before the review, a short presentation of communication theory will be given. Four perspectives will be presented, representing the most influential frameworks used in the study of organizational and human communication. Methodological issues related to the study of communication will also be discussed and some of the most reliable and valid communication research measures will be presented.

1.1 Multiple Perspectives

Perhaps more than any other area of communication inquiry, organizational communication stands defenseless against claims that researchers fail to articulate theoretical frameworks underlying their work (Richetto, 1977), and are negligent in their use of theoretical models to integrate research results involving numerous and often disparate variables (Redding, 1979). However, Aubrey Fisher (1978) proposed that scholars tend to assume one of four basic conceptual approaches to the study of human communication. Krone, Jablin and Putnam (1987) have adopted this view and presents four perspectives (1) mechanistic, (2) psychological (3) interpretive-symbolic and (4) system-interaction perspectives, where each of these perspectives models the process of communication from a relatively distinct point of view. Krone et al. (1987) acknowledged that the four perspectives represent the most influential and comprehensive frameworks used in organizational communication to date. Moreover, they claim that while other philosophical frameworks may be used generally to categorize social science (e.g. Habermas, 1971), none is as explicitly communicative as the Fisher model.

1.1.1 The Mechanistic Perspective

From a mechanistic perspective human communication is viewed as a transmission process in which a message travels across space, through a channel from one point to another. “From the mechanistic point of view…events occurring in the channel become the fodder for research and theorizing” (Fisher, 1978 p.112). Researchers who adopt a mechanistic perspective assume that communication concepts are causally or at least quasi-causally related. More specifically, the mechanistic perspective implies a

linear connection between communicators, with the channel serving as a direct linkage between the two (Krone et al., 1987).

Krone et al. further propose a second assumption saying that communication concepts are linked together in a chainlike relationship. Based on this assumption it is believed that the way in which A functions leads directly to how B functions, in turn leading to how C functions and so on. This assumption further implicates that a communication breakdown can occur easily when a barrier blocks message transmission and reception. Third, the mechanistic perspective treats communication as materialistic. More specifically this implies that a message becomes a concrete substance with spatial and physical properties (for example, message frequency and/or duration). Finally, the mechanistic framework assumes that communication can be broken into smaller and smaller units. This is to a large extent a reductionist perspective implying that communication concepts can be best understood by reducing the whole of a given concept into its smallest parts, identifying and measuring the part, then testing the linear causal chains among the parts. The mechanistic approach emphasizes the channel and transmission of messages, considered to be the basic model of communication. The approach also expands the basic model including fidelity (refers to the extent to which a message is similar at two points on the channel), noise (anything that interferes with the message sending and message receiving), barriers (obstacles that slow down the communication process), breakdowns (those problems that result in complete stop in communication) and gatekeeping (gatekeepers serve a filtering function, have control over the information flow) (Krone et al., 1987).

In summary, a mechanistic perspective views communication as a transmission process in which messages travel across a channel from one point to another. An example of research using this perspective is organizational communication network research, since this approach focuses primarily on the channels that allow communication to flow among individuals (Krone et al., 1987). The communication network approach will be elaborated later in this paper.

1.1.2 The Psychological Perspective

Whereas the mechanistic perspective toward human communication places primary emphasis on the communication channels, the psychological perspective focuses specifically on how characteristics of individuals affect their communication. From this specific viewpoint communicators are located within an informational environment that includes a huge amount of stimuli, too numerous to process. What information individuals choose at-

tending to will further be determined by attitudes, cognitions and perceptions. Attitudes, cognition and perceptions will function as filters to what information the individual chooses to process, but also how it is processed. The materialism, transmission effects and emphasis on channels that characterized the mechanistic view are subjugated to internal cognitive processes of senders and receivers. Considering that conceptual filters are internal and not observable objectively, explanations of communication concepts are restricted to direct observations of inputs and outputs only. For example, it is believed that when employers interview job applicants they attend to information related to for instance non-verbal behavior (McGovern & Tinsley, 1978), level of vocal activity (Diboye & Wiley, 1978), and rhetorical communication strategies (Einhorn, 1981). From a psychological perspective on communication, it is the manner in which interviewers attend to and process this kind of information (inputs) that is expected to affect their judgements about applicants' suitability for employment (output). This implies that communication shifts to a receiver-orientation in the psychological perspective from a sender-transmission focus in the mechanistic approach.

In summary, the psychological perspective of organizational communication concentrates on explaining the informational environments in which individuals are located and the range of stimuli to which they respond using different conceptual filters.

1.1.3 The Interpretive-Symbolic Perspective

When organizational communication is conceptualized mechanistically or psychologically, the organization takes on the quality of a "container" within which interaction occurs (Hawes, 1974). To put it another way, organizational properties are assumed to determine communication processes to a greater extent than communication processes are thought to shape organizational characteristics, and communication is treated almost exclusively as a dependent variable. When viewed from an interpretive perspective however, organizational communication consists of patterns of coordinated behaviors that have the capacity to create, maintain, and dissolve organizations (Daft & Weick, 1984). The interpretive-symbolic perspective posits that individuals shape their own social reality through communicating.

The interpretive-symbolic perspective is the most humanistic of the four perspectives, and adopts a view of human communication that resembles symbolic interactionism (Blumer, 1969; Mead, 1934). In the interpretive-symbolic perspective the self is reflected through social interaction. Behavior is not simply the response of conceptual filters to information stimuli as

in the psychological perspective, but rather it develops through social interaction and it changes as the social context changes.

The interpretive perspective distinguishes between symbolic, non-symbolic and social action. Non-symbolic action involves reflex or automatic responses that do not require interpretation. In contrast, symbolic action requires self-indication (meaning action and interpretation), implying that individuals respond to others based upon their understanding of what the other's words and actions mean. Finally, social action is directly tied to the meanings that individuals construct for events and activities.

Culture and congruence are also important concepts in the interpretive symbolic perspective. Congruence refers to a consensus of meaning in interpreting events. This is in contrast to the accuracy in message transmission as in the mechanistic perspective or similarity in conceptual filters between communicators in the psychological perspective. The meanings of different symbols are, according to the interpretive-symbolic perspective, greatly affected by the context. The interpretive-symbolic approach therefore emphasizes how cultural factors have an impact on the interpretive process. Culture generally "refers to all the accepted and patterned ways of behavior of a given people. It is a body of a common understanding…the sum total and the organization or arrangement of all the group's ways of thinking, feeling and acting (Brown, 1963 p. 3–4). In contrast to the organization as "container" approach, which focuses on identifying specific dimensions of the organizational culture, the interpretive-symbolic paradigm searches for the way consensual meanings constitute culture (Krone et al., 1987).

Research using the interpretive perspective usually seeks to explain communication from the viewpoint of organizational members. Researchers using this approach don't attempt to control their subjectivity. Rather they acknowledge it, and incorporate it into their research methods such as participant observation, ethnomethodology, and naturalistic inquiry (Putnam & Pacanowsky, 1983).

1.1.4 The Systems Interaction Perspective

Unlike the interpretive-symbolic approach, research from the systems-interaction perspective concentrates on external behaviors as the fundamental units of analysis. The locus of communication in the systems-interaction perspective is patterned sequential behavior, meaning the grouping of sequences of communicative behaviors. Researchers who take this approach concentrate on the categories, forms and sequential patterns of message be-

havior rather than on the cause-and-effect relationship between communication variables – as is done in the mechanistic and psychological perspectives.

Studying social interaction from this perspective also entails the use of stochastic probability. This means to determine the redundancy. Redundancy is the repetition of behaviors over time, and as redundancy increases, uncertainty decreases. Thus, through tracking the repetition of behaviors over time, researchers can ascertain patterns of message behavior and the probability that a sequence of behavior will recur. The communication process is greater than the sum of its parts, and changes in behaviors within the system change the character of the entire system. Unlike the psychological perspective, the individual is not the central component of action; rather the behaviors that he or she performs in relation to others constitute social events.

In essence, while the mechanistic and psychological perspective define communication as something one does (that is, send/receive messages, perceive activities/objects), the systems-interaction approach treats communication as an act of participation (Fisher, 1978). As Birdwhistell (1959) observes; "An individual doesn't do communication, he becomes a part of communication" (p. 104).

Table 1: An Overview of Four Conceptual Approaches to the Study of Organizational Communication

	Mechanistic perspective	Psychological perspective	Interpretive symbolic perspective	Systems interaction perspective
Theoretical approach	Reductionist approach Focus on communication channels	Individual approach Focus on attitudes, traits, cognition and perception	Humanistic approach Focus on social interaction	Focus on communication as an act of participation
Method	Network analysis Communication =dependent variable – cause and effect relationships	Self-report questionnaires Communication=dependent variable – cause and effect relationship	Participant observation Ethno-methodology Naturalistic inquiry	Study of external behaviors – patterns of communicative behaviors

1.2 Summary

Research and also application in the field of organizational communication are based either explicitly or implicitly on a particular view of communica-

tion. This view shapes the way people see and interpret organizational communication. A manager who insists; "my subordinate just doesn't listen to me. I sent him that message several days ago" exemplifies the mechanistic approach to communication. Researchers who take this approach see communication as a materialistic substance that travels through computers, telephones and other concrete substances. In contrast, managers who view communication from a psychological perspective concentrate on the receivers perceptions. Effective communication in this perspective is based on adapting one's needs to meet the values and attitudes of the respondents. Researchers operating from this perspective center on cognition together with personality traits of communicators. Managers rarely have conceptualizations grounded in the interpretive-symbolic perspective. However, if they do, the manager would concentrate on how employees and superiors are interpreting the events in their work-environment, and moreover how he/she can influence the consensual meanings organizational members construct. Finally, in the systems-interaction approach to communication managers concentrate on the patterns, routines and the interaction that define their relationship with others. They also realize that these patterns can become self-sustaining over time, considering they are not in our awareness (Krone et al., 1987)

Krone et al. (1987) emphasize that no one of these perspectives are right or wrong, and communication actually encompasses all of the four perspectives. They further claim that they see theoretical value in embracing a variety of perspectives, since each makes a potentially unique contribution to an overall understanding of communication in organizations.

2 Methodological issues

The field of organizational communication has been marked by a variety of methodological traditions. Lab experiments studying mainly information flow dominated the field in early years, but was later supplanted by survey research investigating perceptions of communication processes. In the 1970's these methods were joined by multivariate field and laboratory methodologies based largely on systems theory concepts. In the 1980's, a growing popularity of the culture metaphor and increasing dissatisfaction with scientific methods led many organizational communication scholars to embrace interpretive methods. In the past ten years more and more scholars were wedding those interpretive approaches with a critical theoretical stance. As new methods have come onto the organizational communication scene, the old ones have not necessarily left quietly. A variety of approaches still exist, and organizational communication scholarship is today marked by a healthy electicism in which a variety of research methods are accepted as legitimate (Miller, 2001).

2.1 Quantitative Research Approaches to Organizational Communication

In the following section several specific research methodologies widely used by quantitative organizational communication researchers will be considered: experimental methods, survey methods, and behavioral observation.

2.1.1 Experimental Research

Experimental research involves the manipulation or control of the independent variable (Camppell & Stanley, 1963). The goal of an experimental study is to maximize the ability of a researcher to draw conclusions about the causal relationship between the independent variable and the dependent variable. A true experiment involves the random assignment of participants to treatment groups, as well as tight control over research procedures. Due to this, such studies typically take place in laboratory settings. Though laboratory settings involve some sacrifice in terms of organizational realism, they are often used to ferret out the specific mechanisms involved in organizational communication processes. However, experiments can also be conducted in actual organizations, but are then referred to as quasi-experiments. Quasi-experiments may involve the manipulation of the independent variable through the use of scenarios or through organizational programs or subgroups that provide a "naturally occurring field experiment". Quasi-experimental designs can also be employed to investigate organizational

programs in which effects are evaluated over extended periods of time. The data gathered in an experimental study are typically analyzed with statistical techniques that allow for the comparison of groups. The procedures most typically used are from the family of techniques based on analysis of variance (ANOVA).

In organizational communication several recent studies have used experimental methods. Papa and Pood (1988) studied the effect of coorientational accuracy on conflict resolution tactics in a field experiment. These researchers created dyads with either high or low coorientational accuracy regarding the organization's plan to use participative management. They further analyzed the dependent variable of conflict resolution tactics and discussion satisfaction. Ellis (1992) investigated the impact of source credibility and uncertainty in the organizational change process by creating messages with varying types of social information about an upcoming departmental reorganization and measuring subsequent attitudes about the planned change. Both of these experimental designs are interesting in that they use naturally occurring organizational events as a springboard for the manipulation of theoretically driven independent variables. The most well known studies within the experimental field of organizational communication are the small group studies, where communication networks were studied in a laboratory setting. The small group studies will be further elaborated and discussed later in this paper.

2.1.2 Survey and Interview Research

Researchers using survey and interview techniques within the quantitative tradition rely on self-reports of research participants to make inferences about organizational communication processes (Kerlinger, 1986). Researchers using these techniques generally base their work on the psychological perspective (Krone, Jablin & Putnam, 1987) referred to previously, proposing that individual perceptions about communication processes have important theoretical and pragmatic implications. The self-reports of research participants are used to measure attitudes about communication events or relationships, to measure predispositions for particular communication behavior, or as a marker of other organizational communication behavior. Quantitative researchers typically use structured measurement instruments that include forced-choice items or structured open-ended questions.

In analyzing data from survey research, the investigator generally follows two sequential steps. First, the quality of the scales must be determined, then the theoretical relationships among the scales can be analyzed. Scale quality can be assessed through face validity and a consideration of scale consis-

tency such as Cronbach's alpha (Cronbach, 1951). In initial studies where scale development is the goal, exploratory factor analysis may be used to uncover the dimensionality of the scales (Nunally, 1978). However, many communication researchers have become disillusioned with this technique and have turned to confirmatory factor analysis (CFA) as a method for analyzing the quality of both newly developed and well-validated scales (for discussions of CFA techniques see Fink & Monge, 1985).

When having confirmed the quality of the measurement instruments, the survey researcher assesses the relationships among the constructs. At the simplest level relationships are considered through correlation and regression analysis (for complete discussion see Keppel & Zedeck, 1989). However, many organizational communication researchers are interested in more complex systems of relationships and have therefore turned to more sophisticated analytical techniques. For example, many researchers now use path analytic techniques or structural equation modeling (for discussion, see Cappella, 1980; McPhee & Barrow, 1987) in their analysis of survey data in organizational communication.

Finally, if the self-report data collected are designed to be indicators of communicative activity in the organization, network analytic techniques are often applied. Network analytic techniques will be further elaborated later in this paper.

A wide range of recent organizational communication research has used survey research techniques. For example, Marshall and Stohl (1993) were interested in assessing the ways in which participation led to valued organizational outcomes. Their survey design involved measures of network participation, perceived involvement, empowerment and satisfaction. Performance appraisals were also obtained from members of the management team. Through correlational and regression techniques Marshall and Stohl were able to explore the differential relationship among empowerment, involvement, satisfaction and performance. A more complex analytical strategy was applied by Fulk (1993), in a survey research taking a social constructivist approach to the investigation of communication technology in organizations. Using a survey of electronic mail users and structural equation modeling techniques, Fulk determined that social influences on technology related attitudes and behaviors were consistently stronger when individuals reported a high level of attraction to their work groups. A third recent study (Sthol, 1993) is useful in demonstrating the ways in which quantitative research methods can be applied to explain the processes through which organizational members interpret their working worlds. Philips (1990) argues that the

social constructed realities of factors can be objectively investigated with appropriate quantitative research methods. One method for doing this that has gained considerable favor in organizational communication is semantic network analysis. This method allows the researcher to analyze the self-reported interpretations of research participants to create a map of the degree to which meanings for key organizational processes are shared. Stohl (1993) recently used this method to investigate the ways in which managers from varying national cultures differ in the interpretation of the participation construct.

2.1.3 Coding of Communication Behaviors and Archives

A third general research strategy used by quantitative organizational communication researchers involves the objective coding of communication behaviors or communication artifacts (Bakeman & Gottman, 1986). Work in this genre attempt to view the interaction or archives in an objective and reliable manner in search for systematic explanations of communication phenomena. The first step involves collecting behavioral or archival data to be coded. After the data set has been collected, attention shifts to analyzing the data, and a coding scheme is developed. A coding scheme can be developed in two ways (Poole and McPhee, 1995); first, an analytically complete coding system can be deduced through rules of formal logic (e.g. a logical choice tree). Second, and more typically, categories can be developed based on theoretical concerns and the text being studied. Poole and McPhee note a natural trade-off between these two techniques:

> *"The second approach to designing classification systems is advantageous because it is more responsive to the particular nature of the discourse than the first, but it is correspondingly less "clean" and its rules harder to apply consistently"* (p. 62).

After the data are coded, the researcher typically looks for patterns in the categorization. Due to the data being coded at the nominal level, techniques such as ANOVA and regression are inappropriate as analytical choices. Coded interaction and archival data can however be analyzed with non-parametric statistics such as chi-square. However, recent trends in organizational communication research point to the continuing importance of more advanced categorical data analysis techniques, particularly log-linear analysis (see e.g. Bishop, Feinberg & Holland, 1975) or, for the analysis of sequential categorical data, Markow modeling (see Hewes, 1975, 1979).

Several important examples of the use of behavioral observation and analysis are prominent in the organizational communication research literature. For example, interaction analysis (along with discourse analysis) have been

used to investigate the relational control patterns used in supervisor-subordinate relationships (see e.g. Fairhurst, 1993; Fairhurst & Chandler, 1989; Fairhurst, Green & Courtright, 1995; Fairhurst, Rogers & Sarr, 1987). Research in decision-making conducted by Scott Poole and his colleagues provides another example of behavioral coding in organizational communication research. In early work, Poole and Roth (1989) developed a typology of group decision paths and a procedure for coding types of interaction in decision-making groups. In subsequent work, these researchers have used the coding procedures to explore the nature of computer-mediated decision making, concentrating on conflict management (Poole, Holmes & DeSanctis, 1991), micro-structurational processes (Poole & DeSanctis, 1992) and the distinction between computer-mediated and face-to-face groups (Poole, Holmes, Watson & DeSanctis, 1993).

2.2 Qualitative Research Methods

In the past two decades a growing number of researchers have used qualitative methods to study various aspects of organizational communication. In the next section the focus will be on the trends of qualitative research in organizational communication.

Organizational communication has its own unique history and its own unique trends in the use of qualitative research (see Redding, 1985). Unlike sociology and anthropology, the field of organizational communication never really experienced a "traditional period" of qualitative research. However, Tompkins and Redding (1988) noted that the period from 1900 to 1940 included several areas of study such as "business speech", "industrial journalism", and "proto-human relations". Modernist trends in organizational communication began in the 1940s and dominated research well into the early 1970s as researchers struggled to define "organizational communication" as a distinct and legitimate field (Taylor & Trujillo, 2001). Although most of the methodologies that characterize modernist research in organizational communication were – and still are – quantitative ones applied by proponents of mechanistic, psychological, and systems approaches, some scholars also developed more qualitatively oriented approaches. Early in this period communication scholars debated about the human relations' approach to management. Numerous case studies of communication in organizations dominated the early years of this period. Case study approaches, however, became post-World War II casualties when scholars in communication conducted large-scale experiments and surveys to satisfy institutional goals of prediction and control (Taylor & Trujillo, 2001). Later in this period scholars applied rhetorical criticism to the study of organizational communication,

setting the stage for subsequent rhetorical analyses of organizational communication and corporate discourse (see Cheney, 1991; Cheney & Vibbert, 1987). Finally, other researchers suggested that ethnomethodology (Garfinkel, 1967) could be a useful qualitative method for studying the interactional reproduction of social order. This further led to the development of conversation analysis, which has since become a thriving area in the study of communication, and which has been used to study organizational discourse (e.g. Banks, 1994; Beach, 1994). During the 1970s and the 1980s studies were dominated by the new idea that organizational communication should be seen as a cultural phenomenon. This field initiated in 1981 in what became the annual Conference on Interpretive Approaches to the Study of Organizational Communication in Alta Utah. Following that first conference and the subsequent publications resulting from the conference (Pacanowsky & Putnam, 1982; Putnam & Pacanowsky, 1983) there was a large amount of conferences, curriculum offerings, journal articles, and books on organizational culture and symbolism. Allen, Gotcher and Seibert (1993) noted that "organizational culture and symbolism was the third most frequent topic in organizational communication from 1980 to 1991 (p. 233). Even more important, scholars in organizational communication started to use "new" qualitative methods of field research, such as ethnography, forcing them to spend more time in organizations. In the late 1980's and 1990's qualitative researchers have experienced crises of representation in struggling to articulate and evaluate the choices available for writing qualitative reports, choices that now include fictional and autobiographical forms as well as traditional social science formulas (e.g. Brown & McMillan, 1991; Goodall, 1989). Further, some researchers are arguing for the legitimacy of performing one's qualitative research (e.g. Conquergood, 1989; Jackson, 1993). Taylor & Trujillo (2001) state that it is naive and narrow-minded to assume that one particular theoretical or methodological perspective can completely reveal the complexities of organizational communication. Additionally they find that this at present is an exciting but also disturbing time to be a qualitative researcher, trying to push the boundaries of what constitutes qualitative research in organizational communication.

