STRUCTURING DEFERENCE AND SOLIDARITY IN A MANAGER-EXPATRIATE EMPLOYEE DYAD IN THE CONTEXT OF CHANGING COMMUNICATIONS MEDIA WITHIN THE MENNONITE CENTRAL COMMITTEE

BY

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Abstract

The present study joins studies of the relationship between structure and technology (Barley, 1986) and computer mediated communications (Orlikowski, 1992; Orlikowski & Robey, 1991; Orlikowski, Yates, Okamura, & Fujimoto, 1995; Poole & DeSanctis, 1992; Yates, Orlikowski, & Okamura, 1999) in drawing from structuration theory (Giddens, 1984) as a framework for understanding how the introduction of new communication media serves as a junctural structuring event (Poole & DeSanctis, 1992) that fundamentally influences the order of discourse as reflected in existing interaction patterns (Fairclough, 1993; Schwarz & Brock, 1998). In particular, the present study examines the effects of changes in communications media on hierarchical communications within manager-employee dyads in an international organization using politeness theory as its analytical framework. This study samples the ongoing communications between managers located in North America ('the Africa Desk') and their direct reports (the Country Representative) in the Chad operation of the Mennonite Central Committee, an international aid and peace organization, as the medium of their communications changes from couriered letters to facsimiles and, finally, to electronic mail (e-mail).

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Chapter 1: Introduction

Purpose

Communication is how work gets done in organizations. Communication, particularly 'talk,' is central to our understanding of how people function within organizations and how organizations function (e.g., Alvesson, 1994; Boden, 1994; Drew & Heritage, 1992; Gronn, 1983; Karl, 1996; O'Connor, 2000). Although face-to-face communication is usually readily available as an alternative to written communication, this is not generally the situation faced by members of international organizations. These managers and employees are most likely to interact through written communications, given the dual constraints of the financial costs associated with communicating in person or by telephone and the time zone differences that make synchronous communications difficult.

There is a growing interest in understanding how communication technology, especially e-mail, affects how people communicate and how this influences an important aspect of organizational life - the manager-employee relationship (Sherblom, 1988). This interest corresponds with an enduring question being investigated in organization analysis; that is, whether technology induces a change in organizational structure or conforms to the structure already in place, thus reproducing existing patterns of structural arrangements (Barley, 1986; Burkhardt & Brass, 1990; Hickson, Pugh, & Pheysey, 1969; Rousseau, 1983; Woodward, 1965). Although this issue has traditionally been studied in relation to production or information technology, it has yet to be adequately addressed in relation to communication technologies such as facsimiles or electronic mail. Unlike production or information technologies, communication technologies directly and explicitly shape the nature of the interaction that is possible and, therefore, may be "especially subject to the constraints of the existing social context" (Zack & McKenney, 1995, p. 397).

Despite the plethora of research that considers the nature of the interaction patterns afforded by face-to-face versus written communication, there does not appear to be any published studies that have considered this issue solely in relation to written communication media such as letters delivered through a courier or a postal service, facsimiles, or electronic mail. By 'removing' the face-to-face component of communication, the present study provides a more realistic view of communications in global organizations. It joins studies of the relationship between structure and technology (Barley, 1986) and computer mediated communications (Orlikowski, 1992; Orlikowski & Robey, 1991; Orlikowski, Yates, Okamura, & Fujimoto, 1995; Poole & DeSanctis, 1992; Yates, Orlikowski, & Okamura, 1999) in drawing from structuration theory (Giddens, 1984) as a framework for understanding how the introduction of communication media becomes an 'occasion for structuring' (Barley, 1986) as evidenced by the development of recurring interaction patterns which both re-present and reflect existing social structures.

This study examines the extent to which changes in communication media serve as junctural structuring events (Poole & DeSanctis, 1992) or exogenous shocks (Barley, 1986) that fundamentally influence the order of discourse as reflected in interaction patterns (Fairclough, 1993; Schwarz & Brock, 1998) between managers and their employees. These interaction patterns, specifically, the relative power levels of communicants as reflected in language use, are examined through the lens of politeness theory (Brown & Levinson, 1987). More specifically, the present study examines the effects of changes in communication media on hierarchical communications within manager-employee dyads in an international setting using politeness theory as its analytical framework. This study examines whether the introduction of communication media serves to "enhance democracy in organizations" (Mantovani, 1994, title) or whether "status differentials" (Saunders, Robey, & Vaverk, 1994, title) tend to persist. Following Yin (1989), this explanatory study presents competing propositions as alternative explanations regarding the expected results as a means of determining which of the explanations are demonstrated.

Research Setting

This research investigates how changes in the communications media employed by country representatives and their managers induce subsequent shifts in the pattern of interaction within the Africa Department of the Mennonite Central Committee (MCC). MCC is a relief, development, and peace agency with approximately 900 workers in 58 countries around the world. It is "the relief, service, community development and peace agency of Mennonite and Brethren in Christ churches in Canada and the United States...[It] seeks to demonstrate God's love by working among people suffering from poverty, conflict, oppression and natural disaster" (Mennonite Central Committee, 1999a).

MCC's income in 1998 was approximately 54.15 million dollars (U.S.), approximately 11.5 percent of which was directed towards administrative overhead. Its funding is garnered primarily from the Mennonite and Brethren in Christ Churches in North America who have representatives on the MCC board of directors. Given the stable nature of this funding source, MCC does not engage in the extensive fund raising campaigns through media outlets such as television, radio, or mass mailings that are characteristic of several other development organizations. Although it has international and Canadian operations (so that a country can control the funds that it raises), their headquarters located in the village of Akron, Pennsylvania are at the centre of MCC operations. These headquarters employ an open office approach and is staffed by approximately 180 volunteers and workers, many of whom have previously served on overseas assignments. Their low fund raising costs, a heavy reliance on volunteers, and the relatively small headquarters structure permit the MCC to apply approximately 90 percent of its funds directly towards its programming.

Workers are employed for a term of three years during which time they receive training, transportation to and from the country in which they are serving, and funds for living expenses as well as a relatively small amount as a personal allowance. MCC is not intended to be a place where individuals develop careers over an extended period of time. Rather, it is intended to serve as a temporary opportunity for students, professionals, and others of primarily Mennonite faith to be a witness for Christ. MCC workers in Africa report to a Country Representative who, in turn, reports to a manager (the 'Africa Desk') located either in Winnipeg, Canada or in Akron, PA. The manager performs the traditional functions that one would expect of a manager; i.e., he hires and orients the country representative, provides first level approval for the country manager's proposed program and budget (before it goes further up the hierarchy and, ultimately, to the board of directors), provides direction and feedback on program activities, conducts performance reviews, and performs other managerial functions.

Given their interest in reducing administrative costs and the exorbitant costs associated with travel to Africa or telephone communications, with few exceptions, all communications between country representatives and their managers are in written form. Since 1988, these communications have evolved from consisting primarily of couriered letters and memos to faxes and, more recently, electronic messaging. Although these media did not require "new knowledge" (Barley, 1986, 1988), they did alter the practical realities of communications. In this particular context, this meant that couriered documents were sent every two weeks but received six weeks later. When employees sent faxes, it was by using a machine owned by another NGO and at a cost of $25 for three pages (thus requiring efficient communications). This may also account for why couriered documents continued to be employed after faxes were introduced. Each new form of communication technology provided the country representatives and their manager with the possibility of greater access to each other.

This research setting was particularly appropriate for several reasons. First, in obtaining access to these written communications, I had a unique opportunity to study a continuous and 'complete' set of interactions between a manager and his employees over an extended period of time. One of the primary difficulties in resolving the ongoing debates previously discussed is the lack of access to a complete set of employee/manager communications. Second, given that the data were collected from a single organizational setting, I was able to "essentially hold constant variations brought about by the organization's ... idiosyncrasies" (Barley, 1995, p. 5). It must be noted that, although conducting research in a single organization offers the noted advantage (i.e., holding the organization constant so that the results are not influenced by variations in organizational settings), it also requires that the results be interpreted in light of this context. In other words, the extent to which the study's results generalize to other settings is an empirical question that can only be determined in additional research.