2.3 Communication Research Measures

Trying to identify the major instruments in organizational communication research has been a difficult task (Downs, DeWine & Greenbaum 1994). The reasons for this are: Organizational communication is a boundary spanning discipline with very imprecise perimeters, the content of what is covered in organizational communication research is exceedingly broad, the study of organizations encompasses other aspects of communication (such as inter-

personal communication), organizational communication instruments often appear in non-communication publications. Downs et al. made an attempt selecting organizational communication instruments where their selection was based on the following preferences: (1) instruments comprehensively examined communication in organizations, (2) instruments were developed by communication scholars, (3) measures demonstrated reliability and validity, (4) instruments were developed in the field with organizational employees rather than with students or student employees, (4) instruments needed to have a communication component. In spite of the limitations and issues, there appeared to be a surprisingly large number of well-developed organizational communication instruments. Down et al. further grouped the instruments into three sections: (a) Comprehensive Instruments (b) Communication Process Instruments (c) Organizational Outcomes Instruments. The instruments listed here are only a fraction of the instruments. The instruments that have been chosen are those most relevant for the themes elaborated in this article. The instruments are listed in Table 2.

Table 2: Communication Research Measures

Comprehensive Instruments
Communication Satisfaction Questionnaire
International Communication Association Audit
Organizational Communication Scale
Organizational Communication Development Audit Questionnaire
Organizational Culture Survey
Survey of Organizations (Likert, 1967)
Communication Process Instruments
Management communication
Style:
Communicative Adaptability Scale
Communicator Style Measure
Focal Person's Communication Survey (Klaus & Bass, 1982)
Management Communication Style (Richmond & McCrosley, 1979)
Leadership
Coaching Practices Survey (Mahler, 1963, cited in Morrison, McCall & DeVries, 1978)
Desirabel Motivational Characteristics (McClelland, 1961)
Grid Feedback from a Subordinate to a Boss (Blake & Mouton, 1964)
Leader Effectiveness and Adaptability Description Instrument (Hersey & Blanchard, 1973)
Leadership Opinion Questionnaire (Fleischman, 1969)
Management Practices Questionnaire (Miller & Zenger, 1976, cited in Morrison et al. 1978)
Management Profiling, As Others See You (Daniels, Dyer & Mofitt, 1975)
Manager Feedback Program (Hinrichs, 1975)
Organizational Behavior Describer Survey (Harrison & Oshrey, 1976, cited in Pfeiffer & Jones, 1977)

2.3.1 Comprehensive Instruments

Six primary instruments examine communication throughout the entire organization (the instruments are listed in table 2). The International Communication Association Audit, the Organizational Communication Scale, and the Communication Satisfaction Questionnaire are quite profiled measures. The following measures, the Organization Communication Development Audit Questionnaire and the Organizational Culture Survey are standardized measures, allowing the easiness of scoring, and the easiness of making comparisons across organizations. Moreover, the measures are developed by scholars in the communication discipline. The final measure; the comprehensive survey of Organizations by Likert (1967), goes far beyond communication (e.g. organizational climate, supervisor leadership, group process satisfaction); yet it also covers many of the topics covered by communication instruments. Taylor and Bowers (1972) reported extensive studies to support its construct, content and predictive validity.

2.3.2 Communication Process Instruments

Since the 1970's, instrument development has focused on facets of organizational communication. The probably most important facet is the Management Communication. The superior-subordinate relationship is often described as the most important communication link in organization. A consequence of this is that many instruments have been designed with aim of gathering information about how managers communicate with subordinates. It will here be provided a brief overview of two kinds of management communication: style and leadership.

2.3.3 Style

Downs, Archer, McGrath and Stafford (1988) reviewed five style instruments that measured different aspects of communication style. The five instruments are listed in table 2: *The Communicator Style Measure* is the most popular measure of communication style for scholars in communication. Richmond and McCroskey (1979) developed *The Management Communication Style Scale*. The scale was developed to investigate style's relationship to employee satisfaction. The styles reflect boss-centered or subordinate-centered leadership orientation. Respondents to the three questions select on a 19-point continuum whether or not their communication style is one that tells, sells, consults or joins. Reliability estimates have been in the .80-.90 range. Critics have praised it for investigating style in the actual organizational settings. However, some have also been uncomfortable with its brevity and the social desirability tendency, which might affect respondents. *The Communicative Adaptability Scale* views competence as the ability to adapt

to different social constraints. Through factor analysis C.W. Downs, McGrath, Stafford and Rowland (1990) discovered that the *Communicative Adaptability Scale* had more stable dimensions, than any of the other style instruments they reviewed. Finally, Klaus and Bass (1982) developed the *Focal Person's Communication Survey* to measure how people's perceptions of communication style might be congruent or incongruent. They designed an instrument that people fill out themselves and others fill out about them. Twenty-five Likert type items break into 11 dimensions. The dimensions are as follows: Communication Style (careful transmitter, open/two-way, frank, careful listener, informal), Credibility (trustworthy, informative, dynamic), and Organizational Outcomes (role clarity, job satisfaction, satisfaction with each other). Reliability and validity evidence is limited.

2.3.4 Leadership

Morrison, McCall and De Vries (1978) reviewed 24 instruments that allow both managers and subordinates to rate the manager and thus provide important feedback to managers about their leadership. The sophistication of the empirical and theoretical development of these instruments varies considerably. Downs, Deewine and Greenbaum (1995) have listed the following instruments as showed in the table above:

The Coaching Practices Survey (Mahler, 1963, cited in Morrison et al., 1978), has 62 items that measure nine factors. Many of the items have a communication dimension (e.g. "How often is your supervisor frank in telling you what he/she thinks?" and "Has your supervisor used meeting with you and your peers to discuss each person's objectives and goals?"). The next instrument in table 1, *The Desirable Motivational Characteristic instrument* contains 48 items based on achievement motivational work (McClelland, 1961). Several of these items focus on relationships (e.g., "Always tries to watch over and control the subordinate" and "Wants to be the one who gives orders in the department"). *The Leader Effectiveness and Adaptability Description Instrument* (Hersey & Blancard, 1973) contains 20 items, each used to measure (a) leadership style (b) style, range, and (c) style adaptability. *The Leadership Opinion Questionnaire* (Fleischman, 1969) is one of the pioneering instruments developed to measure Structure (task) and Consideration (relationships) dimensions of leadership. Sample communication items include "Speak in a manner not to be questioned" and "Stress importance of being ahead of other units." The Manager Feedback Program (Hinrichs, 1975) contains 40 items that measure 10 dimensions. Some of the labels used to describe the labels are communication oriented: "Maintaining Communication", "Clarity of Job Requirements," "Group Atmosphere" and "General Relations with Manager". *The Grid Feedback from a Subordinate*

to a Boss is a short, simple instrument developed to measure information requests (Blake & Mouton, 1964). Each of 10 dimensions is measured by one item each. A sample item is: "Brings me in to discuss and contribute to the quality of plans". The Management Profiling, As Others See You (Daniels, Dyer & Mofitt, 1975) has 34 items that measure seven dimensions, including Communication, Decision Making, Influence Interactions and Listening. *The Management Practices Questionnaire* (Miller & Zenger, 1976, cited in Morrison et al., 1978) contains 76 items. Most of its 13 scales have a communication emphasis. It measures Communicating, Decision Making, Giving Support, Team Building and Delegating. The final measure listed in table 1 is *The Organizational Behavior Describer Survey* (Harrison & Oshrey, 1976, published in Pfeiffer & Jones, 1977) contains 25 items that measure Rational-Technical Competence, Verbal Dominance, Emotional Expressiveness, and Consideration. According to Morrison et al. (1978), it has been used extensively to determine the effects of T-groups.

3 Structure

3.1 How Are Patterns of Communication Shaped by Organization Structure?

The notion of structure is probably one of the oldest concepts in organization theory, and organizational theorists have typically used the term to refer to the formal characteristics of organizations (Jablin, Putnam, Roberts & Porter, 1987). Organizational theorists have tended to focus on how formal structure affects communication processes, thereby treating communication as the dependent variable. In contrast, communication researchers have treated communication as the independent variable, trying to provide a view of how patterns of interaction create and shape organization structure (Jablin et al., 1987). However, Monge and Eisenberg (1987) state that formal and emergent networks/structures coexist, and each can be best understood in the context of the other. These two approaches being intertwined is also a common recognition among recent researchers (Jablin et al., 1987). According to Jablin et al., (1987) there are three important topics related to how patterns of communication are shaped by organization structure: formal organization structure, communication networks and superior-subordinate leadership. In the following sections a review will be given on formal organization structure and communication networks, whereas superior-subordinate relationship will be elaborated in the second part of the paper.

3.2 Formal Structural Dimensions and Communication

The majority of research on organizational structure follows a pattern traced in the work of Weber and Taylor. In the welter of theoretical arguments and research findings the major theme is that mechanistic elements involve more control over worker behavior and less flexibility than do organic structures. These consequences result partly from restricting and channeling internal organizational communication (McPhee & Poole, 2001). Formal structure serves in many ways as a substitute for communication in organizations by providing the coordination that is otherwise achieved through communicating (McPhee, 1985; Perrow, 1986).

Although there is no clear consensus in the organization literature, four key structural dimensions are predominant in most theoretical analyses considering formal organization structure and communication: ***(1) configuration (2) complexity (3) formalization*** and ***(4) centralization*** (e.g. Berger &

Cummings, 1979; Blackburn, 1982; James & Jones, 1976; Miles, 1980; Porter & Lawler, 1965). Studies of organizational communication that have been conducted within these four dimensions will now be reviewed, starting with configuration.

3.3 Configuration

Configuration refers to the shape of an organization (Jablin, 1987), and according to Jablin (1987) four structural characteristics are frequently associated with organizational configuration: (1) *span of control* (2) *hierarchical level* (3) *organizational size* (4) *sub-unit size* (Jablin, 1987). In the following section studies conducted on the relation between communication and span of control, communication and hierarchical level and communication and organizational size will be reviewed. The term *sub-unit size* is in many ways similar to communication networks, and will therefore be elaborated under that heading later on.

3.3.1 Span of Control

Span of control can be defined as the number of subordinates reporting directly to a superior (Jablin, 1987), and is one of the oldest concepts in organization theory (e.g. Fayol, 1916/1949; Graicunas, 1937; House & Miner, 1969). It is however ironic that little empirical research has been conducted exploring relationships between span of control and communication, considering that one of the primary explanations theorists supply for investigating span of control is based on communication principles (Jablin, 1987). One important question to consider would of course be to what extent high versus low spans of control affects organizational communication. Meyer (1968) reasons:

> *"Intuition tells one that where spans of control are low, supervisors and subordinates have better access to one another than where spans of control are high.…Where working conditions are such that the two-way interchange between supervisors and workers is not needed spans of control will be quite large"* (p. 950).

Most theorists, like Meyer, often assume that the narrower the span the greater potential for communication, while the larger the span, the lower potential for communication. Bedeian (1984) however states that this assumption is problematic since together with narrow spans of control often comes an increase in hierarchical levels. This will again increase the number of levels separating upper – from lower – level organization members, thereby inhibiting rather than creating cross-level vertical communication. Conversely, when spans are wider the interaction between superiors and

immediate subordinates may be more difficult, whereas communication between persons at the top and bottom of the organization may be facilitated because fewer hierarchical levels separate them. Jablin (1987) reviews the different studies that have explored communication and span of control suggesting the following conclusions: (1) Span of control is unrelated to the extent to which a supervisor communicates with his or her subordinates via oral versus written means (Udell, 1967 in Jablin, 1987); (2) span of control does not appear related to closeness of supervision (Bell, 1967 in Jablin, 1987) or subordinates' perceptions of role clarity (Follert, 1982 in Jablin, 1987); (3) narrow spans of control are associated with increased amounts of upward and downward communication between superiors and subordinates (Brewer, 1971 in Jablin, 1987); and (4) spans of control do not differentially affect subordinates' perceptions of communication openness with their immediate superiors (Jablin, 1982 in Jablin, 1987). Thus, while the research results presented provide some support for the notion that frequency of communication may be affected by the span of control, they also indicate that mode and quality of communication are not necessarily affected. However, Jablin (1987) notes that the conclusions must be viewed cautiously considering the studies mentioned vary in their operationalisation of span of control.

3.3.2 Hierarchical Level

Hierarchical level refers to an individual's position in a scalar chain and ranges from non-supervisory workers at the lower end of the scale to chief executive officers at the upper extreme (Berger & Cummings, 1979). Studies exploring relationships between individuals' levels in their organizations and communication-related behavior have tended to focus on relationships between variations in hierarchical level and (1) formal and informal communication patterns (2) decision-making behavior and influence strategies (3) information adequacy. What exactly has been revealed through these studies will be discussed in the following section.

3.3.3 Hierarchical Level and Communication Patterns

Research exploring relationships between hierarchical level and communication patterns has produced a rather diverse and contradictory set of findings (Jablin, 1987). Firstly, higher-level organization members have been found to spend more time in message sending and receiving activities than their subordinates, being likely to generate a greater volume of communication (Bacharach & Aiken, 1977; Dublin, 1962; Hinrichs, 1964; Putnam & Sorenson, 1982; Thomason, 1966, 1967). However, some studies have found that the ratio of superior to subordinate communication increases the higher

one's position in the hierarchy (e.g. Dubin & Spray, 1964), while other studies report the opposite pattern (e.g. Burns, 1954), while other studies report no consistent relationship (e.g. Martin, 1959). Conclusively, the exact form this increase in communication assumes as one moves higher in a hierarchy appears to be variable across organizations and work environments. MacLeod, Shriven and Wayne (1992) also found that hierarchical level raised the frequency of oral communication episodes. Research also provides evidence suggesting that the communication behavior of organization members may be affected by the interaction of hierarchical level and environmental uncertainty. Hannaway (1985) found in his research that under conditions of high uncertainty, upper level managers take part in more conversations and meetings than do lower level managers. It has also been found that use of electronic mail systems may be determined by hierarchical level. Sproull and Kielser (1986) revealed in their study that volume of messages (sent and received) via electronic mail does not vary across levels, but the nature of messages is distinctive. They discovered that the messages of managers were longer, focused more on work-related topics, and more frequently contained negative affect. Conclusively, research exploring relationships between hierarchical level and communication patterns has produced a rather diverse, often contradictory set of findings. Moreover, there is an indication of a variety of factors jointly affecting or moderating relationships between hierarchical level and interaction patterns.

3.3.4 Decision-Making and Hierarchical Level

Jablin (1987) concludes from the results of the investigations done on this field that: (1) upper-level managers tend to involve their subordinates in decision-making more than do lower level managers, and (2) lower-level managers tend to have decisions initiated for them by their superiors (e.g. Blankenship & Miles, 1968; Jago & Vroom, 1977). Level has also been found to influence problem-solving communication in other ways, where higher levels have been found tending toward more innovative solution processes. For instance, Barnard (1991) found that higher level employees exhibited greater reliance on peers for advice than did those at lower levels. Stevenson and Gilly (1991) also found that when managers refer problem cases to other parts of an organizational network, they pass the problem case less often to the person formally assigned to deal with it. Instead they pass it to an acquaintance of theirs, perhaps because they see the problem as non-routine and needing special attention (Poole & McPhee, 2001).

Only a minimal amount of research has explored relationships between information adequacy and hierarchical level (Jablin, 1987). However, the results of the studies that have been conducted paint a consistent picture:

Higher level managers are better informed than lower- level managers (Davis, 1953; Sutton & Porter, 1968).

3.3.5 Organizational Size

Organizational size refers to the total number of full-time (and some percentage of part time) employees within an organization (Jablin, 1987). The presumption among theorists is that greater organizational size leads to more mechanistic organizing as the coordination burden overwhelms informal organizing processes (McPhee & Poole, 2001). However, studies in general have provided limited support for the notion that organizational size is negatively related to the quality of communication. For instance, Mahoney, Frost, Crandall and Weitzel (1972) in a study of 19 organizations ranging in size from 200 to over 10000 employees found no relationship between organizational size and the degree to which information and communication flow freely. On the other hand, several studies have reported that as organizational size increases, the quality of communication between superiors and subordinates decreases. However, most of these studies have not found these relationships to be statistically significant (Green, Blank & Liden, 1983; Jablin, 1982; Klauss & Bass, 1982; Snyder & Morris, 1984).

Recent research has focused on the relation between organizational size and decision making processes. On the one hand, increasing size has been found to result in greater and broader decision participation (Connor, 1992). On the other hand, Smeltzer and Fann (1989) found size leading to some restrictions on decision-making breadth. In comparison with small companies, large company managers were more oriented to internal communication with subordinates, and were also more concerned with exchanging routine information.

The studies above point to mixed benefits of communication in larger organizations.

3.4 Complexity

Complexity represents the number of separate parts within an organization as represented by the division of labor and by the number of both hierarchical levels and departments (Bedeian, 1984). Differentiation describes the process by which these units evolve, typically occurring in two directions; vertically and horizontally. The two directions are referred to as vertical complexity and horizontal complexity.

3.4.1 Vertical Complexity

It is important to realize the close relationship between the concept of vertical complexity and the span of control referred to earlier. Porter and Lawler (1965, p.43) observe, "the degree to which a structure is tall or flat is determined by the average span of control within an organization. In addition the tendency for organizational size to be positively related to vertical complexity is noteworthy, since effects of vertical complexity on communication processes can be confused for effects between size and communication (e.g., Zey-Ferrell, 1979).

Only a limited number of studies have examined relationships between vertical complexity and communication, and generally the findings do not suggest a consistent set of relationships between vertical complexity and communication. Rousseau (1978) reports that the greater the number of hierarchical levels in a department, the less performance feedback individuals perceive receiving from supervisors and co-workers. On the other hand, in a study exploring leadership styles Giselli and Siegel (1972) determined that sharing information with subordinates is positively related to managerial success in tall organizations, but negatively related to success in flat organizations. Recent studies have also shown variation in communication behavior by hierarchical level. Mac Leod, Shriven and Wayne (1992) for instance found that hierarchical level raised the frequency of oral communication episodes.

3.4.2 Horizontal Complexity

The work of Hage (1974) and his associates (Hage, Aiken & Marrett, 1979) represents the earliest major attempts to explore relationships between horizontal complexity and communication. These researchers operationalized horizontal complexity in several ways: number of occupational specialties, degree of extra-organizational professional activity, and number of organizational departments. The findings were relatively consistent, although the statistical significance of the findings varied across measures. When the number of occupational specialties was used as a complexity index, complexity was found to be significantly correlated with the average number of scheduled organizationwide committee meetings attended, the frequency of department heads' unscheduled communication with other department heads, the supervisors' communication with workers in various units, the workers' communication with colleagues in other units, and the overall rate of unscheduled communication. In contrast no significant relationships were discovered between professional activity and communication, whereas the only significant correlation between number of departments and communi-

cation was for department heads' unscheduled communication with supervisors in other work units (Hage, 1974). Hage (1971) concludes that: "the volume of communication is higher in more complex organizations. It is the flow of communication with people *on the same status level in different departments* that is most highly associated with …measures of complexity (p. 867). However, Bacharach and Aiken (1977) found in their study negative correlations between horizontal complexity (operationalized as a number of departments) and the frequency of subordinates' upward, lateral, and total communication. No significant relationships were found between supervisors' communication and complexity. When considering the above investigations several issues need to be recognized. First, with increase in size, organizations usually exhibit increases in horizontal complexity – they have more departments and occupational specialties (e.g. Child, 1973; Zey-Ferrell, 1979). Thus, research exploring complexity- communication relationships should consider the moderating effects of organizational size on reported results. Second, relationships between horizontal complexity and communication may vary with the manner in which complexity is operationalized. It is therefore not surprising that Hage et al. (1971) report complexity (number of occupational specialties) positively related to frequency of horizontal communication, and Bacharach and Aiken (1977) find complexity (number of departments) negatively correlated with lateral communication. Conclusively, the measures may not only be conceptually distinct but the measure of Hage et al. (1971) may also be confounded by organizational size. To sum up, while the specific direction of the relationship between horizontal complexity and communication frequency may be unclear, there is little doubt that complexity and communication are significantly interrelated (Jablin, 1987).

3.5 Formalization

The notion of formalization is typically credited to Max Weber (1922/1947), who conceived it as a method for enhancing organizational efficiency and control (Jablin, 1987). Generally formalization refers to the degree to which the behaviors and requirements of jobs are codified into policies, rules, regulations, customs and so forth (Hage, 1980; Miles, 1980). Very few studies have examined relationships between formalization and communication (Jablin, 1987). The most prominent study is however that of Hage (1974), where the overall results appeared to be that negative associations were found between frequency of scheduled and unscheduled communication – and formalization. One theoretical presumption is that inflexible strictly formalized rules can lead to ineffectiveness. Olson (1995) illustrates this effect in a study of a public clinic where record-keeping rules forced

structured interviews that were very effective for collecting information, but too inflexible to optimally serve clients. Miller (1987) found that formalization increased perceived rationality of decision making. Jablin (1987) states that it is difficult to suggest generalizations based on the small amount of research that has been conducted on formalization and communication. In future research he suggests that structuration theory would provide the most useful perspective for understanding this relationship. So what is structuration theory? "Structuration's major argument is that every action bears a dual relation to structure: It both produces and reproduces structure" (McPhee, 1985 in Jablin, 1987. 405). In essence, a structuration approach to the study of formalization moves us beyond measuring how written practices affect the frequency of various forms of oral communication. Instead the structuration approach leads us to consider how communication processes function in the creation, interpretation, legitimation, and transformation of organizational formalization (Jablin, 1987).