Third, this setting represents a critical test of existing theory (Yin, 1989) given that MCC's egalitarian culture is such that 'power differences' are particularly unlikely to be found. MCC espouses a consultative, 'listen and learn' approach to dealing with clients and seeks to carry out it mission in a "participatory, transforming process leading to greater dignity and self-reliance, greater vision and possibility, greater community and interdependence" (Mennonite Central Committee, 1999b). If MCC wants employee - client relationships to be egalitarian, then managers need to model this in their language structures with their employees; i.e., their language should empower. As argued by Morand (1996), there is an increased move towards status leveling and informality in organizations. The organic cultures of organizations should be reflected in low social distance and power relationships; consultation, not command. In such organizations, the hierarchy exists merely for the sake of convenience (Morand, 1996). The egalitarian claims of organizations should be reflected in language-in-use;

for example, the universal use of first names (Morand, 1996), relatively equal discourse resources (Fairclough, 1996), no obviously autocratic messages (Fairhurst et al., 1987), and greater freedom and diversity in the linguistic choices made by employees (Jablin, 1978). The discourse employed reveals managers' theories-in-use (Argyris & Shön, 1992). For example, O'Connor, Hatch, White, and Zald (1995) found that managers who were engaged in a change effort that was supposed to be participatory actually adopted adversarial language. This discrepancy between espoused and enacted/practiced views created a paradox that prevented change from happening (Ford & Backoff, 1988). If communication creates organizational culture (O'Connor et al., 1995), then an espoused culture of empowerment should be enacted in talk. Thus, linguistic analysis can be used to initiate and evaluate participation programs and the "veridcality of attempts at status leveling" (Morand, 1996, p. 442). Language-in-use is an indication of social stratification in organizations.

Finally, the communications between a North American manager and his direct report located in the country of Chad were selected as the focus of this research given the economic and political stability in that particular country relative to that of other African countries in which MCC operates. Research has found that the frequency of electronic communications increases with the occurrence of a crisis (Danowski & Edison-Swift, 1985). Also, high levels of uncertainty affect managerial behaviors such as assertiveness and information search (Hannaway, 1985). Thus, the introduction of the new media was "relatively uncontaminated by other forms of social intervention" (Gutek, Bikson, & Mankin, 1984, p. 235).

Importance of This Study

The growing use of alternative communication media, e-mail in particular, necessitates an examination of their impact on organizational arrangements. There has been a significant trend toward the increased use of electronic communications in intra-organizational communications and 'virtual' communications in which the interactants are not physically co-present (Baron, 1998; Perry, 1992; Rogers & Albritton, 1995). "In only three decades, email has grown from a government-initiated, academically-implemented system for sharing research information into an international alternative to long distance phone calls, interoffice memos, and face-to-face encounters" (Baron, 1998, p. 134). In 1993, an estimated five to six billion e-mail messages were sent in North America (Leslie, 1994). Other research estimates that the number of e-mail messages sent in the United States grew from 776 billion in 1994 to 2.6 trillion in 1997 and was projected to grow to 6.6 trillion in 2000 (Gwyne & Dikerson, 1997). In 1994, there were an estimated 30 to 50 million e-mail users, 16 million of whom were North Americans (Rogers & Allbritton, 1995). Some researchers (Kinsley, 1996; Markus, 1994b) have found that e-mail has essentially "replaced more traditional means of communication" (Baron, 1998, p. 134). A Gallop poll indicated that 90 percent of the Fortune 1000 and 50 percent of small businesses used electronic messaging in 1995 (Bachmann, Elfrink, & Vazzana, 1996). Finally, a Canadian Price Waterhouse Coopers study found that electronic mail was the primary reason for accessing the Internet (Walker, 2000).

This analysis forms part of an ongoing and central debate in organizational analysis – the nature of the relationship between technology and organizational structure. This debate has proceeded from several perspectives. The traditional perspective has been that technology determines the organizational arrangements that are possible. This is consistent with the view that the introduction of new communication technology within an organization serves as a catalyst for change in organizational structures (e.g., Dutton, 1999; Mantovani, 1994). Change can take the form of greater or, possibly, even reduced levels of democratization. The other primary perspective in this debate stresses the importance of social forces and discounts the potential role of technology in determining organizational arrangements. A third perspective offers the possibility that organizational members will make choices to their advantage. Giddens (1979)'s structuration theory bridges the gap among these perspectives by drawing attention to the recursive nature of the relationship between structure and technology.

Although the media effects literature is extensive, it tends to consider the effects of computer-mediated communications (CMC) only in relation to face-to-face communications (e.g., Daft & Lengel, 1984, 1986; Daft, Lengel, & Trevino, 1987) and it examines issues of status only in studies of the introduction of group-based software (e.g., group decision support systems, Dubrovsky, Kiesler, & Sethna, 1991; Tan, Wei, Waston, & Walczuch, 1998; nurse-physician interaction in a discussion forum, Fieger & Schmitt, 1979). Also, there is little research that examines potential temporal effects of the use of CMC (Walther, 1992); i.e., changes in rhythms or flows of social interaction in everyday CMC use (Mantovanni, 1994). Media effects research tends to be undertaken in an experimental setting with students as participants. When undertaken in an organizational setting, such research focuses on perceptions of organizational members and/or group decision-making situations. Very little research has examined computer-mediated communications within a manager-employee relationship in a 'natural setting' "where history, routine, norms, asocial relationships, and deeply shared interpretive and behavioral context may play a large role in determining interaction patterns" (Zack & McKenney, 1995, p. 395) (e.g., Barley, 1986; McKenney et al., 1992).

Indeed, most media effects studies tend to compare the relative efficacy of face-to-face and computer-mediated communication, thus assuming that both media are available to organizational members. Although some have argued that written communication can completely substitute for face-to face communications (Tapscott, 1996), written communication, especially technology-mediated communication, is most often used to enhance face-to-face communications, thus increasing overall levels of communication (Dutton, 1995, 1999; Elton, 1985; Monge & Fulk; 1999). Furthermore, according to media richness theory, a lean communication channel such as electronic mail should be used to convey simple, unambiguous information and face-to-face communication (a rich channel) is necessary for the communication of equivocal, ambiguous, and emotionally charged information (Ku, 1996; Walther, 1992). Both Westmyer, DiCioccio, and Rubin (1998) and Perse and Courtwright (1993) found that verbal communications tend to be viewed as being more appropriate for satisfying interpersonal needs such as affection, inclusion and control than written channels. Written communication tends to be treated as a supplement or a 'second-best' substitute for the former.

This research also builds on the media effects literature by examining the manager-employee relationship, a linkage that is central to organizational functioning, as it unfolds over time and space in a natural setting. We tend to know very little about how leadership and the manager-employee relationship play out on a micro level. We know even less about the process of leading at a distance. Very little research exists has examined "actual sequences and structures" (Fairhurst, Rogers, & Sarr, 1987, p. 395) of interactions between managers and employees. The rarity of such research may be due the fact that: (a) such research is costly and time-consuming to undertake; and (b) organizations may be unwilling or unable to participate in such a study given the requirement that actual communications occurring over an extended period of time be used. It may also be the result of a lack of appreciation or awareness of the vital link between social structure and interaction, i.e., a belief "that social structure simply does not penetrate that far down into the details of behaviour...[and that although] society is about the patterned,...interaction is about the idiosyncratic" (Brown & Levinson, 1987, p. 240). This argument ignores the fact that social interaction "is extremely tightly and systematically structured in patterns that are daily replicated by countless individuals" (Brown & Levinson, 1987, p. 240). The present study addresses these deficiencies by examining real time, actual manager-employee interactions on a linguistic level.

In addition to furthering our knowledge of the leadership process, understanding the microstructure of interactions may provide managers and employees with: (a) greater awareness of how both parties participate in the realization of egalitarianism and (b) resources for enhancing egalitarianism in hierarchical communications. This is important given that, "Talk is not cheap. What is said matters" (Ford & Ford, 1995, p. 560). Language indexes, marks, and reflects existing relations of control but is also a means of exerting control and influence (Conrad, 1995; Iedema & Wodak, 1999; Kramarae Schulz, & O'Barr, 1984; McGowan, 1999; Ng & Bradac, 1993; Parker, 1992; Scotton, 1985; Stillar, 1998; Strati, 1998). The nature of the language used in interactions both reflects and affects power relations and, thus, can be viewed as a means of control (Alvesson & Karreman, 1998; Cooper & Burrell, 1988; Gabriel, 1995; Gergen & Whitney, 1996; Kramarae et al., 1984) and, indeed, a substitute for raw power (Pfeffer, 1981), thus making explicit 'command and control' unnecessary and taken for granted (Giles & Coupland, 1991; Moch & Fields; Phillips & Brown, 1993; Wiemann, 1985). Power is tacit and implicit in that it functions in a manner that generally exists "below the conscious level of participants in the speech act" (Nichols, 1984, p. 23).