3.6 Centralization

What exactly is centralization? Generally speaking an organization is considered centralized to the degree that authority is not delegated but concentrated at higher levels of management (Jablin, 1987). In empirical research, decentralization is frequently operationalized in one of two ways: (1) The hierarchical level at which decision making takes place, or (2) the extent to which subordinates participate in making decisions (Jablin, 1987). The relationship generally hypothesized between centralization and communication is stated by Hage et al. (1971,):

> *"There is less need for feedback when power is concentrated at the top of the organization hierarchy, since the role of subordinates is to implement decisions rather than to participate in the shaping of decisions. Therefore, as the concentration of power becomes greater, and consequently as the degree of participation in decision-making by lower participants becomes less, we would expect inhibitions on communication in an organization"* (p. 863).

Hage et al. (1971) explored the above proposition and found in their study that:

> *"If power is dispersed in an organization, not only does volume of communication increase, but the flow of communication across departmental boundaries is also increased* (p. 896)".

Also recent research supports the pattern of decentralization being accompanied by increased communication on many dimensions. The first dimension is raw amount of communication. Miller (1987) found that decentralization

of strategic decision making led to more interaction. Yammarino and Naughton (1988) also found support for this relationship, reporting that increased autonomy was accompanied by reports of more time spent communicating. In addition, according to Pearson (1992), decentralization through autonomous work groups led to growing feedback. A second dimension that is enhanced by reduced centralization is communication effectiveness. Macey, Peterson and Norton (1989) revealed that a participation program led to increased influence by members, group cohesiveness, organizational involvement and clarity of decision making. Looking at the last dimension, Trombetta and Rogers (1988) found that participation led to communicative openness and adequacy. To sum up, research suggests that centralization is negatively related to communication volume, communication effectiveness and finally to communication adequacy and openness.

Jablin (1987) emphasizes that it is important to recognize the associations that exist between centralization and other structural characteristics referred to earlier as formalization and standardization, and how these relationships may affect communication. For example, there is considerable evidence of centralization being negatively related to formalization and standardization (Jennergreen, 1981). The reason for this can be explained by managers often feeling unsure about decentralizing decision making and therefore building control mechanisms into decision-making processes by creating high degrees of formalization and standardization (Lammers, 1978; Meyers, 1972). Conclusively, it is possible that communication processes in organizations are affected by the interaction levels of centralization and formalization, something that should be further investigated in future research (Jablin, 1987). Jablin (1987) also suggests that future research should explore the effects of physical decentralization on communication processes. Physical decentralization can have important effects for communication processes, including the frequency of face-to-face interactions, telephone usage, and the communication characteristics of meetings (e.g. Goddard, 1973; Pye, 1976). A final question that should be considered and further studied is the effect of new communication technologies on the degree to which organizations adopt centralized or decentralized structural designs.

3.7 Summary

In the review so far it has been focused on reviewing research on issues associated with formal organization structure and communication. To sum up, it is apparent that some structural dimensions may have stronger relationships with communication behavior and attitudes than other dimensions. According to Jablin (1987) the structural dimensions of formalization, centrali-

zation and complexity may account for more variability in communication than do other dimensions because they represent practices that directly influence behavior. The effect of physical attributes of structure (as size etc.) on communication is perhaps not that significant before they exceed an unknown threshold. Determination of the thresholds at which various structural dimensions begin to measurably affect communication behavior would according to Jablin be an important focus for future research. Moreover, the effect other physical attributes as architectural design and open versus closed office systems has on communication should also be included in future research.

Most studies have used self-report measures in the study of organizational communication. Few studies have however collected and analyzed actual oral and/or written messages. The understanding of how structural dimensions affect message characteristics (meaning content, medium etc.) is extremely limited (Jablin, 1987), and should therefore be further investigated.

Researchers have tended to explore formal-structure relationships more frequently in service and government-related organizations than in industrial concerns. Data have also more frequently been collected from managers and professionals than from non-professionals and blue-collar workers (Dalton et al., 1980) The question of whether the results from studies conducted in this field can be generalized to all organizations should therefore be considered. The stability of associations between structure and communication across time has been infrequently investigated, and additionally there have been few longitudinal studies (Jablin, 1987). Conclusively, this should be considered in future research.

3.8 Unformal Structure

It has until now been focused on ”formal structure” in organizations and how formal structure may be related to communication. The studies conducted within this tradition treat communication as the *dependent variable*, meaning that the focus is on how structure affects organizational communication behavior. However, early organizational theorists were aware that the formal organizational structure failed to capture many of the important aspects of communication in organizations, and discussed the importance of informal communication and the grapevine (Barnard, 1983; Follett, 1924). Informal structure is in the literature often referred to as *communication networks*. Communication networks will be elaborated in the following section.

3.8.1 Communication Networks in Organizations

This tradition is concerned with studying the actual communication in the organizations first, and thereafter determining the effect of the established communication patterns on organizational structure. In contrast to treating communication as the dependent variable, it was treated as the *independent variable.* The theory of communication networks and the most important studies for this tradition of research will now be presented.

3.8.2 Communication Networks – Theory and Research

The difference between formal and informal communication is the greater stability and predictability of the formal communication, stability lent by the organizational structure. It is important to remember that the organization chart (representing the formal communication) is simply a diagram of the *expected* or *ideal* communication relationships in an organization. What actually happens is usually quite different (Rogers & Rogers, 1990). As Charles Perrow (1972, p. 42) states it: ”One of the ”true delights” of the organizational expert is to find a wide discrepancy between the formal and the informal structure of an organization”. However, informal communication also has a certain amount of pattern and predictability, deriving not from the formal organization structure, but rather from the regularized patterning of interpersonal communication flows. Due to the fact of such networks existing leads us to speak of an ”informal communication structure”. These informal structures are referred to in the literature as communication networks. The term ”network” is the communication analogue to the sociological concept of group; but ”network is distinct from ”group” in that it refers to a number of individuals who persistently interact with one another in accordance with established patterns” (Rogers & Rogers, 1990, p. 297). Networks are not visually obvious. Still, they are quite real: ”The numerous case studies (of communication) show undoubtedly that sociometric patterns (that is networks) are real” (Nehnevasja, 1960, p. 751 in Rogers & Rogers, 1990). For example using a variant of ECCO (episodic communication in channels of communication) analysis, Stevenson and Gilly (1991) found that managers tended to forward problems to personal contacts rather than to formally designated problem solvers, thus bypassing the formal network. Similarly Albrech and Ropp (1984) discovered that:

> *“Workers were more likely to report talking about new ideas with those colleagues with whom they also discussed work and personal matters, rather than following prescribed channels based upon hierarchical relationship*” (p. 3).

Communication networks are of course much *less* structured than formal communication. This is because networks occur more or less spontaneously,

and spring up out of the day-by-day communication behavior of individuals in an organization. Communication networks are constantly changing over time.

3.8.3 Defining Communication Networks

The term *network* is actually used by communication scientists to refer to three different concepts:

1. Total system network – comprising the communication patterns among all the individuals in the system, such as an organization. This network may consist of thousands of individuals if the organization is a large one.
2. Clique – defined as a subsystem whose elements interact with each other, to some extent more frequently than with other members of the communication system. Most cliques consist of from five to twenty-five members (some can be larger). Cliques are thus one of the main components of a communication network in an organization. In the literature some authors also call this unit a network or group.
3. Personal network – defined as those interconnected individuals who are linked by patterned communication flows to any given individual (Laumann, 1973: 7). Each individual carries around with him a personal network of other individuals with whom he consistently interacts about a given topic. Thus each individual possesses his communication environment. This personal network partly explains the individual's behavior.

3.8.4 Laboratory Experiments on Small Group Networks

Laboratory small group studies have attempted a unique contribution toward understanding communication behavior in organizations. Of course they lack the reality of an ongoing, "live" organization. These experiments have to a great extent focused on the nature of the task, motivation of members, group size, and emerging patterns of interaction. Three experiments conducted by Bavelas (1950), Leavitt (1951) and Shaw (1954, 1964) are the most representative studies of laboratory research in small group networks (Rogers & Rogers, 1990).

Bavelas (1950) suggested that a useful way of understanding the effects of different communication structures is to think of the group members as being related in terms of information "linkages". He pointed out that how these linkages are arranged topologically is much more important than knowing how close in units of physical distance various members of the organization may be. A direct telephone link between President Bush and Putin means

that in communication terms these two leaders can be much closer to each other than they may be to most members of their own country living many thousands of miles nearer by.

Bavelas (1950) developed the technique of arranging small group of individuals in cubicles, interconnected by means of slots in the cubicle walls through which the group members were asked to communicate by written messages. Various communication structures such as the circle wheel and chain were imposed upon the group members by closing certain of the cubicles' wall slots. Each of the members was given certain information that had to be shared in order to complete the assigned task. All members had to know the solution in order for the assigned task to be scored as successfully completed. The dependent variables were the amount of time required to achieve the correct solution, the number of messages exchanged, the number of errors committed, sociometric leadership nominations, and perceived satisfaction with the job on the part of the group members.

Bavelas concluded that (1) highly centralized communication networks (like the wheel) are superior for routine tasks, where errors are acceptable. (2) A decentralized network (like the circle) is better suited for less routine tasks, where adaptation and innovative thinking are required. When only centralized communication (as in the wheel) was allowed the task was seldom completed successfully; performance improved when decentralized communication (the circle) was allowed. However, a completely interlocking communication network (the "all channel") was no more effective than the restricted communication network (the wheel).

Leavitt (1951) introduced the concept "Centrality Index" in order to explain communication structures. Centrality Index is the extent to which the information flow in the group is centralized on one person or is dispersed more evenly amongst the members. Leavitt (1951) examined the relationship between different communication networks and task performance by asking his subjects to identify the one correct symbol that had been given to them on a card depicting six different symbols. Information was exchanged until all five participants constituting a group knew the correct answer. The experimental design was similar to Bavelas'. It appeared that the groups arranged in a centralized fashion made fewer errors on the task than the decentralized 'circle' arrangement. However, the morale and job satisfaction was higher in the latter, apparently because its members did not feel as 'left out' of things as did most of the members of the more centralized networks. Those subjects sitting in central positions in the centralized groups liked the task much more than the peripheral members, and were almost always invariably nominated

as the group leader. This is a powerful illustration of a "situational" leadership factor at work.

Shaw (1964) challenged the conclusion that centralized groups performed more effectively, and found that the nature of the task was a critical variable. In the early experiments the task was a very simple one and took a matter of a few minutes to solve. On more complex tasks however involving arithmetical problems, sentence constructions or discussion-type problems, the decentralized networks were clearly superior. Shaw showed that this was because the more difficult tasks required a much greater amount of information to be integrated for their successful solution. Since this integrative function typically fell on one person in a centralized network, this often resulted in cognitive overload in that person and a consequent impairment of group performance. In the less-centralized networks however the load was shared more evenly amongst them. Shaw also argued that centralized groups may result in lowered performance because of lowered morale and motivation among their members. Most people he suggested work better when they have some autonomy, something that is denied to members of centralized networks. To sum up the small group experiments led to several conclusions:

1. Network centralization contributes to rapid performance, especially to simple tasks. On the other hand the error rate is high, presumably because two-way communication and feedback is discouraged.
2. Low centralization or high independence is associated with member satisfaction.
3. The network structure served to elevate certain individuals into leadership positions.
4. Being in a key position in a network however also led to information overload for the leader through whom all the messages had to pass.

3.8.5 Criticisms of the Small Group Studies

One communication scholar claims that since most work in organizations is done in small groups of five or six persons, a large organization can be conceptualized as merely a collection of small groups (Mears, 1974). On the other hand it is important to remember that the network used in these experiments is a far cry from the large and complex arrangements one finds in human organizations, and the networks used in the experiments are very much simplified. Rogers and Rogers (1990) emphasize this point by saying that findings from laboratory experiments on communication networks in small groups can be applied to organizational settings only with great cau-

tion. Becker (1954) refers to the small groups research as ”cage studies”, in a biting criticism of their unreality. The experimental conditions did not reflect the real-life situations of large organizations considering they were brought into experimental settings as total strangers to perform tasks of a completely unreal nature (Rogers & Rogers, 1990). Rogers and Rogers state that the main contribution of the small group studies was that they provided information about structural effects in communication networks.

3.8.6 Network Analysis Procedures

It was natural and logical for communication scholars to drop the laboratory experiments and move from the artificial and controlled setting of the laboratory to the reality of actual organizations where real-life communication networks abound. This resulted in a change of the research setting from experimental design to network analysis in which the structural arrangements of real-life networks and cliques could be determined (Rogers and Rogers, 1990).

In the early 1950s, Jacobsen, Seashore and Weiss started using survey sociometric techniques to gather data from naval personnel about their communication behavior. Each respondent in the organization studied was asked to indicate how frequently he talked with each other member of the organization. The data were then further analyzed by using a technique arranging all of the organization’s members down one side of a matrix (the ”who”, or ”seeker” dimension), and all of the same individuals down the other side (the ”whom” or ”sought” dimension). For almost twenty years no other communication researcher took up this type of network analysis, until Schwartz (1968) and soon thereafter Mac Donald started using this technique again.

Network analysis of communication in organizations is usually carried out in order to determine how the formal and informal structures are related, and also determining the communication flow in the organization. The analysis is according to Rogers and Rogers (1990) done by:

1. Identifying cliques within the total system, and determining how these structural sub-groupings affect communication behavior in the organization.
2. Identifying certain specialized communication roles such as liaisons, bridges, and isolates.
3. Measuring various structural indexes, meaning communication, integration, conceitedness and system openness.

Rogers and Rogers further state that a common approach to network analysis of organizational communication consists of the following research steps:

1. Sociometric data about work-related (or other) interpersonal communication flows are gathered from each member in the organization, or from a subdivision or specific department in the organization. Sociometric data are most often attained by using questionnaires, observations or personal interviews.
2. Based on which individuals communicate most with each other cliques are identified. A computer program can be used to identify cliques, alternatively identification can be accomplished by visually representing the patterns of communication in a sociogram, rearranging together those individuals who interact most with each other.
3. The next step is to determine the degree to which the data correspond with the formal organization chart.
4. The last step is to assess the adequacy of the formal organizational structure from a communication point of view. For instance, the network analysis may show that the organization contains isolates where organization members do not communicate with anyone in their unit or department, nor with other parts of the organization. Moreover network analysis may uncover that cliques are not adequately linked by liaisons or bridges and that these roles may need to be created.

3.8.7 Common Problems with Network Analysis

Several difficulties are involved in communication network analysis. As Rogers and Rogers (1990) point out, one can imagine that the dynamic process of communication relationships in most organizations is so fleeting, meaning networks can not be accurately charted. Moreover, they state that sociometric data actually reflect only the main lines of communication that are most frequently and heavily used. This results in that ”the weak ties” of communication that occur in organizations, meaning the lightly used flows, seldom are reported by respondents in organizational research, and hence are rarely analyzed in network studies (Rogers & Rogers, 1990). Also Granovetter (1973) argues that this problem is especially serious because these ”weak ties” are different in nature from the ”strong ties” meaning the regularized communication patterns that are usually reported by respondents and investigated in network. Moreover Granovetter (1973) states that the ”strong ties” are more likely to be informationally rich.

Another difficulty with communication networks is the immensity of the task. Lindsey (1974) points to the fact that in a system of 100 members, each of the 100 individuals can talk to 99 others so that 9900 communication relationships are possible. However, Rogers and Rogers (1990) suggest that a solution to this problem is to break the total communication system down into subsystems or cliques. By using this technique, the complexity of interpersonal communication will be made more manageable.

A further problem is that there is more than one set of communication networks. A given individual may have different sets of communication partners depending on which topic is being communicated, and some of them may also be overlapping. Berlo (1971) for example found different communication networks for the members of a federal government agency when the sociometric questions dealt with work-related matters, with innovations, and with maintenance.

3.8.8 Why Is It Important to Study Communication Networks in Organizations?

An important rationale for studying communication networks has evolved out of the inconclusive findings relating formal organizational structure to organizational behavior. The ambiguous and inconclusive findings are also quite obvious when looking at the findings from studies referred to previously in this article. Recently, a series of meta-analytic studies have concluded that the relationship between formal structure, organizational effectiveness (Doty, Glick & Huber, 1993; Miller & Glick, 1990), and technology (Miller, Glick, Wang, & Huber, 1991) are to great extent an artifact of methodological designs. The fact that formal structure variables have failed to provide much explanatory power has led scholars to argue that emergent structures are more important to study than formal structures because they better contribute to our understanding of organizational behavior (Roberts & O'Reilly, 1978; Bacharach & Lawler, 1980; Krackhardt & Hanson, 1993).

4 Context

The second part of the paper will focus on the *contex*t of organizations, and how it may determinate communication.

4.1 Defining Organizational Context

Context differs from structure in that it serves as the backdrop rather than the building blocks of organizational life. Context is the framework that embeds behavioral and structural aspects of organizations (Jablin, Putnam, Roberts & Porter, 1987). Early research on organizational communication centered almost exclusively on organization structure as the determinant of communication processes. However, organizational theorists realized that organizations can not be studied without reference to the relationship between organizations and their environment. Environment can be defined as a macro level construct that shapes and is shaped by the processes and structures within and between organizations (Jablin et al., 1987).

It is often distinguished between external and internal environments, and they may both be important for organizational communication. However, it will here primarily be focused on elaborating internal environment, more specifically organizational climate. The reason for this is that climate has been referred to as one of the richest concepts in organizational theory generally, and organizational communication specifically (Falcione, Sussman & Herden, 1987). When characterizing a concept as rich is suggesting at least three conclusions: The concept has received considerable attention in both theoretical and empirical literature. Second, the construct appears to have protean proportions, meaning the process of studying it introduces new things to be discovered. Finally, the concept has far reaching explanatory powers (Falcione et al., 1987). Considering superior-subordinate communication is an important determinant of climate, also this concept will be elaborated. Superior-subordinate communication is often in the literature related to organizational structure. However, considering its close relation to the concept of climate which most certainly is a context variable, it seems natural to elaborate superior-subordinate communication in the following section.

4.1.1 Definitions and Research Approaches to Organizational Climate

The climate construct has received considerable attention over the last 30 years, and much effort has been made to isolate, explain and determine the construct's place in organizational theory. Consequently, numerous definitions are suggested in the literature.

Poole & McPhee (1983: 196) offer the following definition: "Organizational climate represents members generalized beliefs and attitudes about the organization". Extensive literature reviews (Hellriegel & Slocum, 1974; James & Jones, 1974) distinguish three approaches that define and measure organizational climate*; the multiple measurement-organizational attribute approach, the perceptual measurement-organizational attribute approach,* and the *perceptual measurement-individual approach.* The first approach; *the multiple measurement-organizational attribute approach* treats climate as an attribute or set of attributes, belonging to an organization. These attributes are viewed as being possessed by the organization itself, independent of the perceptions made by individual members, suggesting that organizations have some type of personality. Taquiri's (1968) definition reflects this approach:

> *"Climate is the relative enduring quality of the total environment that (a) is experienced by occupants (b) influences their behavior (c) can be described in terms of the values of a particular set of characteristics (or attributes) of the environment"* (p. 25).

As can be seen from this definition Taquiri (1968) defines organizational climate as being a property of the organization. The underlying assumptions of the "perceptual measurement-organizational attribute approach are that (1) organizations exist and persist despite fluctuations in membership; (2) organizations develop a set of characteristics that may be specified; (3) these specified characteristics are relatively enduring over time; (4) the specification of these organizational characteristics may be accomplished objectively, meaning that the quality or value of these characteristics may be found independent of individual members' perceptions of the organizations, and finally (5) consensus across observers as to the characteristics and climate of the organization would be expected to be obtained (Falcione et al., 1987). Several studies support the validity of this approach. Findings reveal that climate score variance tends to be greater across rather than within organizations, suggesting that climate is an organizational element (Paolillo, 1982; Zohar, 1980). However, the approach has been criticized for carrying a broad definition including organizational context, organizational structure, organizational values and norms, and organizational and subgroup processes including leadership, conflict, reward, communication and control. Considering the

generality of this definition it can be operationalized in so many ways that comparison between studies would be difficult. Taylor and Bowers (1972) meet this criticism by trying to define climate by specific dimensions. Based on this assumption they offer six such dimensions which are described by Pace (1983) as *(a) human resource primacy* – the extent to which the organization considers its employees to be a valuable resource within the organization; (b) *communication flow* – the extent to which information flows effectively upward, downward and laterally in the organization; (c) *motivational practices* – the degree to which the work conditions and relationships in the environment are generally encouraging or discouraging in accomplishing tasks; (d) *decision-making practices* – the manner in which decisions are made, whether they are made effectively at the right levels, and based on available information; (e) *technological readiness* – the degree to which members consider the materials, procedures, and equipment to be up-to-date and well maintained; and finally, (f) *lower-level influence* – the extent to which employees feel that they have some influence over what happens in their departments.

The second approach; *the perceptual measurement-organizational attribute approach* (James & Jones, 1974) treats climate as an interaction of an organization's characteristics, and the individual's perception of those characteristics, and moreover attempts to measure organizational climate through the measurement of perceptual data. Similar to the previously mentioned approach, organizational climate is also here seen as a property of the organization itself, and when approaching climate from this perspective researchers again assume that organizations have relatively enduring characteristics. However, in contrast to the first approach, climate is here seen as a *perceptual measure.* The underlying assumptions of this second approach are: (1) climate is considered a perceptual variable, dependent on self-report measures from members of the organization, (2) perceptions of climate are descriptive, rather than evaluative; and (3) reports of individual members are expected to show a great amount of congruence (Falcione et al., 1987). Conclusively, this approach assumes that climate constitutes a consensual perception among organization members of an organization's characteristics. Moreover, the issue of consensus is crucial when using this latter approach in measuring organizational climate, considering organizational climate is defined as an organizational attribute. Additionally, the issue of consensus among respondents relates also to consensus among subgroups in the organization. However, there is considerable evidence that subgroups within an organization may differ in their perceptions of climate (Gorman & Malloy, 1972; Payne & Mansfield, 1973; Pritchard & Karasick, 1973). Concern over these subgroup differences has caused Johnston (1976) to argue for a defini-

tion of climate based on consensual perceptions of the organizations by subgroups. Another criticism of this approach is that it lacks specificity regarding what exactly is to be measured.

James and Jones' third approach, *the perceptual measurement-individual attribute approach*, is conceptualized as an intervening variable, and this approach is intended to express the relationship between individual and situational factors. The major difference between this approach and the previous ones mentioned is that organizational climate is defined as an individual attribute rather than an organizational attribute. This is essentially an individual, psychological approach to organizational climate. The approach considers what is psychologically important to the individual based on how he or she perceives the work environment. Climate from this perspective then is *the individuals' summary perceptions of his or her encounters with the organization.*

Dillard, Wigand and Boster (1986) support this approach defining organizational climate as:

> *"those attributes of an organization which affect the affective dimension of the relationship between the individual and the organization as perceived by the individual. Those attributes are likely to be perceived by the individual as the degree of concern expressed by the organization for the welfare of the individual"* (p. 84).

Dillard et al. claim that organizational climate can not be measured objectively by the examination of things such as fringe benefits, working conditions and pensions. It is rather the employee's *perception* of these factors that is important. The question may be asked whether employee's perceptions can be measured? Definitionally it would appear that as many climates may exist as do individuals. However, Dillard et al. claims this not to be the case. For example Campell and Beatty (1971) found that a significant portion of climate variance could be attributed to differences in subunits, suggesting that individuals check their perceptions of climate against the perceptions of those around them. Festinger's (1954) research on social comparison also supports this point. Festinger reports that we as individuals turn to others to obtain information about our abilities and our perceptions. Dillard et al. emphasizes that the level of abstraction at which climate perceptions are to be measured is a macro one rather than a micro. This requires that the individual, when answering the questions forms a composite image of a global entity. Research done by Reich, Ferguson and Weinberger (1977) offered evidence of the existence of such a process.

Attempts have been made to distinguish the approach presented above from the first two by differentiating between "organizational climate" and "psychological climate" (James & Jones, 1974). Additionally, a number of researchers focus on "subsystem", "subunit", or group climate as the unit of analysis (Hellriegel & Slocum, 1974; Howe, 1977; Powell & Butterfield, 1978). The subsystems perspective argues that perceptions are influenced by experiences one has with the immediate environment. It would therefore be inappropriate to assess the global perceptions of an entire organization from employees who interact within a limited subsystem environment. Powell and Butterfield (1978, p. 155) conclude:

1. *Climate is a property of subsystems in organizations. Subsystems may consist of organizational members taken individually, in groups formed on any basis, or as a whole.*

2. *As a conceptual construct, climate exists independently for separate subsystems. In fact, the relationship may, but do not necessarily, exist between climate for separate subsystems.*

To sum up, when studying organizational climate it is necessary to consider the appropriate theory. Although the three approaches referred to here are related to some degree, they differ empirically, meaning that the theory chosen must correspond with the unit of analysis. Recognizing the importance of the appropriate unit of theory and analysis should be a major consideration in all future climate research, meaning studies should clearly articulate the level(s) of climate being investigated (Falcione et al., 1987).

4.1.2 Measuring Organizational Climate

Climate has in numerous studies tended to overlap with many other variables that may or may not be unique to climate domain such as leadership characteristics (Payne & Maynsfield, 1973), managerial activity (Schneider, Parkington & Buxton, 1980), satisfaction (Schneider & Snyder, 1975), as well as communication dimensions such as information flow (Drexler, 1977); and superior-subordinate communication (Bass, Valenzi, Farrow & Solomon, 1975). Based on these inconclusive findings of what climate actually is, it would, according to Falcione et al., seem appropriate to view climate as an intersubjective construct in which there are multiple subsystem climates.

Perceptual measures have been used predominantly to measure the climate construct in organizations. As stated earlier, psychological climate consists of individual perceptions of the organization, and organizational climate consists of the overall properties of the organization that are meaningful to

its members. If an investigator wished to measure psychological climate, the individuals' perceptions of the organization would be collected. If organizational climate were to be measured however, the investigator would check for a high degree of consensus across individuals' scores. This would suggest that there was indeed an organizational property being measured (Falcione et al., 1987).

Hellriegel and Slocum (1974) found a fair amount of diversity among organizational climate instruments in their review. While some instruments have fairly narrow perspectives (Halphin, 1967), others are more encompassing (House & Rizzo, 1972; Taquiri, 1968; Jones & James, 1979). Campell et al. (1970) considered some commonalties across the instruments and suggested four major climate dimensions: (1) individual autonomy (2) degree of structure imposed on the position, (3) reward orientation, and (4) consideration.

4.1.3 Criticism of Organizational Climate Measures

Organizational climate measures have been exposed to criticism for its overlap with organizational property such as structure, technology, and so on (James & Jones, 1974). Additionally, psychological climate has been criticized for its conceptual similarity with satisfaction (Guion, 1973). Another criticism of organizational climate instruments is that there appears to be an overemphasis on people-oriented scales (Hellriegel & Slocum, 1974), and there are a number of dimensions that appear to be directly related to communication in particular.

4.1.4 Communication Climate

As mentioned previously, organizational climate has been referred to as one of the richest concepts in organizational communication specifically. One important question to answer would be of course *how the two concepts **organizational climate** and **organizational communication** are related?* Recently, several researchers have undertaken an examination of what has been called *communication climate*. Findings reveal that communication climate is a subset of organizational climate (Pace, 1983), "some perceptions directly involve the climate in which communicating occurs. This is called the communication climate" (Pace, 1983: 126). Poole (1985) also argues that communication climate is a distinct practice, expected to represent its own climate-communication climate – separate and apart from other climates in the organization as environment, such as motivational climate, achievement climate and so on. A study by Welsch and La Van (1981) supports the notion of communication climate being separate and apart from organizational cli-

mate. They found five organizational climate variables; communication, decision making, leadership motivation and goal setting to be related positively and significantly to ”organizational commitment”. The relationship between the communication variables however, was stronger than other climate variables, accounting for 38 % of the variance in commitment. However, it is important to note that although communication climate is conceptualized apart from organizational climate ”it appears that much of research on communication climate shares considerable variance with organizational climate” (Falcione, Sussman, & Herden, 1987).

Conclusively, the communication climate, representing the concept of organizational communication, is a subset of organizational climate.

4.1.5 Measuring Communication Climate

The notion of an “ideal communication climate” was postulated by Redding (1972). The dimensions Redding claimed to be of importance were: (1) participative decision making (2) supportiveness (3) trust, confidence and credibility (4) openness and candor; and (5) high performance goals. Based on Redding’s dimensions, Dennis (1975) developed an organizational communication climate instrument consisting of five dimensions: *(1) superior-subordinate communication;* more specifically this dimension is related to whether the employee perceives the leader as open and supportive; *(2) quality of information;* whether the subordinate perceives information received as accurate and to hold quality, *(3) superior openness;* supervisors perception of communication relationships with subordinates, especially the affective aspects of these relationships such as perceived openness and empathy (4) *opportunities for upward communication;* how subordinates perceive upward communication opportunities and perceived upward directed influence *(5) reliability of information,* perceived reliability of information from subordinates and colleagues. According to Dillard et al. (1986) the first factor, superior-subordinate communication, is worthy of considerable attention. This is the degree to how superiors, as a group, are perceived by subordinates as being receptive to messages which are initiated by subordinates and directed upward. There is a substantial body of literature dealing with effects of openness in communication relationships. One of the foremost researchers in this area was Jourard (1971) who suggested that ”the tendency toward openness is probably one of the best indicants of healthy personality” (Jourard, 1964 p. 179). Jourard’s work however was performed solely with regard to dyadic relationships. Since upward openness is an aspect of communication climate, this requires the overall evaluation of a number of real and potential relationships within the organizational setting. Dillard et al. (1986) suggest that in order to transform Jourard’s theory to organizations,

openness should be viewed as a variable similar to openness in the two-person- relationship, but conceived and measured at a more abstract level, i.e., macro rather than micro.

Schuler (1979) claims that communication is a process that is transactional, and that its relationship to other organizational variables may be characterized by reciprocal causality. From this statement we understand that communication is a difficult variable to measure, and according to Robert and O'Reilly (1974) one of the most difficult. This is because communication is a process rather than a static variable. Roberts and O'Reilly concluded that observation of communicative behavior is almost impossible to make, and self-report forms are usually phrased in such a way that they take snapshots of process variables. To solve this problem, Roberts and O'Reilly (1974) expanded on research conducted by Read (1962) and developed a climate type measure of organizational communication. It consists of 35 items designed to measure 16 facets of communication: trust, influence, mobility, desire for interaction, directionality-upward, directionality-downward, directionality-lateral, accuracy, summarization, gatekeeping, overload, satisfaction, modality-written, modality-face-to-face, modality-telephone, and modality-other. The goal of this measurement device was to allow respondents to summarize their behavior over time. Aggregation of individual responses should minimize many of the inherent individual response errors. Communication purpose, content, importance and speed were considered in Roberts and O'Reilly's initial instrument development, but were later discarded because of the difficulty respondents had answering items relevant to them. By *communication content* means what is being said. (Penley & Hawkins, 1985). However, Muchinsky (1977) raised critic against the exclusion of these variables and still claims that there is a need to develop instruments that are able to also measure the content and the purpose of communication. Alexander and Penley (1981) also emphasize the importance of measuring communication content: "*Focusing on purpose or content of communication makes the instrumental role of communication in organizations clearer*" (in Penley & Hawkins, 1985, p. 311). Several writers have suggested categorization systems for the content of communication within organizations. Most of these systems use the function of the communication as the basis for categorizing a message. For example Redding's three classifications, as mentioned previously, were task, maintenance and human, whereas Berlo (1960) used categories that he called production, innovation and maintenance. More recently, Greenbaum (1974) identified four major communication networks; regulative, innovative, maintenance and informative, where regulative messages include policy, statements, procedures and rules; innovative messages include performance-feedback such as praise from a supervisor, and infor-

mative messages seek to enhance productivity through providing subordinates with information about how to carry out their jobs. Penley and Hawkins (1985) conducted a study where they used Redding's and Greenbaum's categorization system as a starting point, and based on these categorization systems they identified five dimensions of communication content: (1) *Task communication*, included four items that measured the extent to which supervisors let subordinates know what is needed to be done (e.g., "My supervisor lets us know about changes that are coming up."), (2) *Performance communication*, included three items that measured the extent to which supervisors communicated information about the quality of subordinates' work or how well they were doing (e.g. "My supervisor lets me know which areas of my performance are weak."), (3) *Career communication*, included five items that measured the extent to which supervisors discussed training opportunities with subordinates and provided them with career advice (e.g. My supervisor discusses with me how to get additional training). Gould og Penley (1984) have found a relationship between career communication and progression in salary. It also seems clear that interpersonal communication between leader and employee focusing on career progression stimulates both to development and adaption. Conclusively, career communication is something leaders can use actively in order to encourage to innovation among employees (Penley & Hawkins, 1985). (4) *Communication responsiveness* included four items that measured the extent to which supervisors listened to subordinates and responded to issues raised by them (e.g." When I ask a question my supervisor does his/her best to get me an answer."). These items represent the human category identified by Redding (1972). (5) Personal communication, the final scale included three items that measured the extent to which supervisors and subordinates discussed personal issues such as family and non-work related interests (e.g. "My supervisor asks about my interest outside work.") These items represent according to Penley and Hawkins (1985) what Greenbaum (1974) described as maintenance or integrative messages. These five categories have been correlated with Roberts and O'Reilly's communication scale referred to previously, and it was found that correlations were strongest between the five categories and "trust" and "influence" in Roberts and O'Reilly's communication scale.

Another measure developed by Downs, Hazen, Quiggens and Medley (1973) purports to measure "communication satisfaction", which is defined as individuals' satisfaction with informational and relational communication within the organization. Specifically, the instrument measures employee satisfaction with: (1) communication climate (2) supervisor communication (3) organizational integration (4) media quality (5) horizontal and informal communication (6) organizational perspective (7) subordinate communication, and (8)

personal feedback. Downs (1979) found that the communication climate, personal feedback, and supervisor communication dimensions showed consistently high correlations with satisfaction across six organizations.

The ICA Communication Audit project developed by members of the International Communication Association represents a major effort to measure the communication climate of an organization. The process used multiple measures including in-depth interviews, questionnaires, network-analysis, critical incidents and diaries. Specifically, the dimensions measured in the survey instrument were information receiving, information sending, communication sources, communication channels, communication follow-up, timeliness, accuracy and usefulness of information, communication relationships, and communication outcomes.

To sum up, communication climate has been tried measured in numerous ways. On the other hand, the different measures have several commonalities, and it is interesting to note that especially superior-subordinate communication is an item that appears in nearly all measures. Apparently, leaders' ways of communicating is an important determinant of communication climate, and of communication in general. Considering the importance of leadership related to organizational communication, its impact on communication will be further elaborated in the following section. Before reviewing some studies that have been conducted on this field, Gibbs' theory related to leadership and communication climate will be presented.

4.1.6 Superior-Subordinate Communication – The Two Poles in the Communication Climate

Gibbs (1961) emphasizes the importance of leader's attitudes and behavior for the communication climate in organizations. He identifies two poles in the climate of communication defined as the supportive and the defensive. The supportive climate encourages the subordinate, whereas the defensive climate puts the individual on guard, reacting defensively to the words and tone of the speaker. In order to make his theory more understandable, Gibbs identifies six dichotomies that affect the communication climate. These six dichotomies illustrate how a manager's approach to a situation may result in the subordinates reacting defensively. An explanation to these reactions could be that traditional management principles tend to produce defensive rather than supportive climates. Conclusively, many persons who assume managerial roles may also unintentionally adopt counterproductive communication patterns. Gibbs' (1961) six dichotomies are:

- Superiority/Equality

The communication attitude in this case will be: "I am the boss. Do it or else". A subordinate who experiences this specific attitude will be reluctant to approach the supervisor with a problem. A supervisor may cover feelings of inadequacy by remarks like: "Haven't you figured out that yet?" Remarks like this put the employees "in their place" even if they know more than their supervisor. The opposite pole will be the boss rather indicating mutual concerns and an intention to work together toward solving the dilemma by remarking: "Looks like we have a problem here."

- Evaluation/Description

Evaluation sets up defenses by passing judgement and blaming, or by questioning standards, values and motives. Employees are often reluctant to approach the supervisor for fear of making a bad impression. As a result of this the subordinate will send up the chain only information that makes him or her look good. The "filtering phenomenon" is used to describe this phenomenon.

When approached with a problem, supervisors may react instinctively with their own perceptions, often without understanding the context of the specific project an employee is working on. For example the supervisor may say; "I'm sure this project is behind schedule. When are you going to get caught up?" It would however be better to ask: "What is the status of this project?" If the question however is asked in an accusing tone, the climate is still defensive regardless of what words are used. In most organizations evaluation is part of managerial analyses. This necessary function of managerial operation when taken into communication situations can however produce unintended defensive reactions.

- Strategy/Spontaneity

Strategy involves a speaker's attempt to appear open, despite the fact that there actually is a hidden agenda. In situations like this the listeners will hear leading questions and wonder what the final objective is. Considering everyone resents being manipulated situations like this places the listener on the defensive. An example is an organization with a flex-time policy, and the supervisor asks: "Don't you think 9 o'clock is a little late to start work tomorrow?" This specific question is both leading and manipulating considering it leaves no room for answering *yes* or *no*. The leader would on the other hand create openness by acknowledging an agenda like: "I'd like you to come to work at 8 tomorrow so that we can work on this budget. Do you think you can make it?" Such a request is honest, and it avoids game play-

ing. It is important that the manager takes a person orientation rather than a machine orientation. This is because a machine orientation rather than a personal approach can result in a defensive climate.

- Control/Problem Orientation

A climate of control involves a supervisor trying to influence a subordinate, attempting to change an attitude or behavior. In this kind of climate the supervisor approaches the employee by asking: "Why haven't you tried this method?" This question is formed as an accusation, and most naturally it will create a defensive climate. A climate of control implies that the supervisor's view is the only valid one. Another example is the supervisor proposing a solution before asking for alternatives. The tone of voice and overall attitude have however communicated that the employees should implement the solution that the supervisor already has proposed. In a supportive atmosphere the supervisor would say: "There seems to be a problem here, what can we do in this case?" This attitude of openness will create a cooperative atmosphere, and friction, accusation and resentment will be prevented. Moreover this attitude will also offer the employee a sense of satisfaction as they contribute to completing the task. Conclusively, control seems a major obstacle to a supportive communication climate.

- Certainty/provisionalism

Certainty appears in the dogmatic "need-to-be right" supervisor. Attitudes of certainty prevent the employees from raising an issue with the supervisor and the feeling that "they never listen to us anyway" is created. In today's society there are rapid changes, and it is therefore unhealthy for a climate to convey the attitude, "We've always done it this way". A provisional manager is willing to adapt, experiment with alternatives, and try new behavior patterns. Instead of holding on to old behavioral patterns the manager would be willing to say: "Could we try this idea to see if it helps?" The tone of voice however must indicate a sincere provisionalism instead of an attitude of: "But we'll end up doing it the traditional way anyway."

- Neutrality/Empathy

Neutrality reflects unconcern for the individuality of the subordinate. A good example is the supervisor who has a "hurry-up-state-your-problem-attitude". The opposite of a neutral attitude is an attitude reflecting empathy. In practical terms empathy means the supervisor takes time to listen to the employee. A published open door policy is often meaningless because the supervisor does not take the time to be available or to demonstrate a true concern.

4.1.7 Foci of Research on Superior-Subordinate Communication

Jablin (1979, 1985) identified 10 areas of considerable research activity in superior-subordinate communication. They are: (1) interaction patterns and related attitudes, (2) openness in communication, (3) upward distortion, (4) upward influence, (5) semantic-information distance, (6) effective versus ineffective superiors, (7) personal characteristics, (8) feedback, (9) conflict and (10) systemic variables. It will here be provided a brief orientation to each of these areas, by summarizing conclusions drawn in previous literature reviews.

4.1.8 Interaction Patterns and Related Attitudes

> *"Probably one of the most consistent findings in superior-subordinate communication research is that supervisors spend from one-third to two-thirds of their time communicating with subordinates"* (Jablin, 1985, p. 625).

In addition research has shown that most supervisory communication is verbal and occurs in face-to-face contexts (Luthans & Larsen, 1986; Whitely, 1984, 1985). Moreover, findings suggest that (1) about one-third of managerial communication is consumed in "routine" communication (writing and reading reports, receiving and sending requested information, answering procedural questions, (2) with the exception of contacts with subordinates managers often communicate more with persons external to their organizations than with others in their organizations (Luthans & Larsen, 1986); (3) interactions with persons external to the organizations and with supervisors are viewed as most challenging and important to managers, while contacts with subordinates are viewed as least important and challenging (Whitley, 1984); and (4) the social context of superior-subordinate communication can directly affect interaction and message exchange patterns (Tjosvold, 1985).

4.1.9 Openness in Superior-Subordinate Communication

Openness in superior-subordinate communication can be defined as;

> *"In an open communication relationship between superior and subordinate, both parties perceive the other interactant as a willing and receptive listener and refrain from responses that might be perceived as providing negative relational or disconfirming feedback"* (Jablin, 1979, p. 1204).

Other investigators further report that subordinates' perceptions of openness are positively related to their job-satisfaction and in particular their satisfaction with supervision. Wheeless, Wheeless and Howard (1984) and Pincus (1986) suggested that subordinates' perceptions of the superiors' openness in

message receiving are also a powerful predictor of workers job satisfaction. In a laboratory study Tjosvold (1984) also reported that subordinates' perceptions of openness were related to nonverbal warmth of superiors (communicated through eye gaze, posture, facial expression, and voice tone).

4.1.10 Upward Distortion

The propensity of persons of lower hierarchical rank to distort messages transmitted to persons in higher organizational levels, have been frequently noted in the literature (Dansereau & Markham, 1987). Of the various studies in this area, one of the more frequently reported results is that subordinates are often hesitant to communicate upward information that is unfavorable or negative to themselves. Fulk and Mani (1986) examined the degree to which the supervisor's downward communication affects the accuracy and frequency of the subordinate's upward communication distortion. They suggest a reciprocal relationship between superiors' and subordinates' communication behaviors such that "subordinates reported withholding information and generally distorting information sent upward when their supervisors were seen as actively withholding information" (503).

4.1.11 Upward Influence

Generally speaking, studies of upward influence in superior-subordinate communication have concentrated on exploring variations of the "Pelz Effect" (Pelz, 1952). In brief, the Pelz Effect suggests that "subordinates" satisfaction with supervision is a by-product not only of an open supportive relationship between the two parties, but also of the supervisor's ability to satisfy subordinates' needs by possessing influence with those higher in the organization hierarchy" (Jablin, 1985). Overall, most research has been interpreted as supportive of the Pelz Effect. Any major moderators of this effect have not been uncovered. Trempe, Rigny and Haccoun (1985) recently examined the notion that the supervisors gender might moderate the Pelz Effect. However, testing this hypothesis among French-speaking Canadian blue-collar workers, they did not find any sex differences.