The use of a particular discourse may serve to maintain established patterns of domination and subordination (Potter & Wetherell, 1987) and "to keep others in 'their places'" (Kramarae et al., 1984 p. 14). It provides people with power, a "differential potential to enable and constrain one another's actions" (Hutchby, 1996, p. 483). Thus, how people talk is an indicator of how they see themselves; it is like an "identity kit...that people adopt.....Members of more powerful groups get equipped with kits that, for many reasons, bring them more of the goods" (Gee, 1990, p. 12-13). Language "enables interactants to say and do some things, and constrains them from saying and doing other things" (Cushman & Kovacic, 1994, p. 275). Thus, it is an instrument of power (Fowler, 1985), a reflection of a tacit consensus regarding participants' relative social status and worth (Kramarae et al., 1984; Lakoff, 1974; Lemke, 1995; Nichols, 1984; Slembrouck, 1998; Trees & Manusov, 1998; Wilson, 1992), and, as such, is not neutral (Foucault, 1969/1999; Lacity & Janson, 1994; Lemke, 1995). Having said this, it is important to note that, although important, language is but <u>one</u> of the ways in which power is enabled. Additionally, there are other aspects of language use in addition to politeness (for example, interruptions) that signal relative power levels.

The preceding discussion offers some insight into the nature of 'power' as it is referenced in this research. The construct of power has been examined in many studies and has been conceptualized in as many ways (see Fincham, 1992 for a discussion of this). Although in many of these studies, the construct of power was not directly defined, some refer to it in terms of characteristics possessed by individuals (e.g., bases of power; French & Raven, 1959; Jackson & King, 1983) and others consider it to be forms of authority, influence, or control (Cuming, 1985; Galang & Ferris, 1997). Still others argue that it can be understood only in the context of a relationship (i.e., relative power; Carper & Litschert, 1983) and through proxies such as social status (e.g., Brass & Burkhardt, 1993; Morand, 1996). The present research adopts the definition of power presented earlier; i.e., power is the "differential potential to enable and constrain one another's actions" (Hutchby, 1996, p. 483). It is reflected in the ability of individuals to choose actions and the nature of the particular choices that are made.

In summary, if "organization is a moral problem" (Golembiewski et al., 1994), then so is the process of organizing. Thus, an aim of this study is to contribute to the awareness of the power of language; i.e., that individuals' sense of self and their relationships are shaped by how they say what they say and how they are addressed in return. As argued by Slembrouck (1998, p. 2), "language users should be able to shape language practices consciously (rather than simply adopting and uncritically subscribing to available modes and formats of communication)." This increased consciousness of language employed by both managers and employees may direct both parties to ways in which they can enhance their relationship (Morand, 1996). Indeed, it has been argued that individuals can "intentionally" accomplish social change by altering their language in use (Rorty, 1989). As argued by Nichols (1984, p. 24), it may:

> give us the possibility of exercising conscious control over these aspects of linguistic behavior and of furthering social changes underway....With awareness can come the potential of withholding consensus on the part of the weak...And on the part of the powerful who are also rational and see beyond themselves, a willingness to participate on terms of greater equality can come with recongnition (sic) of the arbitrariness of all power relationships.