In addition to the investigation of the Pelz Effect, a considerable amount of interest has also been given exploring the dynamics of political activity in organizations, more specifically the communication strategies that subordinates use in their attempt to influence their superiors. However, the reports are somewhat inconsistent, with some investigators suggesting that most subordinates most commonly use covert message tactics, and other investigators indicating that logical /rational presentation of ideas is most fre-

quently employed. Jablin (1985) after having reviewed this literature concluded;

> *"A subordinate's selection and use of a message strategy in an influence attempt appears dependent on a wide array of situational factors (such as decision type, organizational climate and structure, and perceived power of the target"* (p. 628)

4.1.12 Semantic-Information Distance

The term *semantic-information distance* describes the gap in information and understanding that exists between superiors and subordinates on specified issues (Jablin, 1979, p. 1207). Research exploring this phenomenon suggest that superiors and subordinates frequently have large gaps in understanding on even such simple topics as subordinates basic job duties (Jablin, 1979) and the degree to which subordinates participate in decision-making (Harrison, 1985). A number of investigations have also emphasized differences in meta-perceptions (one's views of the other persons perspective, (e.g. Phillipson & Lee, 1966). The meta-perceptions literature suggests that superiors and subordinates differ not only in their direct perspectives of issues, but also very often in their meta-perspectives (Smircich & Chesser, 1981). Eisenberg, Monge and Farace (1984) extended upon the notion of meta-perspectives, and explored superiors' and subordinates' perceptions of the communication rules that guide their interaction. They suggest that the more a subordinate or supervisor perceives agreement between his or her own attitudes and his or her predictions about the others' attitudes, the higher their evaluation of the other party. Further they state; "The accurate perception of a subordinate's view of these rules by a supervisor is positively associated with performance evaluation (Eisenberg et al., 1984: 267).

4.1.13 Effective versus Ineffective Superiors

The identification of effective as compared to ineffective communication behaviors of superiors has received more investigation than any other area of organizational communication (Jablin, 1979 p. 629). However, we are still unable to state whether or not there is an ideal set of communication characteristics associated with "effective" supervisors (Dansereau & Markham, 1987). Some researchers claim that there is a considerable amount of evidence suggesting that effective leader communication is dependent on numerous situational factors as task type, gender and work-unit size. It has also been suggested that superiors do not develop the same types of exchange patterns with all of their subordinates, but rather develop communication relationship that may vary from one superior-subordinate dyad to another (average leadership style versus vertical dyad linkage model) (Dansereau,

Graen & Haga, 1975). Still, some researchers point to a common communication style across effective leaders. In particular; "good" supervisors are considered to be: (1) communication minded, meaning they enjoy communicating, (2) approachable, open willing and empathic listeners, (3) oriented toward asking or persuading in contrast to demanding or telling, (4) sensitive to the needs and feelings of subordinates, and (5) open in communicating information to subordinates and willing to explain why policies and regulations are being enacted (Redding, 1972, p. 443).

The somewhat contradictory perspectives above have not been resolved. For example Manz and Sims (1984) reported that effective unleaders, meaning coordinators of self-managed groups, displayed distinctive types of communication behaviors, more specifically encouraging open discussion of problems, and acting as a communication link with other groups. On the other hand Komaki (1986) reported in an observational study of effective supervision that effective managers conducted essentially the same activities as the marginal managers. They spent approximately the same amount of time interacting, discussing the work, talking about performance related matters, delivering performance antecedents and providing positive, negative and neutral performance consequences.

4.1.14 Personal Characteristics

Numerous personal characteristics of superiors and subordinates have been suggested as affecting the character of their communication relationships. Consistent with this tradition of research, studies have focused particular attention on how interactants' gender affects their communication behavior and attitudes (for a complete review, see Fairhurst, 1986). Along these lines, Steckler and Rosenthal (1985) examined potential sex differences in the nonverbal and verbal communication of workers with their bosses, peers and subordinates. In their laboratory experiment, Steckler and Rosenthal suggested that "females voices were rated as sounding more competent verbally and non-verbally when they were speaking to their peers" (157). On the other hand, in a study exploring perceptions of female managers and their communication competencies, Wheeless and Berryman-Fink (1985) suggested that regardless of respondents' experience in working for a female manager, women perceive female managers as more competent communicators than do males. Studies have also explored relationships between a number of superiors' and subordinates communication-related characteristics and subordinates' levels of job satisfaction. Infante and Gordon (1985) examined the hypothesis of subordinates' satisfaction with supervision being positively related to the degree to which they perceive their superiors as high in argumentativeness (meaning the tendency to advocate positions on issues

and to refute the positions others take) and low on verbal aggressiveness (meaning the tendency to attack the others self-concept). Johnson, Luthans and Hennessey (1984) further reported that "internal" supervisors (meaning high degree of locus of control) tend to use persuasion more with subordinates than external leaders, and that supervisor persuasiveness is positively related to subordinate satisfaction with supervision.

4.1.15 Feedback

The two major conclusions that Jablin (1979) proposed in his review are still of interest today: (1) feedback from superiors to subordinates appears related to subordinate performance and satisfaction, and (2) a subordinate's performance to a large extent controls the nature of his/her superior's feedback (Jablin, 1979, p. 1214). Research has also suggested that: (1) subordinates receiving feedback from sources high versus low in credibility judge the feedback as more accurate, the source as more perceptive, tend to express greater satisfaction with the feedback, and are more likely to use the performance suggestions offered in the feedback (Bannister, 1986; Earley, 1986); (2) supervisors may often be reluctant to give subordinates negative performance feedback, and this reluctance can affect both the content and frequency of the feedback they give (Larson, 1986, p. 405); (3) supervisors with limited authority and informal influence in decision making do not often use confrontative tactics (oral warnings) in disciplining subordinates (Beyer & Trice, 1984); (4) positive supervisory feedback to new employees is negatively related to their turnover (Parson, Herlod & Leatherwood, 1985); (5) supervisors tend to exhibit positive verbal reward behaviors more frequently in response to high performers, as opposed to goal-setting, punitive and task information behaviors in response to low performers (Sims & Manz, 1984); managers tend to probe for the causes of failure among poor performers by asking attribution-seeking ("why") questions, while they tend to ask high performers "what-do-you think" or "how" questions (Gioia & Sims, 1986).

Recent research done by Latham and Locke (1991) suggests that in the absence of goal setting feedback have no necessary relationship to performance. In the absence of feedback goal setting is less effective. Locke and Latham (1990) reviewed 33 studies that compared the effects of goals plus feedback versus either goals or feedback alone. The vast majority supported the combined hypothesis.

4.1.16 Conflict

The study of the role of communication in superior-subordinate conflict has been a popular theme to study. Some investigators suggest that several factors may moderate the manner in which supervisors may manage conflict with subordinates (for example supervisor's organizational level, self-confidence). Other investigations suggest that supervisors may favor the use of "forcing" or "confronting" strategies in managing conflicts with subordinates (Dansereau & Markham, 1987). At the same time, still other investigators suggest that the particular communication strategies utilized by superiors and subordinates in conflicts are to some degree reciprocally related to the behaviors exhibited of the other party (Goering, Rudick & Faulkner, 1986). Finally, Gerloff and Quick (1984) reported that subordinates in "high distortion" relationships with their superiors (low agreement on feedback issues) show significantly higher levels of role conflict with their superiors than persons in "low distortion" relationships.

4.2 Summary

As we can conclude from the studies listed above, several determinants of superior-subordinate communication have been suggested. Jablin (1979) noted in his review that three items seem to be consistently studied with respect to the nature of superior-subordinate interaction: Power and status, trust and semantic information distance .The following presentation supports this statement although it also seems apparent that the investigations presented have also focused on examining the behavioral and cognitive characteristics of communication in the upward influence and feedback processes.

In the last 20 years, considerable progress has been made in addressing leader effectiveness according to one theoretical perspective called transformational leadership (also known as charismatic leadership). As noted by Bass (1990, p. 23) "most experimental research, unfortunately, has focused on transactional leadership, whereas the real movers and shakers of the world are transformational". Moreover, communication and language have always been a concern of the charisma and vision literature (Awamleh & Gardner, 1999; Bass, 1988; Conger, 1991; Gardner & Avolio, 1998). Considering the importance of charisma for effective leadership, the following section will report recent research that has tested Bass' model of transformational leadership and its relation to organizational communication. Before approaches to research on this field will be presented, it will be necessary to give a brief introduction to the theory of transformational leadership.

4.3 Defining Charismatic (Transformational) Leadership

Before referring to the recent studies that have been done on charismatic leaders and their communication style, it would be necessary to define what a charismatic leader actually is. Charismatic leadership is often referred to in theory as transformational leadership. James MacGregor Burns in his book *Leadership* (1978) was the first to identify two kinds of political leadership: Transactional and transformational. Burns considered transformational and transactional leadership to be polar opposites, and when giving an account for transformational leadership, it is therefore also necessary to touch on transactional leadership. Transactional leadership occurs when one person takes the initiative in making contact with others for the purpose of an exchange of something valued; that is: "leaders approach followers with an eye toward exchanging" (4). Transformational leadership however is based on more then the compliance of followers. It involves shifts in the beliefs, needs and the values of followers. According to Burns (1978) transformational leaders obtain support by inspiring followers to identify with a vision that reaches beyond their immediate self-interest. Bass (1985) applied Burns' (1978) ideas to organizational management (in Kuhnert & Lewis, 1987), and discovered four dimensions that were related to transformational leadership. These dimensions were discovered through interviews with subordinates who were asked to describe leaders that caused them to perform beyond expectations. The four dimensions were (1) *Idealized influence/charisma* – can be defined as serving a charismatic role model to followers, and this dimension is therefore often simply referred to as charisma (Judge & Bono, 2000). (2) *Inspirational motivation* – involves articulation of a clear and inspiring vision to followers (3) Intellectual stimulation – is defined by Bass (1985as:

> *"By the transformational leader's intellectual stimulation, we mean the arousal and change in followers of problem awareness and problem solving, of thought and imagination, and of beliefs and values."* (p. 99)

Intellectual stimulation is displayed when the leader helps followers to become more innovative and creative (Bass, 1998). The last dimension – (4) *Individual consideration* is displayed when leaders pay attention to the developmental needs of followers, in addition to supporting and coaching their development (Bass, 1999).

4.3.1 Research Approaches to Charismatic Communication

There are several categories containing studies of charismatic leaders. The first category contains case studies of charismatic leaders (e.g. Conger, 1989, 1991; Seeger, 1994; Wendt & Fairhurst, 1994). This body of work is more suggestive than definitive in its approach to charismatic communication in

business settings. It focuses heavily on charismatic political leaders, their style and vision in public communication settings, and the largely unacknowledged role that the media play in enhancing a charismatic persona (Fairhurst, 2001).

The second category consists of more traditional social scientific research on charismatic communication focusing on influence tactics and the outcomes associated with the delivery aspects of a charismatic style. This research emphasizes the individual, cognitive outcomes, and a transmission view of communication. In two studies of informal emergent leaders championing technological innovations Howell and Higgins (1990) found that in comparison to champions non-champions displayed many of the qualities of charismatic leadership. Champions initiated more influence attempts; used a greater variety of influence strategies; and relied on coalition, reason, higher authority, and assertiveness more than non-champions.

Tepper (1993) found that in routine influence attempts transactional leaders reportedly used more exchange and pressure tactics over transformational leaders, who used more legitimating tactics. Zorn's (1991) research suggests that cognitive complexity and person- centered message production may explain the success of transformational leaders.

Cognitive outcomes associated with the delivery aspects of a charismatic style such as eye contact, fluid rate, gestures, facial expressiveness, energy, eloquence and voice tone variety have also been studied (e.g. Bass, 1998; Holladay & Coombs, 1993). Howell and Frost conducted a laboratory experiment in which leaders were cast as either charismatic, considerate, or structuring. In the charismatic condition, the leader's use of the delivery features to communicate a vision yielded higher task performance, greater task satisfaction, and lower role conflict than did leaders in the other two conditions. Content (meaning in form of a leaders vision) and delivery were confounded in the present study. However, Holladay and Coombs (1993) isolated the effects of delivery on the communication of an organizational vision. Using the same delivery aspects described above, subjects in the "strong" delivery condition made stronger leader attributions of charisma than subjects in the "weak" delivery condition. Another interesting finding was that the dramatic and animated communicator style constructs were not among the best predictors of charisma, instead the constructs of friendly, attentive, dominant and open were. Research on transformational leaders done by Avolio, Howell and Sosik (1999) suggests the addition of humor to that list.

Two studies examined the differential effects of vision content and delivery on perceptions of charisma. Both Holladay and Coombs (1994) and Awamleh and Gardner (1999) found that delivery contributes more strongly to perceptions of charisma than vision content. However, Kirkpatrick and Locke (1996) found the opposite, that vision content was more strongly related to perceptions of charisma than stylistic features.

To summarize, it seems apparent that leaders who have the ability to communicate in a charismatic way are more likely to succeed. This can be claimed due to the findings that subordinates had higher task performance, greater task satisfaction, and lower role conflict in the presence of a leader communicating in a charismatic way.

5 Process

In this final part I will turn from looking at environment and structure organizational factors, that both affect and are affected by communication, to *processes* within organizations that relate to communication.

5.1 Defining Process

As referred to previously, process helps to provide a dynamic as opposed to a static view of communication in the organizational context. For example, Marc and Shapira have observed; "outcomes are generally less significant than process. It is …process that gives meaning to life, and meaning is the core of life" (in O'Reilly & Chatman, 1987).

More specifically it will be focused on the process of *organizational change*, and how communication processes may be important for organizations going through a change process. There are several reasons why this is an important area to study; Rapid change will continue being important for organizations in years to come. Moreover, communication is fundamental in the introduction and enactment of planned change efforts in organizations – implementation – as well as in the other areas of the change process. (Lewis & Seibold, 1998). Although organizational scholars have acknowledged the importance of communication processes in explanations for organizational change processes, they have according to Lewis and Seibold (1998) focused primarily on the invention, design, adoption and responses to planned changes. Lewis and Seibold (1998) argue that implementation of planned organizational change must also be seen as a communication-related phenomenon. Communication perspectives have largely ignored the *means by which programs are installed* and by which users come *to learn* of such programs.

Theory on change implementation and research approaches to this field will be presented. Further, the question of whether communication is a predictor of change implementation will be answered. Finally, based on an article of Lewis and Seibold (1998), a set of research targets for communication scholars in the area of planned change implementation will be suggested.

5.2 Defining Organizational Change Implementation

Tornatzky and Johnsen (1982) define implementation as:

> *"The translation of any tool or technique, process, or method of doing, from knowledge to practice. It encompasses that range of activities which take place between "adoption" of a tool or technique (defined as a decision or intent to use the technology) and its stable incorporation into on-going organizational practice"* (p. 193).

Lewis and Seibold (1993) conceptualize *structured implementation activities as:*

> *designed and enacted by internal or external change agents to specify usage of innovations and influence users' innovation-role-involvement, their formal (prescribed) and emergent patterns of interactions with and concerning the innovation* (p. 324).

Such activities might include the formation of goals, selection and training of users, development of performance criteria, and assessment of implementation outcomes.

"Most companies find that they must undertake moderate organizational changes at least once a year and major changes every four or five" (Kotter & Schlesinger, 1979, p. 106). This trend has only increased in the past decade and a half (Cushman & King, 1994), and rapid change will continue being important for organizations in years to come. In spite of this, planned change implementation efforts often fail. In the case of some technologies implementation failure rates are as high as 50 to 75 % (Majchrzak, 1988). Tornatzky og Johnson (1982) also note that the implementation process is "almost always difficult and rarely proceeds as planned" (193). Human and organizational factors are commonly identified as causes and contributors to failures. Miller, Johnson and Grau (1994) suggest that resistance that may occur during change efforts – reduction of output, quarreling and hostility, work slowdowns and pessimism regarding goal attainment – can be attributed to numerous political, cultural, normative and individual causes. Bikson og Gutek (1984) concluded in their studies that less than 10 % of the failures in the companies they studied were due to technical problems.

Considering human factors have been found to be the main causes of implementation failures, an important question would be why this is so? An answer might be found when looking into the process of communication. "Communication is fundamental to organizing" (Farace, Monge & Russell, 1977). As referred to in previous sections in this article, researchers and theorists have conceptualized numerous organizing phenomena as communicative, including leadership (Eisenberg & Riley, 1988), management behavior (Pfeffer, 1981; Trujillo, 1983), climate (Redding, 1972), socialization (Jablin, 1987), attitude formation (Salancik & Pfeffer, 1978), control systems

(Barker & Thompkins, 1994), and maintenance of organizational image and legitimacy (Elsbach & Sutton, 1972). These re-conceptualizations have led to new understandings of how structures and processes in organizations are created, maintained and changed. A question that should be considered is whether organizational change can be seen as a communication-related phenomenon?

5.2.1 Is Communication a Predictor of Organizational Change?

Understanding how communication influences change processes in organizations appears to be of major importance in order to predict the success of the change process (Lewis & Seibold, 1998). The empirical picture that is slowly emerging indicates that communication process and organizational change are inextricably linked processes. Studies illustrate the importance of communication in several aspects of change implementation including creating and articulating vision (Fairhurst, 1993), channeling feedback between implementers, key decision-makers and key users (Lewis, 1997), providing social support (Ashford, 1988; Miller & Monge, 1985) and in appropriating and adapting features of proposed changes (Johnson & Rice, 1987; Poole & DeSanctis, 1990). Communication represents not only the primary mechanism of change in organizations, but for many types of change may constitute the outcome as well (e.g., management programs which are evidenced in styles of supervision) (Lewis, 2000). Conclusively, communication must be said to be an important predictor of organizational change.

In spite of organizational scholars having acknowledged the importance of communication processes in explanations of organizational change processes, their efforts have focused primarily on the invention, design, adoption, and responses to planned organizational change, as well as outcome of change efforts. Researchers have noted the importance of communication variables in predicting the creation of innovative ideas and perceptions of innovativeness (Albrecht & Hall, 1981; Cheney, Block & Gordon, 1986; Ebadi & Utterback, 1984; Monge, Cozzenz & Contractor, 1992), the formation of attitudes regarding planned changes (Ellis, 1992; Miller & Monge, 1985), resistance to change programs (Fairhurst, Green & Courtright, 1995), behavioral coping responses of innovation users (Lewis & Seibold, 1996), and outcomes of organizational change programs (Johnson & Rice, 1987; Rive & Contractor, 1990). However, according to Lewis and Seibold (1998) central communication processes involved in the *installation* of planned changes within organizations have received far less attention from communication scholars. Lewis and Seibold emphasize that communication processes are inherently a part of these *implementation activities.* Announcement of change programs, training of users, and users' interaction and feedback re-

garding change programs are a few examples of implementation activities. Within this area of organizational change literature, communication scholars have been noticeably silent (Lewis and Seibold, 1998).

5.2.2 Approaches to Change Implementation

In approaches to change implementation it is often distinguished between "rule-bound-approaches" and autonomous approaches. Rule-bound approaches involve central direction and highly programmed tasks, whereas autonomous approaches accept that people in the lowest echelons of an organization exhibit autonomy by redefining policies during the implementation (Markus, 1988). Both of these approaches deal primarily with externally induced change programs. However, other scholars have found this distinction to be important also when exploring intra-organizational implementation approaches. Authors making the rule-bound/ autonomous distinction tend to argue in favor of more autonomous approaches. Generally it has been suggested that autonomous approaches produce better results. In his study of the implementation of nuclear power plants Marcus (1988) found that poor safety records were associated with rule-bound approaches, whereas plants with strong safety records tended to retain their autonomy.

Whether implementation is "adaptive" or "programmatic" in nature is a second important distinction made concerning approaches to implementation. Roberts-Gray (1983) and Gray (1985) suggests that the choice of an adaptive or programmatic approach depends on whether the implementer wishes to adapt the innovation to fit the organization (adaptive), or to alter the organization to accommodate the innovation (programmed).

A third general distinction concerns the time period for change and the scope of the change (Dunphy & Stace, 1988; Lindquist & Mauriel, 1989; Lovelady, 1984). Lindquist and Mauriel (1989) compare two common strategies that differ, the "breadth" strategy and the "depth" strategy. Using the breadth strategy the implementation is induced in all units of the organization simultaneously. In the depth strategy however the innovation is implemented in one unit of the organization ("a demonstration unit"), before it is generalized to other units. In Lindquist and Mauriel's study of site-based management programs in two public school districts, the breadth strategy was more successful than the depth strategy. The researchers suggest that political resistance to change can be dealt with more effectively when the innovation is implemented widely and top-level management is in control, than when the program is demonstrated within a demonstration site.

Much of the literature on change implementation in organizations has focused on strategy. Strategy refers to the general thrust, direction and focus of the activities that make up the implementation effort. However, there is a small amount of literature concerning the *tactics* of implementation. Tactics entails the more specific actions, messages and events constructed and carried out in service of some general strategy or goal (Lewis & Seibold, 1998). Nutt (1986, 1987) has developed four models of implementation strategy that he terms tactics. The models are developed from interviews conducted with key informants in multiple organizations where change had been implemented. The four models of implementation were; intervention (marked by a problem-solving orientation), participation (marked by high-level goal setting, low-level decision making, and high user involvement), persuasion (marked by experts' control of development and independence of experts), and edict (marked by sponsors' control and personal power, avoidance of participation, and low expert and user power). These four models were further tested according to their relative frequency of use and success. In Nutt's study of 91 service organizations these four models represented 93 % of the cases studied. The success rates of the different models were investigated, and the success rate was defined as final change adoption. Intervention was found to be most likely to bring about final adoption followed by participation, persuasions and edict. It is interesting to note that Nutt found the two most commonly used models to produce the least effective results. Nutt also identifies a number of important contextual factors that may mediate selection of implementation strategy, such as budgets for change processes and staff support. Smeltzer (1991) found in his interview study in 43 organizations that what most differentiated between effective and ineffective strategies in announcing organization-wide change were a large number of inaccurate rumors about the change, and employees learning about the change from sources other than management. Griffith and Northcraft (in press) further found users' satisfaction with, and feelings of expertise concerning a new technology, were related to their perceptions of having enough time to learn and work with the innovation.

5.2.3 The Change Agents Role in Implementation

Numerous authors have pointed to the significance of the role of the change agent in implementation (Curley & Gremillion, 1983; Kanter, 1983; Maidique, 1980; Ottaway, 1983; Rogers & Shoemaker, 1971; Schon, 1963). As Kanter (1983) argues:

> *Any new strategy, no matter how brilliant or responsive, no matter how much agreement the formulators have about it, will stand a good chance of not being implemented fully – or sometimes, at all – without someone with power pushing it* (p. 296).

Different implementers have been found to have different success rates, and a variety of change agent characteristics have been proposed as important for promoting success during implementation efforts. Hamilton (1988) developed a list of 37 characteristics which seem to be important in order to be an effective change agent based on a review of relevant literature on this field. She categorizes these into the following groupings: openness, responsiveness, comfort with ambiguity, and comfort with oneself. In Hamilton's (1988) study among 105 organizational development consultants there were indications of significant differences in characteristics between effective and ineffective change agents. Specifically, effective consultants expect sensitivity, empathy, and compassion from themselves and others, have a large capacity for ambiguity; are self-reliant and are friendly, cooperative, venturesome, trusting and imaginative. Effective consultants also tended to score as intuitive on Myers-Briggs personality Inventory (Lewis & Seibold, 1998). Zaltman and Duncan (1977) include technical qualifications, administrative ability, interpersonal relations, job orientation and leadership among their favored characteristics of good change agents. They further develop several generalizations concerning change agent effectiveness including "Change agent success is positively related to his credibility in the eyes of his clients" (p. 203) and "change agent success is positively related to his client orientation, rather than to change agency orientation" (p. 201).

A key concern is whether internal or external change agents do better in implementing change. There is no easy answer to this question considering Hunsaker (1985) notes that there are relative advantages and disadvantages for both external and internal change agents: External change agents are more independent and tend to have more objective and fresher perspectives. On the other hand they are strangers to the organization, may lack inside understanding, and may not be able to identify with the problems of the organization. Internal change agents however are more intimately familiar with the organization, know who the opinion leaders are, speak the language of the organization, understand the norms of the organization, and have greater personnel motivation to bring about the success of the change programs. At the same time internal agents may lack objective perspectives, have inadequate skills or technical knowledge associated with the change, lack an adequate power base to invoke compliance with the change program, or be hindered by past image or previous failures. Case et al.'s research revealed that external change agents tend to possess more humanistic and democratic values than do internal change agents. Internal change agents were found to be more likely to focus on technostructural interventions, meaning short-term improvement in bottom-line performance; and less likely to use human procedural interventions, which is aimed toward improving communication,

human relations, and climate. Brimm (1988) on the other hand addresses the potential dangers to career health of individuals taking on the role of change agent. Change agents may threaten other power holders by acquiring control over new resources, may attract increased attention and scrutiny to their own departments and operations, and may be perceived as critics of previous procedures or processes that are associated with powerful others.

5.2.4 What Factors Determine Successful Change?

Perhaps the most important question when dealing with implementation of organizational change regards the question of what factors enable successful change, and what factors lead to failure. Lewis and Seibold, (1998) claim that the greatest of all factors affecting implementation processes is the political context of the change effort. De Luca (1984) states that the sociopolitical context, the power, political activity, and informal social network among actors is a major factor in any large-scale organizational change. Resistance to change efforts is another topic that is often discussed by authors. Markus (1983) defines resistance as "behaviors intended to prevent the implementation or use of a system or to prevent system designers from achieving their objectives" (p. 433). Moreover, Markus suggests that resistance can also be functional for organizations, by preventing the installations of systems whose use might have on-going negative consequences as stress, turnover and reduced performance. In their study of inter-organizational change efforts, Gray and Hay (1986) found that the keys to successful implementation of a national coal mining policy were the perceived legitimacy of the project, and the inclusion of all stakeholders.

> *"A stakeholder is viewed to have legitimacy when this individual or group is perceived by others to have the right and the capacity to participate. The right derives from one's being influenced by the issues under consideration; the capacity of a legitimate stakeholder refers to one's possessing some degree of power over the domain"* (p. 96).

The nature of the change also appears to be an important factor for the implementation process (Lewis & Seibold, 1998). Different authors have studied the type of change (Ettlie, Bridges & O'Keefe, 1984; Etlie & Rubenstein, 1980; Nord & Tucker, 1987; Van de Ven, 1993), the scope of change (Berman, 1980; Van de Ven, 1993), and specific features of change programs (Roberts-Gray, 1985). The type of change most often concerns the "radical" or "routine" nature of the change. The scope of the change refers to "the kind and amount of change in the standard behavior of members of the implementing system" (Berman, 1980, p. 214). One should perhaps believe that changes smaller in scope could be implemented more simply. However,

Berman (1980, p. 215) presents evidence to support the opposite conclusion. In a study of educational innovations he found:

> *"Projects demanding little change in teacher behaviour were likely to be implemented in a pro forma fashion, whereas ambitious change efforts that engaged the sense of professionalism among teachers could be made to work with appropriate implementation strategies."*

A third factor important for successful change relates to the *timing* of implementation activities. Tyre and Orlikowski (1994) found that a relatively short time of opportunity exists for the adaptation of change programs. After a short time "the technology and its context of use tend to congeal, often embedding unresolved problems into organizational practice" (p. 98). Moreover they found that "even when project members recognized the need for ongoing process modifications and incorporated that into their schedules, opportunities for change narrowed over time" (p. 104). Lewis and Seibold (1998) claim there are numerous factors militating against lengthy implementation programs, including production pressure, the formation and strengthening of new work norms and erosion of implementing team membership and enthusiasm. According to Van de Ven (1993) interest and commitment to implementation programs have a tendency to vanish as time goes by, "after the honeymoon period, innovations terminate at disproportionately higher rates, in proportion to the time required for their implementation" (p. 286). Smeltzer (1991) has also noted the importance of timing. In several organizations he observed that delays in making announcements of downsizing resulted in the development of leaks and rumors. This further led to reported feelings of resentment among employees, as a result of hearing about the change from rumors.

User participation has also been noted as important in the implementation process. In spite of there being general agreement to participation being of great importance in organizations, there is much that is unknown considering just what the outcomes of that involvement will be (Lewis & Seibold, 1998). "Not only is there debate about the ultimate utility of involving users in design, but there is considerable ignorance as to the mechanics of user involvement" (Leonard-Barton, 1987, p. 9). Leonard-Barton and Sinha (1993) further suggest that although recent research has acknowledged participation to be important for organizational change, the correct amount of user involvement have not been specified. In their study they found the interaction between developers and users to be critical to users satisfaction. However, the relationship found was not strictly linear: "although extensive user involvement does not necessarily predict user satisfaction,…..very low levels (of involvement) are associated with dissatisfaction" (p. 1125). In attempting

to account for the reasons that user involvement affects user acceptance of and satisfaction with change, Baronas and Louis (1988) propose that:

> *"System introduction is perceived by the user as a period of transition during which the normal level of personal control is threatened, and that activities that restore a user's perception of personal control during system implementation will contribute to user acceptance and other aspects of system success"* (p. 111).

In a fifth set of contingency factors, managers' expectations, interpretations and influence have been found to have significant impact on the results of implementation. King (1974) conducted a field experiment where managers' expectations for the success of a new innovation were manipulated. It was revealed that implementation results were related to the manager's expectations of the implementation rather than to the qualities of the innovation itself. Barton and Descamp (1988) found the employees characteristics to also be important for the implementation process. Managers' influence in encouraging use of new technologies were found to be mediated by the characteristics of the employees:

> *"Employees whose characteristics incline them to adopt an innovation will do so without management support or urging if it is simply made available. Employees low on these characteristics will await a managerial directive before adopting"* (p. 1252).

In addition to the factors listed here, there are also numerous other factors important for the outcomes of planned organizational change. However, very few of these factors have been empirically investigated in a variety of settings, and there also seems to be much less consensus about the remaining factors which have not been listed here (Lewis & Seibold, 1998).

5.2.5 How can Change Implementation be Studied from a Communicative Perspective?

A review of the change implementation literature has been given. The essential question now is how a communication agenda for the study of organizational change can be created. Lewis and Seibold propose several targeted communication foci for research in the implementation area (see table 3).

Table 3: Communication Agenda for the Study of Implementation of Planned Organizational Change

	Formal implementation Activities	Informal Implementation Activities
Interaction surrounding implementation	**A**	**B**
Information sharing	How are innovations announced? What channels are utilized to provide information about change? What type of information is provided about change? To whom? By whom? In what context?	How do users share understandings/interpretations of formal information? With whom do they share these impressions? What makes information credible? How is additional information sought out? From whom?
Vision and motivation	How is vision for planned change communicated? What formal "campaign" tactics are utilized to set goals and to motivate users?	Do supporters or resisters reframe vision of change? Does interaction among users produce informal vision?
Social support	What is said to address fears and anxiety of users? How do implementers monitor reactions to change? Should users encourage social support among users?	How is supportive and comforting communication accomplished during change? Is evaluative information about the change communicated during social support? With what effects for users and for change programs?
Evaluation/feedback	How is evaluation and feedback sought from and given to users? What means are utilized to address areas of weakness both in users' performance and in change programs? How do implementers cope with upward feedback that negatively evaluates change programs?	Do users draw upon peer feedback more or less than supervisory feedback? Does informal evaluation of change get transmitted to formal implementers? Does informal evaluation lead to reinvention? If so, how does communication determine this process

Communication related structures	C	D
Reward structures	What systems are utilized for distribution of rewards and disincentives regarding participation in change? What communication channels are created to maintain reward systems? How do users respond?	How do organizational members informally punish or reward participants or nonparticipants? How are consequences for participation communicated informally?
Participatory structures	What structures do implementers utilize to involve lower-level employees in change implementation? When are implementation decisions made unilaterally, and when are they participatory in nature? What forms of participation are most productive during change implementations?	What channels do users/nonusers create to participate in implementation of change? How do nonimplementation team members gain access to and influence in implementation decision making? How do informal "champions" and "assassins" gain status and influence? What forms of participation best address users' effective and cognitive needs?
Role structures	How are users/implementers selected and socialized? What formal role status is accorded to change agents? What support is given to users who experience significant role transition?	What informal socialization do change agent and users receive? What affects the process by which users adopt new roles? What affects the evaluation of users' roles in terms of informal status and influence.

As can be seen in table 3, Lewis and Seibold propose that a useful research agenda for studying the association between communication and organizational change should focus on (a) interaction surrounding implementation and (b) communication-related structures regarding implementation. They suggest further that these foci should be investigated both within (c) formal and (d) informal implementation activities. In the following section the different quadrants of table 3 will be discussed more thoroughly

5.2.6 Interaction Surrounding Implementation

The questions in quadrants A and B of table 3 represents potential topics for communication researchers, concerned with interaction during both formal

and informal implementation activities. Research questions in quadrant A focus on the formal interaction when organizational change is introduced. The proposed questions are concerned with what implementers talk about, when, with whom, why and with what results. The quadrant B questions focus on how informal implementation occurs through the day to day organizational life, coming from spontaneous interactions of those who promote, evaluate, make sense of and resist planned change efforts.

5.2.7 Information Sharing

Uncertainty has been noted by communication scholars as a key concern in organizations (Eisenberg & Riley, 1988; Feldman & March, 1981). Previous studies underscore the importance of addressing members' information needs during organizational change. Empirical work has established the role of information in reducing anxiety about change (Smeltzer, 1991), and in increasing willingness to participate in planned change. Any information, even that which negatively evaluates the change, is considered more helpful than no information (Miller & Monge, 1985; Smeltzer, 1991). Covin and Kilmann (1990) found in their study that:

> *"Failure to share information or to inform people adequately of what changes are necessary and why they are necessary were viewed as having a highly negative impact. Secrecy, dishonesty, and the failure to assess dysfunctional rumors were also issues of concern"* (p. 239).

In a study of the effects of messages about change, Papa and Papa (1990) concluded that more research is needed into the relative weight and importance of informal and formal information about change:

> *"It may be possible that employees form perceptions of change as soon as they hear about it from management or through the grapevine. If this is true it may be important for managers or trainers to consider how initially spread information about change"* (p. 37).

Questions in quadrant A of table 3 are aimed at incorporating into studies of implementation of planned change what we know about the importance of information.

5.2.8 Vision and Motivation

Ford and Ford (1995) argue that one of the key breakdowns in planned change efforts is the "failure to create a shared understanding among participants to produce a clear statement of the conditions of satisfaction for the change" (p. 557). There is also evidence suggesting that leaders' expectations for success are strongly and positively related to successful change. King (1974) found that managers who transmitted their own strong feelings

King (1974) found that managers who transmitted their own strong feelings about efficacy of the innovation to their employees created mutual expectancy of high performance and greatly stimulated productivity: "There is the implication then that a unique characteristics of these managers was their ability to communicate high performance expectancy that subordinates fulfilled" (p. 228)

Fairhurst (1993) notes the importance of grassroots involvement in creating and promoting vision around organizational change programs. In a discourse analysis of an organization going through change she highlights how leaders may fail to serve as good resources for organizational members in providing information that would help them make sense of the vision or reduce the conflict:

> *"As such, the discourse gives us a unique look as to how visions may be cast aside. Specifically, it does not appear that individuals abandon a vision in a single decision. Rather it takes place in a series of interactional moments where a specific problem at a specific point is poorly addressed" (p. 365).*

One implication of Fairhurst's findings may be that vision is as much a matter of daily informal interaction among organizational members as of formal organized "vision" campaigns.

The research questions Lewis and Seibold propose in quadrant A of table 3 concern the means that implementers utilize to create and communicate formal goals and vision to users of change programs. Considering there are likely to be important differences in how various types of organizations, implementers and stakeholders attempt to communicate vision and to motivate users, it would be interesting to study how these strategies differ systematically. Investigation of the actual communicative behavior of implementers are according to Lewis and Seibold also important arenas for research. Questions in quadrant B encourage investigators to examine how vision is framed by users of change programs. Extension of Fairhurst's work within different organizational contexts, with various types of planned change, and with an assortment of user types could be important starting points. For example; does interaction among users produce alternative visions of planned change? What role does interaction play in the translation of formally created vision into the day-to-day actions of users?

5.2.9 Social Support

Evidence within the organizational change literature suggests the importance of social support, especially form peers, in effective coping with change programs. In Ashford's study (1988) of coping during organizational change

"sharing worries and concerns" appeared to be the most effective strategy serving as a buffer against stress. Ashford suggests that "managers can promote the use of this coping mechanism by deliberately creating norms that encourage employees to share their worries and concerns" (p. 31). On the other hand, Papa and Papa (1990) note that complaining can also lead to motivation problems and poor performance. Clearly, opinion is divided on communication of social support during adjustment to change. However, there is little doubt that social information, being communicated while users convey social support may have important effects on users' attitudes and emotions about change (Ashford, 1988; Miller & Monge, 1985), willingness to participate in change programs (Miller et al, 1994), and productivity within change programs (Papa & Papa, 1990). Questions raised in quadrant A of table 3 propose some suggestions for investigating the role of formal implementation in providing social support mechanisms. Questions in quadrant B address the need to learn more about how social support functions within informal networks.

5.2.10 Evaluation/Feedback

According to Lewis and Seibold, strikingly little has been written within the planned organizational change literature regarding the communication of evaluation and feedback. Evaluation and feedback can be viewed from at least two perspectives within the context of planned change. First, users' performance with new technologies, techniques, and programs is likely to be evaluated, and feedback may be given to correct deficiencies and/or to praise preferred performance models. Second, users may develop informal evaluations of change programs and may upwardly communicate those evaluations to implementers in the form of feedback. Both of these evaluation/feedback processes should be examined by communication researchers in the context of planned change. Questions in quadrant A ask how evaluation and feedback is sought from and given to users of planned change programs. In quadrant B the question is raised concerning the consequences of informal evaluation of change programs and the use of feedback seeking strategies by users.

5.3 Communication-Related Structures

The questions in quadrants C and D of table 3 represents potential topics of inquiry for communication researchers concerned with both formal and informal communication structures related to implementation. While the research questions within quadrant C focus on how the formal structures are invoked and designed by the implementers during the change process, quad-

rant D are concerned with the emergent structures that may be created by users.

5.3.1 Reward Structures

There is some evidence suggesting the importance of formal reward systems in predicting the success or failure of implementation of planned change. For example, formal reward systems have been found to affect the ways in which individuals react to new technologies (Leonard- Barton, 1987; Mainiero & DeMichiell, 1986). Griffith (1995) proposes that outcomes such as pay, recognition, type of work, and satisfaction are balanced against what users believe they will get in terms of change outcomes, an that this calculation affects their participation in planned change. According to Lewis and Seibold only a small amount of research has been done on the relation between communication channels and reward structures.

Questions in quadrant C focus researcher's attention on the creation and maintenance of formal systems for distributing rewards and disincentives to users and nonusers. Questions in quadrant D concern users' informal reward structures, for example whether users develop informal means of punishing or rewarding others for participation in change programs, and moreover whether these informal reward/punishment structures outweigh the effects of formal systems.

5.3.2 Participatory Structures

Miller and Monge's (1986) meta-analysis of employee participation studies reveals a strong relationship between employee satisfaction and participative climate. Other research indicates that participation has a positive effect on job involvement and organizational commitment (Monge & Miller, 1988).

However, Monge and Miller (1988) caution against assuming that more participation is always better, and state that one must look carefully at the situations and individuals for which participation is most appropriate. For example, Marshall and Stohl (1993) found that the communication individuals have with managers is of particular importance because those employees who have established communicative relationships with managers are more likely to get insight to relevant information. Neumann (1989) suggests that in order for employees to embrace change, truly empowering participative structures must be in place. A paradox is however that most participative efforts invite subordinates to try to influence those who have the authority to exercise power, that is those who make the important decisions. Sthol (1995) names this the participation paradox.

The literature on employee involvement and participation is voluminous. Lewis and Seibold note however that simplistic advice to involve users in decisions about planned change is imprecise at best and inappropriate at worst. Literature addressing the need for user participation during change efforts (see Baronas & Louis, 1988; Leonard-Barthon & Sinha, 1993; Zaltman & Duncan, 1977) has not yet thoroughly investigated the relative advantages and disadvantages of various forms of participation, the influence. Communication scholars should contribute to the questions of how participation may hinder or help during organizational planned change (Lewis & Seibold, 1998).

Several questions within quadrant C and D in table 3 address how implementers create and maintain participatory structures and how users informally gain access to decision making concerning planned change.

5.3.3 Role Structures

Barley's (1990) study of the introduction of new technology revealed that innovations:

> *"..initially modify task, skills and other non-relational aspects of roles. These modifications, in turn, shape role relations. Altered role relations either transform or buttress the social networks that constitute occupational and organizational structure" (p. 70).*

As we can conclude from Barley's study, planned organizational change often involves temporary and/or permanent alteration of job duties, role relationships, required skills, and status of users. When socialization of users into change programs constitutes significant role transition there may also be added stress on the users (Ashford & Taylor, 1990). Moreover, planned change programs may also trigger important *context* variables that can alter the ways in which new roles are perceived by users (Lewis, 1996).

To date, theoretical and empirical evidence strongly supports the importance of socialization of users during change implementation. Simple orientation sessions and formal training programs are likely to be incomplete in addressing the complex needs of new users, and in some cases may be misguided and useless. On the other hand, the impact of informal work group socialization can be very strong. The strong social bonding that often occurs there have powerful potential to influence attitudes about any program, policy or technology that affects individuals' work or work unit, and research provides evidence for the strong influence of peers during socialization (Comer, 1991).

Communication is a primary vehicle through which transitioners learn new role behaviors, new values and new norms and develop self-image within new positions in organizations. How these processes are affected by the context of organizational change and how they come to have significant impacts on planned change programs are important issues for communication scholars (Lewis and Seibold, 1998). Questions in quadrant C and D of table 3 concern the means by which role transitions and socialization for new role occupants are managed formally and informally.

5.4 Summary

In the previous section several targeted communication foci for research in the implementation area have been proposed, based on Lewis and Seibolds (1998) article. They further suggest three reasons for highlighting these four general foci: First, they seek to emphasize the tension between structure and process. Lewis and Seibold note that in analytically separating interaction (process) from structure we run the risk of either individual reductionistic or collectivist deterministic accounts of innovation implementation. This has also been claimed by Whittington (1994). Analytically separating the literature in this way obscures the mutually constituted and constituting character of interactional processes and institutional structures in producing and reproducing the organization. None of the studies Lewis and Seibold reviewed have reflected this duality. Hence, theoretical and empirical treatments that simultaneously examine structure and process will be the most productive course in this area, and should be further investigated in future research.