Outline Of This Paper

This study draws on a variety of literatures including those pertaining to media effects, structuration theory, and politeness theory to develop propositions regarding the production, reproduction, and transformation of egalitarian relations in the manager-employee relationship in the context of changing communication media. Although the discussion of this issue is centered on structuration theory, it is examined from several perspectives, each of which offers a relatively parsimonious explanation of the effects of changing technology. First, the agency and social perspectives, which reflect structuration theory's dialectic of control, is discussed. Whereas an agency perspective views structural arrangements as being open for change at the hands of the agent (i.e., agents can direct the outcomes of the introduction of new communication technology), a social perspective emphasizes the persistence of structural arrangements and stresses the relevance of present hierarchical relationships as determinants of future hierarchical relationships.

The technological perspective is reviewed in the discussion of junctural structuring events. The technological perspective considers technology to be a causal force in determining organizational structure. The nature of this effect depends on whether one adopts an optimistic view (technology will enhance democratization) or a pessimistic view (technology will result in the development of a 'super-panopticon' and, hence, reduce levels of democratization). In blending several perspectives, structuration theory represents a more complex explanation of the possible outcomes of the introduction of new technology, one that hinges on whether the new technology represents a junctural structuring event.

This is followed by a section that describes how politeness can serve as a linguistic manifestation of power and, thus, form the basis for the development of specific propositions. This is followed by a description of the methods employed in this study (i.e., the research context, analytical methods, etc.) and a presentation of the results obtained. This paper concludes with a summary of the results and a discussion of their implications for research and practice.

In sum, although there is much supposition in this regard, the predominant view seems to be that computer-mediated communications, in particular, removes constraints such as roles, structure, and procedures (Rice & Love, 1987) and, thus, creates the potential and opportunity to challenge and replace existing structures (Poole & DeSanctis, 1992). Given its ability to reduce communication costs (thereby increasing the frequency of communications) and its unique potential to alter the language in use, the introduction of e-mail, in particular, is expected to serve as a catalyst for change in existing social arrangements as evidenced by the language employed by managers and employees. Language-in-use is expected to change with a shift in communication media, thus creating a new interaction order (Barley, 1986). Following Barley (1986), the latter is expected to correspond with changes in the locus of decision-making that is evident in the manager-employee dyad.

Chapter 2: Theoretical Perspectives

Overview

Research that examines the relationship between technology and structure has employed diverse methodological approaches and measures of technology and has yielded a cacophony of results (see Barley, 1988, for a summary of this literature). A parallel stream of literature has considered the effects of the introduction of information technology on organizational structure (Culnan, 1986; Leavitt & Whisler, 1958). However, there exists a relative lacuna in regards to the potential effects of the introduction of computer-mediated communication within an organization. Although several researchers have argued that communication technology has the potential to alter the nature and quality of hierarchical communications that occurs within an organization (Chesebro & Bonsall, 1989; Sherblom 1988), others have suggested that new communication media are more likely to preserve the existing system of relations (Applegate, 1999; Robins & Webster, 1987; Young, 1987).

Both sets of arguments - whether optimistic or pessimistic - represent technologically deterministic stances and tend to ignore the possibility that aspects of organizational structure such as the distribution of power in hierarchical relationships may simply persist in the face of new technology. The existing social order may be of greater salience in predicting hierarchical relationships than the introduction of technology (Barley, 1988). In other words, although technology makes new modes of communication and new relationships possible (Saunders et al., 1994), the latter do not necessarily occur. This suggests that more than technological change is needed if egalitarianism is wanted. This view, however, may simply represent the 'social' side of the deterministic coin. Neither approach - the 'hard' or 'soft' determinism (Gutek, Bikson, & Mankin, 1984) - provides room for the potential of agency as an impetus of change.