A second reason for the development of these specific foci is according to Lewis and Seibold the need to direct attention toward specific tactics and implementation behaviors that implementers utilize when enacting planned organizational change. The seven subtopics Lewis and Seibold have developed within the process and structure categories (information sharing, vision and motivation, social support, evaluation/feedback, reward structures, participatory structures, and role structures) direct our attention to very specific arenas for action. This action orientation is lacking in the majority of the implementation literature to date.

A third issue is that the implementation literature has reflected top-down initiatives and strategies, whereas studying lower-level employees' active role in implementation has been neglected. To highlight the separate issues and concerns that might be important regarding planned, official implementation and those having to do with unplanned, unofficial spontaneous implementation, Lewis and Seibold include the formal and informal categories as the

other dimension of this research agenda. They say they hope that the highlighting of this dichotomy will encourage exploration of both worlds of implementation, and research on the interplay between them.

6 Conclusion

In the present paper a review of research done within the area of organizational communication has been given. Generally, organizational communication literature has been categorized into structure, context and process, and the structure of the present paper has to some extent mirrored this categorization. However, as noted in the previous section, analytically separating the literature is perhaps simplistic, considering it denies the fact that organizational structure, context and process will interact with each other in producing and reproducing the organization. Lewis and Seibold (1998) note that process and structure should be combined when studying the effect of organizational communication on implementation. An important question to consider is whether this perhaps also should apply to the study of organizational communication in general. Considering communication is such a complex concept to study, future studies within the field of organizational communication should perhaps attempt taking a more complex approach in order to achieve the goal of capturing the full and whole essence of organizational communication.

7 References

Albrecht, T., & Ropp, V.A. (1982). The study of network structuring in organizations through the use of method triangulation. *Western Journal of Speech Communication, 46,* 162–178.

Allen, M.W., Gotcher, J.M., & Seibert, J.H. (1993). A decade of organizational communication research: Journal articles 1980–1991. In S.A. Deetz (Ed.), *Communication yearbook, 16* (pp. 252. 330). Newbury Park: Sage Publications.

Awamleh, R., & Gardner, W.L. (1999). Perceptions of leader charisma and effectiveness: The effects of vision, content, delivery and organizational performance. *Leadership Quarterly,10,* 345–374.

Avolio, B.J., Howell, J.M., & Sosik, J.J. (1999). A funny thing happened on the way to the bottom line: Humor as a moderator of leadership style effects. *Academy of Management Journal, 42,* 219–227.

Bacharach. S.B., Aike, M. (1977). Communication in administrative bureaucracies. *Academy of Management Journal 20,* 356–377.

Bacharach, S.B., & Lawler, E.J. (1980). *Power and politics in organizations.* San Francisco: Jossey Bass.

Bakeman, R., & Gottmann, J.M. (1986). *Observing interaction.* Cambridge, UK: Cambridge University Press.

Bannister, B.D. (1986). Performance outcome feedback and attributional feedback: Interactive effects on recipient responses. *Journall of Applied Psychology, 71,* 203–210.

Banks, S.P. (1994). Performing flight announcements: The case of flight attendants' work discourse. *Text and Performance Quarterly, 14,* 253–267.

Barnard, J. (1991). The information environment of new managers. *Journal of Business Communication, 28* 312–325

Barnard, C.I. (1938). *The functions of the executive.* Cambridge, MA: Harvard University Press.

Bass, B.M. (1999). Two decades of research and development in transformational leadership and attitudinal and financial outcomes: A field experiment. *European Journal of Work and Organizational Psychology, 8 (1),* 9–32.

Bass, B.M. (1990). *Bass & Stogdill's handbook of leadership: Theory, research and application.* New York: Free Press.

Bass, B.M. (1985). *Leadership and performance beyond expectations.* New York: Free Press

Bass, B.M. (1988). Evolving perspectives on charismatic leadership

Bass, B.M., Valenzi, E.R., Farrow, D.L., & Solomon, R.J. (1975). Management styles associated with organizational task, personal, and interpersonal contingencies. *Journal of Applied Psychology, 60,* 720–729.

Bavelas, A. (1950). Communication patterns in task oriented groups. *Acoustical Society of American Journal, 22* , 727–730.

Beach, W.A. (1994). Orienting to the phenomenon. In F.L. Casmir (Ed.), *Building communication theories: A socio-cultural approach* (pp. 133–163). Hillsale, NJ: Lawrence Erlbaum.

Beck, C.E. & Beck, E.A. (1986). The manager's open door and the communication climate. *Business Horizons,* 15–19.

Becker, H. (1954). Vitalizing sociological theory. *American Sociological Review, 19,* 383–384.

Bedeian, A.G. (1984). *Organizations: Theory and analysis.* Hinsdale: Dryden Press.

Berlo, D.K. (1960). *The process of communication*. New York: Holt, Rinehart & Winston.

Berman, P. (1980). Thinking about programmed and adaptove implementation: Matching strategies to situations. In H.M. Ingram & D.E. Mann (Eds.), *Why policies succeed or fail* (205–227). Beverly Hills, CA: Sage.

Beyer, J.M., & Trice, H.M. (1984). A field study of the use and perceived effects of discipline in controlling work performance. *Academy of Management Journal, 27,* 743–764.

Bikson, T., & Gutek, B. (1984). *Implementation of office automation.* Santa Monica: Rand Corporation.

Birdwhistell, R.L. (1959). Contributions of linguistic-kinesic studies to understanding of schizophrenia. In A. Aurback (Ed.), *Schizophrenia: An integrated approach* (pp. 99–123).

Bishop, Y.M.M., Feinberg, S.E., & Holland, P.W. (1975). *Discrete multivariate analysis: Theory and practice.* Cambridge, MA: MIT Press.

Blake, R., & Mouton, J. (1964). *The Group Behavior Questionnaire.* Austin, TX: Scientific Methods.

Blumer, H. (1969). *Synbolic interactionism: Perspective and method.* Englewood Cliffs: Prentice Hall.

Brimm, M. (1988). Risky business: Why sponsoring innovations may be hazardous to career health. *Organizational Dynamics, 17,* 28–41.

Brown, M.H., & McMillan, J. (1991). Culture as text: The development of an organizational narrative. *Southern Communication Journal, 57,* 46–90.

Brown, I.C. (1963). *Understanding other cultures.* Englewood Cliffs: Prentice-Hall.

Burns, J.M. (1978). *Leadership.* New York: Harper & Row.

Cappella, J.N. (1990). Structural equation modeling: An introduction. In P.R. Monge & J.N. Cappella (Eds.), *Multivariate techniques in human communication research* (pp. 57–110). New York: Academic Press

Campbell, D.T., & Stanley, J.C. (1963). *Experimental and quasi-experimental designs for Research.* Chicago: Rand-McNall

Case, T.L., Vandenberg, R.J., & Meredith, P.H. (1990). Internal and external change agents. *Leadership and Organizational Development Journal, 11(1),* 4–15.

Cheney, G. (1991). *Rhetoric in organizational society: Managing multiple identities.* Columbia: University of South Carolina Press.

Cheney, G., Block, B.L., & Gordon, B.S. (1986). Perceptions of innovativeness and communication about innovations: A study of three types of service organizations. *Communication Quarterly, 34,* 213–230.

Cheney, G., & Vibbert, S.L. (1987). Corporate discourse: Public relations and issues management. In F.M. Jablin, L.L. Putnam, K.H. Roberts, & L.W. Porter (Eds.), *Handbook of organizational communication: An interdisciplinary perspective.* (pp. 165–194). Newbury Park: Sage Publications

Child, J. (1973). Predicting and understanding organization structure. *Administrative Science Quarterly, 18,* 168–185.

Comer, D.R. (1991). Organizational newcomers' aquisition of informaion from peers. *Management Communication Quarterly, 5,* 64–89.

Conger, J.A. (1989). *The charismatic leader.* San Fransisco: Jossey-Bass.

Conger, J.A. (1991). Inspiring others: The language of leadership. *The Executive, 5,* 31–45.

Conquergood, D. (1989). Poetics, play, process, and power: The performative turn in anthropology. *Text and Performance Quarterly, 9,* 82–88.

Covin, T.J., & Kilmann, R.H. (1990). Participant perceptions of positive and negative influences on large-scale change. *Group and Organizational Studies, 15,* 233–248.

Cronbach, L. (1951). Coefficient alpha and the internal structure of tests. *Psycometrika, 16,* (297–334).

Curley, K.F., & Gremillion, L.L. (1983). The role of the champion in DSS implementation. *Information and Management, 6,* 203–209.

Cushman, D.P., & King, S.S. (1994). *High speed management.* Albany: State University of New York Press.

Daft, R.L., & Weick, K.E. (1984). Toward a model of organizations as interpretation systems. *Academy of Management Review, 9,* 284–295.

Dalton, D.R., Todor, W.D., Spendolini, M.J., Fielding, G.J., & Porter, L.W. (1980). Organization structure and performance: A critical review. *Academy of Management Review, 5,* 49–64.

Daniels, Dyer, & Moffitt, N. (1975). *Instruction manual: Management profiling: As others see you.* Provo, UT: Behavioral Science Resources.

Dansereau, F., & Markham, S.E. (1987). Superior-subordinate communication: Multiple levels of analysis. In *Handbook of Organizational Communication*. F.M. Jablin, L.L. Putnam, K.H. Roberts, & Porter, L.W. (Eds.)

Dansereau, F., Graen, G., & Haga, W.J. (1975), A vertical dyad linkage approach to process. leadership within formal organizations: A longitudinal investigation of the role-making process. *Organizational Behavior and Human Performance, 13,* 46–78.

Davis, K. (1953). Management communication and the grapevine. *Harvard Business Review, 31 (5),* 43–49.

DeLuca, J.R. (1984). Managing the socio-political context in planned change efforts. In A. Kakabadse & C. Parker (Eds.), *Power, politics, and organizations: A behavioral science view* (pp. 127–147). New York: John Wiley.

Diboye, R.L., & Wiley, J.W. (1978). Reactions of male raters to interviewee self-presentation style and sex: Extension of previous research. *Journal of Vocational Behavior, 13,* 192–203.

Doty, D.H., Glick, W.H., & Huber, G.P. (1993). Fit, equifinality, and organizational effectiveness: A test of two configurational theories. *Academy of Management Journal, 36,* 1196–1250.

Downs, C.W., DeWine, S., & Greenbaum, H.H. (1994). Measures of organizational communication. In Rubin, R.B., Palmgreen, P., & Sypher, H. E. (Eds.), Communication Research Measures (pp. 57–78).

Downs, C.W., McGrath, J., Stafford, J., & Rowland, J. (1990). *A comparison of four communication style instruments.* Paper presented at the meeting of the Academy of Management, San Fancisco.

Downs, C.W., Archer, J., McGrath, J., & Stafford, J. (1988). An analysis of communication style instrumentation. *Management Communication Quarterly,* 543–571.

Drexler, J. (1977). Organizational climate: Its homogeineity within organizations. *Journal of Applied Psychology, 62,* 38–42.

Dunphy, D.C., & Stace, D. (1988). Transformational and coercive strategies for planned organizational change: Beyond the O.D. model. *Organizational studies, 9,* 317–334.

Earley, P.C. (1986). Supervisors and shop stewards as sources of contextual information in goal setting: A comparison of the United States with England. *Journal of Applied Psychology, 71,* 111–117.

Ebadi, Y.M., & Utterback, J.M. (1984). The effects of communication on technological innovation. *Management Science, 30,* 572–585.

Eisenberg, E.M., & Riley, P. (1988). Organizational symbols and sense-making. In G.M. Goldhaber & G.A. Barnett (Eds.), *Handbook of organizational communication* (pp. 131– 150). Norwood: Ablex.

Eisenberg, E.M., Monge, P.R., & Farace, R.V. (1984). Coorientation of communication rules in managerial dyads. *Human Communication Research, 11,* 272–295.

Einhorn, L.J. (1981). An inner view of the job interview: An investigation of successful communicative behavior. *Communication Education, 30,* 217–228.

Elsbach, K.D., & Sutton, R.I. (1992). Acquiring organizational legitimacy through illegitimate actions: A marriage of institutional and impression management theories. *Academy of Management Journal, 35,* 699–738.

Ellis, B.H. (1992). The effects of uncertainty and source credibility on attitudes about organizational change. *Management Communication Quarterly, 6,* 34–57.

Ettlie, J.E., Bridges, W.P., & O' Keefe, R.D. (1984). Organization strategy and the structural differences for radical versus incremental innovation. *Management Science, 30,* 682–695.

Ettlie, J.E., & Rubenstein, A.H. (1980). Social learning theory and the implementation of production innovation. *Decision Sciences, 11,* 648–668.

Fairhurst, G.T. (2001). Dualism in leadership research. In F.M. Jablin, L.L. Putnam (Eds.). *The New Handbook of Organizational Communication.* Thousand Oaks: Sage Publications.

Fairhurst, G.T., & Green, S., & Courtright, J. (1995). Inertial forces and the implementation of a socio-technical systems approach: A communication study. *Organization Science, 6,* 168–185.

Fairhurst, G.T. (1993). Echoes of the vision: When the rest of the organization talks total quality. *Management Communication Quarterly, 6,* 331–371.

Fairhurst, G.T., & Chandler, T.A. (1989). Social structure in leader-member interaction. *Communication Monographs, 56,* 215–239.

Fairhurst, G.T., Rogers, L.E., & Sarr, R.A. (1987). Manager-subordinate control patterns and judgments about the relationship. In M. McLaughlin (Ed.), *Communication yearbook, 10* (pp. 395–415). Newbury Park, CA: Sage.

Fairhurst, G.T. (1986). Male-female communication on the job: Literature review and commentary. In M.L. McLaughlin (Ed), *Communication yearbook, 9,* (pp. 83–111).

Falcione, R.L., Sussman, L., & Herden, R.P. (1987). Communication climate in organizations. In Jablin, F.M., Putnam, L,L., Roberts, K.H., & Porter L.W. (Eds.) *Handbook of Organizational Communication.* (pp 125–277).

Farace, R.V., Monge, P.R., & Russell, H.M. (1977). *Communicating and organizing*: New York: Random House.

Feldman, M.S., & March, J.G. (1981). Information in organization as sign and symbol. *Administrative Science Quarterly,* 26, 171–186.

Fisher, B.A. (1978). *Perspectives on human communication.* New York: Macmillan.

Fink, E.M., & Monge, P.R. (1985). An exploration of confirmatory factor analysis. In B. Dervin & M.J. Voight (Eds.), *Progress in communication sciences* (Vol. 5, pp. 167–197). Norwood, NJ: Ablex.

Fleischmann, F.A. (1969). *Manual for the Leadership Opinion Questionnaire.* Chigago: Science Research Associates.

Follett, M.P. (1924). *Creative experience.* New York: Longmans, Green

Ford, J.D., & Ford, L.W. (1995). The role of conversations in producing intentional change in organizations. *Academy of Management Review, 20,* 541–570.

Fulk, J. (1993). Social construction of communication technology. *Academy of Management Journal, 36,* 921–950.

Fulk, J., & Mani, S. (1986). Distortion of communication in hierarchical relationships. In M.L. McLaughlin (Ed.), *Communication yearbook, 9,* (pp. 483–510). Newbury Park, CA: Sage.

Gardner, W.L., & Avolio, B.J. (1998). The charisimatic relationship: A dramaturgical Perspective. *Academy of Management Review, 23,* 32–58

Garfinkel, H (1967). *Studies in ethnomethodology.* Englewood Cliffs, NJ: Prentice Hall.

Gerloff, E.A., & Quick, J.C. (1984). Task role ambiguity and conflict in supervisor- subordinate relationships. *Journal of Applied Communication Research, 12,* 90–102.

Gibbs, J.R., (1961). Defensive Communication. *The Journal of Communication,* 141–148.

Gioia, D.A., & Sims, H.P. (1986). Cognition behavior connections: Attribution and verbal behavior in leader-subordinate interactions. *Organizational* Behavior *and Human Decision Process, 37,* 197–229.

Goddard, J.B. (1973). Office linkages and location: A study of communications and spatial patterns in central London. *Progress in Planning, 1,* 111–232.

Goodall, H.L. (1989). *Casing a promised land: The autobiography of an organizational detective as cultural ethnographer.* Carbondale: Southern Illinois University Press.

Gorman, L., & Malloy, E. (1972). *People, jobs and organizations.* Dublin: Irish Productivity Center.

Gould, S., & Penley, L.E. (1984). Career strategies and salary progression: A study of their relationships in a municipal bureaucracy. *Organizational Behavior and Human Performance, 34,* 244–265.

Gray, B., & Hay, T.M. (1986). Political limits to interorganizational consensus and change. *Journal of Applied Behavioral Science, 22,* 95–112.

Green, S.G., Blank, W., & Liden, R.C. (1983). Market and organizational influences on bank employees' work attitudes and behaviours. *Journal of Applied Psychology, 68,* 298– 306.

Greenbaum, H.H. (1974). The audit of organizational communication. *Academy of Management Journal, 17,* 739–754.

Griffith, T.L., & Northcraft, G.B. (in press). Cognitive elements in the implementation of new technology. *Journal of Managerial Issues, 5,* 465–482.

Habermas, J. (1971). *Knowledge and human interests.* Boston: Beacon Press.

Hage, J., Aiken, M., & Marrett, C.B. (1971). Organization structure and communications. *American Sociological Review, 36,* 860–871.

Hage, J. (1974). *Communication and organizational control: Cybernetics in health and welfare settings.* New York: John Wiley

Hage, J. (1980). *Theories of organizations: Form, processes and transformation.* New York: John Wiley.

Halphin, A. (1967). *Change and organizational climate. Journal of Educational Administration, 5,* 5–25.

Hamilton, E.E. (1988). The facilitation of organizational change: An empirical study of factors predicting change agents' effectiveness. *Journal of Applied Behavioral Science, 24,* 27–59.

Harrison, T.M. (1985). Communication and participative decision making: An exploratory study. *Personnel Psychology, 38,* 93–116.

Hawes, L.C. (1974). Social collectivities as communication: Perspectives on organizational behavior. *Quarterly Journal of Speech, 60,* 497–502.

Hellriegel, D., & Slocum, J. (1974). Organizational climate: Measures, research and contingencies. *Academy of Management Journal, 17,* 255–280.

Hersey, P., & Blanchard, K. (1973). *Leader adaptability and style inventory: Rationale and analysis of LASI instruments.* Athens: Ohio University, Center for Leadership Studies.

Hewes, D.E. (1979). The sequential analysis of social interaction. *Quarterly Journal of Speech, 65,* 56–73.

Hewes, D.E. (1975). Finite stochastic modeling of communication processes. *Human Communication Research 1,* 217–283.

Hinrichs, J.R. (1975). A feedback program to make manager development happen. *Personnel Journal, 9,* 478–481.

Holladay, S.J., & Combs, W.T. (1994). Speaking of visions and visions being spoken: An exploration of the effects of content and delivery on perceptions of leader charisma. *Management Communication Quarterly, 6,* 405–427.

Holladay, S.J., & Combs, W.T. (1993). Communicating visions: An exploration of the effects of content and delivery on perceptions of leader charisma. *Management Communication Quarterly, 8,* 165–189.

House, R.J., & Rizzo, J.R. (1972). Towars te measurement of organizational practices: Scale development and validation. *Journal of Applied Psychology, 56,* 338–396.

Howe, J.G., (1977). Group climate: an exploratory analysis of construct validity.

Howell, J.M., & Frost, P.J. (1989). A laboratory study of charismatic leadership. *Organizational Behavior and Human Decision Processes, 43,* 243–269.

Howell, J.M., & Higgins, C.A. (1990). Champions of technological innovation. *Administrative Science Quarterly, 35,* 317–341.

Huber, G.P., Miller, C.C., & Glick, W.H. (1990). Developing more encompassing theories about organizations: The centralization-effectiveness relationship as an example. *Organizational Science, 1,*11–40.

Hunsaker, P. (1985): Srategies for organizational change: Role of the inside change agent. In D. Warrick (Ed.), *Contemporary organizational development* (pp. 123–137). Glenview, IL: Scott, Foresman.

Infante, D.A., & Gordon, W.I. (1985). Superiors' argumentativeness and verbal aggressiveness as predictors of subordinates' satisfaction. *Human Communication Research, 12, 117–125.*

Jablin, F.M., (1982). Formal structural characteristics of organizations and superior- subordinate communication. *Human Communication Research, 8,* 338–347.

Jablin, F.M., (1985). Task /work relationship: A life-span perspective. In M.L. Knapp & G. R. Miller (Eds.) *Handbook of interpersonal communication (pp. 615–614*). Newbury Park, CA: Sage

Jablin, F.M., (1979). Superior-subordinate communication: The state of the art. *Psychological Bulletin, 86* 1201–1222.

Johnson, A.L., Luthans, F., & Hennessey, H.W. (1984). The role of locus of control in leader influence behavior. *Personnel Psychology, 37,* 61–75.

Johnson, B.M., & Rice, R.E. (1987). *Managing organizational innovation: The evolution from word processing to office information systems.* New York: Columbia University Press.

Jourard, S.M., (1964). The transparent self: Self-disclosure and well-being. Princeton, N.J.

Jourard, S.M., (1971). The transparent self. New York.

Judge, T.A. & Bono, J.E. (2000). Five-factor model of personality and transformational leadership. *Journal of Applied Psychology, 85 (5),* 751–765.
Kanter, R.M. (1983). *The change matters.* New York. Simon & Schuster.
Keppel, G. & Zedeck, S. (1989). *Data analysis for research designs.* New York: Freeman.
Kerlinger, F.N. (1986). *Foundations of behavioral research.* New York: Holt, Rinchart & Winston.
King, A.S. (1974). Expectation effects in organizational change. *Administrative Science Quarterly, 19,* 221–230.
Kirkpatrick, S.A., & Locke, E.A. (1996). Direct and indirect effects of three core charismatic leadership components on performance and attitudes. *Journal of Applied Psychology, 81,* 36–51.
Klauss, R., & Bass, B.M. (1982). *Interpersonal communication in organizations.* New York: Academic Press
Komaki, J.L. (1986). Toward effective supervision: An operant analysis and comparison of managers at work. *Journal of Applied Psychology, 71,* 270–279.
Kotter, J.P., & Schlesinger, L.A. (1979). Chosing strategies for change . *Harvard Business Review, 74(5),* 95–104.
Krone, J.K., Jablin, F.M., & Putnam, L.L. (1987). Communication theory and organizational communication: Multiple perspectives. In F.M., Jablin, L.L. Putnam; K.H., Roberts & L.W. Porter (Eds). *Handbook of Organizational Communication.* Newbury Park: Sage Publications.
Krackhardt, D., & Hanson, J.R. (1993).Informal networks: The company behind the chart. *Harvard Business Review, 71,* 104–112.
Kuhnert, K.W. & Lewis, P. (1987). Transactional and transformational leadership: A constructive/developmental analysis. *Academy of Management Review, 12,* 648–657.
Lammers, C.J. (1978). The comparative sociology of organizations. In R.H. Turner, J. Coleman, & R.C. Fox (Eds.), *Annual Review of Sociology, 4,* pp. 485–510. Palo Alto, CA: Annual Reviews.
Larson, J.R. (1986). Supervisors' performance feedback to subordinates: The impact of subordinate performance valence and outcome dependence. *Organizational Behavior and Human Decision Processes, 37,* 391–408.
Laumann, E.O (1973). *Bonds of Pluralism: The Form and Substance of Urban Social Networks* New York: Wiley Interscience
Leavitt, H.J. (1951). Some effects of certain communication patterns on group performance. *Journal of Abnormal and Social sychology, 46,* 38–50.
Leonard-Barton, D. (1987). The case for integrative innovation: An expert system at Digital. *Sloan Management Review, 29,* 7–19.

Leonard-Barton, D & Sinha, D.K. (1993). Development-user interaction and user satisfaction in internal technology transfer. *Academy of Management Journal, 36,* 1125–1139.

Likert, R. (1967). *The human organization.* New York: McGraw-Hill

Lindquist, K., & Mauriel, J. (1989). Depth and breadth in innovation implementation: The case of school-based management. In A.H. Van de Ven, H.L. Angle, & M.S. Poole (Eds.), *Research on the management of innovation: The Minnesota studies* (pp. 561–581). New York: Ballinger/Harper & Row.

Lovelady, L. (1984). Change strategies and the use of OD consultants to facilitate change. *Leadership and Organizational Development Journal, 5,* 2–12.

Luthans, F., & Larsen, J.K. (1986). How managers really coommunicate. *Human Relations, 39,* 161–178.

McGovern, T.V., & Tinsley, H.E.A. (1978). Interviewers evaluations of interviewee nonverbal behavior. *Journal of Vocational Behavior, 13,* 163–171.

Macey, B., Peterson, Peterson, M.F., & Norton, L.W. (1989). A test of participation theory in a work redesig field setting: Degree of participation and comparison site contrasts. *Human Relations, 42,* 1095–1165.

MacLeod, L., Shriven, J., & Wayne, F.S. (1992). Gender and management level differences in the oral communication patterns of bank managers. *Journal of Business Communication, 29,* 343–365.

Mahoney, T.A., Frost, P., Crandall, N.F., & Weitzel, W. (1972). The conditioning influence of organization size upon managerial practice. *Organizational Behaviour and Human Performance, 8,* 230–241.

Maidique, M. (1980). Entrepreneurs, champions and technological innovation. *Sloan Management Review, 21 (2),* 59–76.

Majchrzak, A. (1988). *The human side of factory automation.* San Francisco: Jossey Bass.

McPhee, R.D., & Babrow, A (1987). Causal modeling in communication research: Use, sisuse and misuse. *Communication Monographs, 54,* 344–366.

McPhee, R.D., & Poole, M.S. (2001). Organizational structures and configurations. In F.M. Jablin & L.L.Putnam (Eds.). *The New Handbook of Organizational Communication.* (pp. 503–543).

Mainiero, L.A., & DeMichiell, R.L. (1986). Minimizing employee resistance to technological change. *Personnel,* 32–37.

Manz, C.C., & Sims, H.P. (1984). Searching for the "unleader": Organizational members views on leading self-managed groups. *Human Relations, 37,* 409–424.

Marcus, A.A. (1988). Implementing externally induced innovations: A comparison of rule- bound and autonomous approaches. *Academy of Management Journal, 31,* 235–256.

Markus, M.L. (1983). Power, politics and MIS implementation. *Communications of the ACM, 26,* 430–444.

Marshall, A.A., & Stohl, C. (1993). Being "in the know" in a participative management system.*Management Communication Quarterly, 6,* 327–404.

Mead, G.H. (1934). *Mind self and society*. Chigago: Univerity of Chigago Press.

Mears, P. (1974). Structuring communication in a working group. *Journal of Communication, 24,* 71–79.

Meyer, M.W. (1972). *Bureaucratic structure and authority.* New York: Harper & Row.

McClelland, D.C. (1961). *The achieving society.* Princeton, NJ: Van Nostrand Reinhold.

Miles, R.H. (1980). *Macro organizational behaviour.* Santa Monica, CA: Goodyear.

Miller, K. (2001). Quantitative research methods. In F.M. Jablin & L.L. Putnam (Eds.). *The new handbook of organizational communication.* (pp. 137–160). London: Sage Publications

Miller, D. (1987). Strategy making and structure: Analysis and implications for performance. *Academy of Management Journal, 30,* 7–32.

Miller, K.I, & Monge P.R. (1986). Participation, satisfaction, and productivity: A meta- analytic review. *Academy of Management Journal, 29,* 727–753.

Miller, K.I., & Monge, P.R. (1985). Social information and employee anxiety about organizational change. *Human Communication Research, 11,* 365–386.

Miller, C.C., Glick, W.H., Wang, Y.D., & Huber, G.P. (1991). Understanding Technology- structure relationships: Theory development and meta-analytic theory testing. *Academy of Management Journal, 34,* 370–399.

Miller, V.D., & Johnson, J.R., & Grau, J. (1994). Antecedents willingness to participate in a planned organizational change. *Journal of Applied Communication Research, 22,* 59–80.

Monge, P.R. & Miller, K.I. (1988). Participative processes in organizations. In G.M. Goldhaber & G.A. Barnett (Eds.), *Handbook of organizational communication* (pp. 213– 229). Norwood, NJ: Ablex.

Monge, P.R., Cozzens, M.D., & Contractor, N.S. (1992). Communication and motivational predictors of the dynamics of organizational innovation. *Organizational Science, 3,* 250– 274

Morrison, A., McCall, M., & DeVries, D. (1978). *Feedback to managers.* Greensboro, NC: Center for Creative Leadership.

Muchinsky, P.M (1977). An intraorganizational analysis of the Roberts and O'Reilly organizational communication questionnaire. *Journal of Applied Psychology, 62,* 184–188.

Neumann, J.E. (1989). Why people don't participate in organizational change. In R.W. Woodman & W.A. Pasmore (Eds.), *Research in organizational change and development* (Vol. 3, pp. 181–212). Greenswich, CT: JAI.

Nord, R., & Tucker, S. (1987). *Implementing routine and radical innovations.* Lexington, MA: Lexington.

Nunally, J. (1978). *Psychometric theory*. New York: McGraw-Hill.

Nutt, P.C. (1986). Tactics of implementation. *Academy of Management Journal, 29,* 230– 261.

Nutt, P.C. (1987) Identifying and appraising how managers install strategy. *Strategic Management Journal, 8,* 1–14.

Ottaway, R.N. (1983). The change agent: A taxonomy in relation to the change process. *Human Relations, 36,* 361–392.

Olson, L.M. (1995). Record keeping practices: Consequences of accounting demands in a public clinic. *Qualitative Sociology, 18,* 45–70.

Pacanowsy, M.E., & Putnam, L.L. (1982). Introduction. *Western Journal of Speech Communication, 46,* 114.

Pace, W.R. (1983). *Organizational Communication: Foundation for human Resource development.* Englewood Cliffs, NJ: Prentice Hall

Paolillo, J.G. (1982). Subsystem climate as a function of personal and organizational factors. *Journal of Management Studies, 19,* 327–334.

Papa, M.J., & Pood, E.A. (1988). Coorientational accuracy and organizational conflict: An examination of tactic selection and discussion satisfaction. *Communication Research, 15,* 3–28.

Papa, M.J., & Papa, W.H. (1990). Perceptual and communicative indices of employee performance with new technology. *Western Journal of Speech Communication, 54,* 21– 41.

Parsons, C.K., Herold, D.M., & Leatherwood, M.L. (1985). Turnover during initial employment: A longitudinal study of the role of causal attributions. *Journal of Applied Psychology, 70,* 337–341.

Payne, R.L. & Mansfield, R. (1973). Relationships of perceptions of organizational climate to organizational structure, context an hierarchical position. *Administrative Science Quarterly, 18,* 515–526.

Pelz, D.C. (1952). Influence: A key to effective leadership in the first-line supervisor. *Personnel, 29,* 3–11.

Penley, L.R. & Hawkins. B (1985). Studying interpersonal communication in organizations: A leadership application. *Academy of Management Journal, 28,* 309–326.

Perrow, C. (1972). *Complex organizations. A critical essay.* Glenview: Scott

Pfeffer, J. (1981). Management as symbolic action: The creation and maintenance of organizational paradigms. In L.L. Cummings & B.M. Staw (Eds.), *Research in organizational behavior* (pp. 1–52). Greenwich: JAI.

Pfeiffer, J.W., & Jones, J.E. (1977). *Handbook for group facilitators.* San Diego, CA: University Associates.

Phillipson, H., Lee, A.R., & Laing, R.D. (1966). Interpersonal perception: *A theory and method of research*. New York: Springer

Pincus, J.D. (1986). Communication satisfaction, job satisfaction, and job performance. *Human Communication Research, 12,* 395–419

Porter, L.W., & Lawler, E.E,. (1965). Properties of organization structure in relation to job attitudes and job behaviour. *Psychological Bulletin, 64,* 23–51

Powell, G.N., & Butterfield, D.A. (1978). The case of subsystem climates in organizations. *Academy of Management Review, 3,* 151–157.

Poole, M.S., Seibold, D.R., & McPhee, R.D. (1996). The structuration of group decision Making. In R.Y. Hirokawa & M.S. Poole (Eds.), *Communication and Group Decision Making* (pp. 114–146). Thousand Oaks: Sage Publications

Poole, M.S., & McPhee, R.D. (1995). Methodology in interpersonal communication research. In M.L. Knapp & G.R. Miller (Eds.), *Handbook of interpersonal communication.* (pp. 42– 100). Thousand Oaks, CA: Sage.

Poole, M.S., & DeSanctis, G. (1992). Microstructural processes in in computer supported group decision-making. *Human Communication Research, 19,* 5–49.

Poole, M.S., & Roth, J. (1989). Decision development in small groups IV: A typology of group decision paths. *Human Communication Research, 15,* 323–356.

Poole, M.S, Holmes, M., & DeSanctis, G. (1991). Conflict management in a computer- supported meeting environment. *Management Science, 37,* 926–953.

Poole, M.S., Holmes, M., Watson, R., & DeSanctis, G. (1993). Group decision support systems and group communication: A comparison of decision-making in computer- supported and non-supported groups. *Communication Research, 20,* 176–213.

Pritchard, R., & Karasick, B. (1973). The effects of organizational climate on managerial job performance and job satisfaction. *Organizational Performance and human Performance, 9,*110–119.

Putnam, L.L. & Pacanowsky, M.E. (1983). *Communication and organizations: An interpretive approach.* Newbury Park: Sage Publications.

Pye, R. (1976). Effect of telecommunications on the location of office employment. *OMEGA, 4,* 289–300.

Redding, W.C. (1979). Organizational communication theory and ideology: An overview. In D.Nimmo (Ed.), Communication yearbook 3 (pp. 309–341). New Brunswick, NJ: Transaction.

Redding, W.C. (1972), *Communication within the organization: An interpretive review of the theory and research.* New York: Industrial Communications Council.

Richetto, G.M. (1977). Organizational communication theory and research: An overview. In B.D.Ruben (Ed.), *Communication yearbook 1* (pp. 331–346). Mew Brunswick, NJ: Trabsaction.

Richmond, V.P., & McCroskey, J.C. (1979). Management communication style, tolerance for disagreement and innovativeness as predictors of employee satisfaction: A comparison of single-factor, two-factor, and multiple factor approaches. *Communication Yearbook, 3,*
359–373.

Roberts-Gray, C. (1985). Managing the implementation of innovations. *Evaluation and Program Planning, 8,* 261–269.

Roberts, K.H. & O'Reilly, C.A. (1974). Measuring organizational communication. *Journal of Applied Psychology, 59,* 321–326.

Rogers, E. & Rogers, R (1990). Communication networks in organizations. In Corman, S.R., Banks, S.P., Bantz C.R. & Mayer, M.E. (Eds.), *Foundations of organizational communication* (pp. 296–311). White Plains: Longman.

Rogers, E.M., & Shoemaker, F.F. (1971). *Communication of innovations: A cross-cultural approach(2nd ed.). New York: Free press.*

Rosseau, D.M. (1978). Characteristics of departments, positions, and individuals: Contexts for attitudes and behaviours. *Administrative Science Quarterly, 23,* 521–540

Salancick, G.R., & Pfeffer, J. (1978). A social information processing approach to job attitudes and task design. *Administrative Science Quarterly, 23,* 224–256.

Schuler, R.S. (1979). A role perception transaction process model for organizational communication-outcome relationship. *Organizational Behavior and Human Performance, 23,* 268–291.

Seeger, M.W. (1994). *I gotta tell you: Speeches of Lee Iacocca.* Detroit: Wayne State University Press

Schneider, B., & Snyder, R. (1975). Some relationships between job satisfaction and organizational climate. *Journal of Applied Psychology, 60,* 318–328.

Schneider, B., Parkington, J.J., & Buxton, V.M. (1980). Employee and customer perceptions of service in banks. *Administrative Science Quarterly, 25,* 252–267.

Schon, D.A. (1963). Champions for radical new inventions. *Harvard Business Review, 41,* 78– 86.

Sims, H.P., & Manz, C.C. (1984). Observing leader verbal behavior: Toward reciprocal determinism in leadership theory. *Journal of Applied Psychology, 69,* 222–232.

Smeltzer, L.R. (1991). An analysis of strategies for announcing organization-wide change . *Group and Organization Studies, 16,* 5–24.

Snyder, R.A., & Morris, J.H. (1984). Organizational communication and performance. *Journal of Applied psychology, 69,* 461–465.

Steckler, N.A., & Rosenthal, R. (1985). Sex differences in nonverbal and verbal communication with bosses, peers, and subordinates. *Journal of Applied Psychology, 70,* 157–163.

Shaw, M.E. (1954). Some effects of unequal distributions of information upon group performance in various communication nets. *Journal of Abnormal and Social Psychology, 49,* 547–553.

Shaw, M.E (1964). Communication networks. In Berkowitz, L. (Ed.). *Advances in Experimental Psychology,* (pp. 547–553).

Smeltzer, L.R. (1991). An analysis of strategies for announicing organization-wide change. *Group and Organization Studies, 16,* 5–24.

Smirchich, L., & Chesser, R.J. (1981). Superiors' and subordinates' perceptions of performance: Beyond disagreement. *Academy of Management Journal, 24,* 198–205.

Steckler, N.A., & Rosenthal, R. (1985). Sex differences in nonverbal and verbal communication with bosses, peers and subordinates. *Journal of Applied Psychology, 70,* 157–163.

Stevenson, W.B., & Gilly, M.C. (1991). Information processing and problem solving: The migration of problems through formal positions and networks of ties: *Academy of Management Journal, 34,* 918–928

Stohl, C (1993). European managers' interpretations of participation: A semantic network Analysis. Human Communication Research, 20, 97–117.

Sutton, H., & Porter, L.W. (1968). A study of the grapevine in governmental organization. *Personnel Psychology, 21,*223–230

Taquiri, R. (1968). The concepts of organizational climate. In R. Taquiri & G.H. Litwin (Eds.), *Organizational climate: Exploration of a concept* (pp. 11–32). Boston: Harvard University Press.

Taylor, B.C. & Trujillo, N (2001). Qualitative research methods. In F.M. Jablin & L.L. Putnam. *The new handbook of organizational communication.* London: Sage Publications.

Taylor, J.C. & Bowers, D.G. (1972). *Survey of organizations: A machine-scored standardized questionnaire instrument.* Ann Arbor: University of Michigan Institute for Social Research, Center for Research on Utilization of Scientific Knowledge.

Tepper, B.J.(1993). Patterns of downward influence and follower conformity in transactional and transformational leadership. In D.P. Moore (Ed.), *Academy of Management best papers Proceedings* (pp. 267–271). Madison: Omni

Tjosvold, D. (1984). Effects of leader warmth and directiveness on subordinate performance on a subsequent task. *Journal of Applied Psychology, 69,* 422–427.

Tjosvold, D. (1985). The effects of attribution and social context on superiors' influence and interaction with low performing subordinates. *Personnel Psychology, 38,* 361– 376.

Tjurillo, N. (1983). Mintzberg's roles: The nature of managerial communication. In L.L. Putnam & M.E. Pacanowsky (Eds.), *Communication and organizations: An interpretive approach* (pp. 73–98). Beverly Hills: Sage Publications.

Tompkins, P.K., & Redding, W.C. (1988). Organizational communication: Past and present tenses. In G.M. Goldhaber & G.A. Barnett (Eds.), *Handbook of organizational communication* (pp. 5–33). Norwood, NJ: Ablex.

Tornatzky, L.G., & Johnson, E.C. (1982). Research on implementation: Implications for evaluation practice and evaluation policy. *Evaluation and Program Planning, 5,* 193–198.

Trempe, J., Rigny, A.J., & Haccoun, R.R. (1985). Subordinate satisfaction with male and female managers: Role of perceived supervisory influence. *Journal of Applied Psychology 70,* 44–47.

Trombetta, J.J. & Rogers, D.P. (1988). Communication climate, satisfaction, and organizational commitment: The effects of information adequacy, communication openness, and decision participation. *Management Communication Quarterly, 1,* 494– 515.

Tyre, M.J., & Orlikowski, W.J. (1994). Windows of opportunity: Temporal patterns of technological adaptation in organizations. *Organization Science, 5,* 98–118.

Van de Ven, A.H., Angle, H.L., & Poole, M.S. (1989). *Research on the management of innovations.* New York: Ballinger

Wendt, R., & Fairhurst, G.T. (1994). Looking for the vision thing: The rhetoric of leadership in the 1992 presidential election. *Communication Quarterly, 42,* 180–195.

Wheeless, L.R., Wheeless, V.E., & Howard, R.D. (1984). The relationship of communication with supervisor and decision-participation to employee job satisfaction. *Communication Quarterly, 32,* 222–232.

Wheeless, V.E., & Berryman-Fink, C. (1985). Perceptions of woman managers and their communicator competencies. *Communication Quarterly, 33,* 137–148.

Whitely, W (1984). An exploratory study of managers' reactions to properties of verbal communication. *Personnel Psychology, 37,* 41–59.

Whiteley, W (1985). Managerial work behavior: An integration of results from two major approaches. *Academy of Management Journal, 28,* 344–362.

Whittington, R. (1994). Sociological pluralism, institutions and and managerial agency. In J. Hassard & M. Parker (Eds.), *Towards a new theory og organizations* (pp. 53–74). London: Routledge.

Yammarino, F.J. & Dubinsky, A.J. (1992). Superior-subordinate relationships: A multiple levels of analysis approach. *Human Relations, 41.* 575–600

Zaltman, G., & Duncan, R. (1977). *Srategies for planned change.* New York: John Wiley.

Zey-Ferrell, M. (1979). *Dimensions of organizations: Environment, context, structure, process and performance.* Santa Monica, CA: Goodyear

Zohar, D. (1980). Safety climate in industrial organizations: Theoretical and applied implications. *Journal of Applied Psychology, 65,* 96–102.

Zorn, T.E. (1991). Construct system development, transformational leadership, and leadership messages. *Southern Communication Journal, 56,* 178–193.

Research and Development Information

Title:	Organizational Communication – A review
Project number:	82002046
Project Manager:	Maria Therese Jensen
Author:	Maria Therese Jensen
Commissioned by:	VS-2010
Report type:	Research and Development Report
Report number:	R & D number 1/2003
ISBN-number	82-7602-083-6
ISSN-number:	0803-8198
Accessibility of report:	Open
Keywords:	Organizational communication, superior-subordinate communication, communication climate, change implementation

Summary: The present paper gives a review of studies and theory within the field of organizational communication. Methodological issues and aspects that have been taken within the study of the organizational communication field are elaborated and discussed.