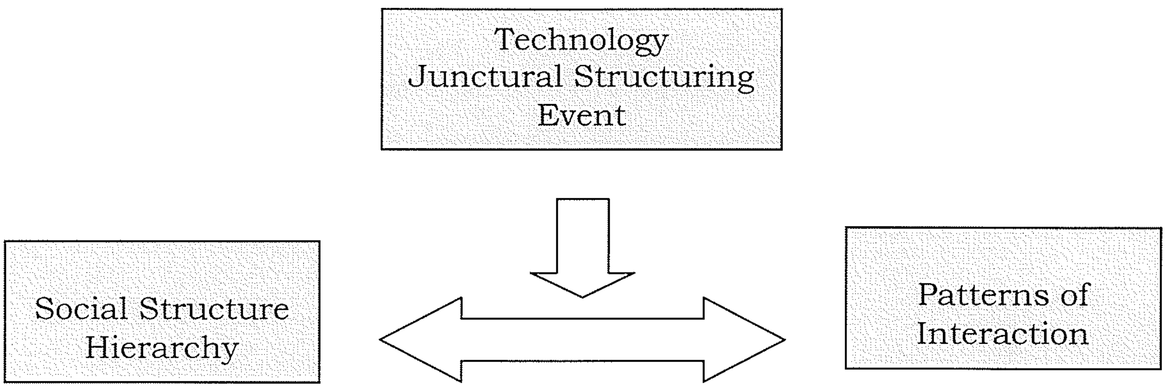
This stream of arguments continues the age-old debate between the primacy of the different forms of determinism and voluntarism. It directs our attention to questions such as: (a) Is human agency relatively unimportant given technological and social constraints? (b) Does communication technology function in the service of the existing organization of work? or (c) Is there room for creativity in how workers make use of new communication technology? In place of the dualism inherent in this voluntarism and determinism debate, Giddens (1987) proposed the existence of a duality of structure in which action and structure are "mutually constituting and constitutive" (Ranson, Hinings, & Greenwood, 1980, p. 1). This structuration perspective adopts a more complex view of how organizations are structured than what is possible with the voluntaristic or deterministic approaches on their own. Structuration theory integrates these apparently competing views into a coherent framework.

A Structuration Perspective

"Structure is both medium and outcome of the reproduction of practices" (Giddens, 1979, p. 5).

Figure 1

A Structuration Perspective



Structuration theory incorporates three central mechanisms: the duality of structure, the dialectic of control, and junctural structuring events (see Figure 1). It suggests a duality of structure in which knowledgeable actors effect change but also work within existing structural arrangements that condition their actions. According to this processual and dynamic theory (Poole & DeSanctis, 1992), knowledgeable and reflexive subjects draw upon existing structural arrangements (rules and resources) in generating new action (Archer, 1982, Boden, 1994). Human agents may 'choose' to reproduce existing structures or social routines or act in a different manner (Cohen, 1989; Giddens, 1984; Poole & DeSanctis, 1992). Thus, change is possible and, indeed, "inherent in every act of social reproduction" (Cohen, 1989, p. 45) but contingent on human action (Kersten, 1987).

In sum, structuration theory recognizes that relations are partially determined by technology, but that individuals "have some agency of choice within the constraints that are imposed by the technology [and are] both enabled and constrained by technical structures, yet these very same structures are the result of previous actions" (Shulman, 1996, p. 365). Although existing structural arrangements tend to evolve incrementally over time, according to structuration theory, a junctural structuring event is required to effect significant change in structural arrangements. The foregoing discussion provides "room" for both the voluntaristic and deterministic perspectives. According to structuration theory, people serve as agents who make choices but they do so within an existing social system, which can serve to constrain the choices that are possible. The introduction of technology would "upset" the existing equilibrium only if sufficiently significant in magnitude to alter the existing social system. The status quo would tend to be characterized by a relatively stable social system in which individual attempts at agency exist but are strongly conditioned by the existing social structure; i.e., a combination of the agency and social perspectives.

Duality of Structure

According to structuration theory, structure serves as a "complex medium of control which is continually produced and re-created in interaction and yet shapes that interaction" (Roberts & Grabowski, 1996, p. 416). Thus, structuring occurs through a duality of structure in which pre-existing and enduring social structures (Kersten, 1987) both shape and constitute practice or action (Giddens, 1979; Kersten, 1987; Sewell, 1992). Structures consist of the rules and resources used in interaction and is "realized in interaction" (Brown & Levinson, 1987, p. 239). Rules and resources are used by agents to guide their actions but are also reaffirmed in their use (Sarason, 1995). Systems represent the "results of the application of structures....[such as] the status hierarchy" (Poole & McPhee, 1983, p. 210). Structures or patterns of interaction are derived from and preserved by the established hierarchy (Giddens, 1979, 1984; Poole & DeSanctis, 1992; Zack & McKenney, 1995).

The Dialectic of Control

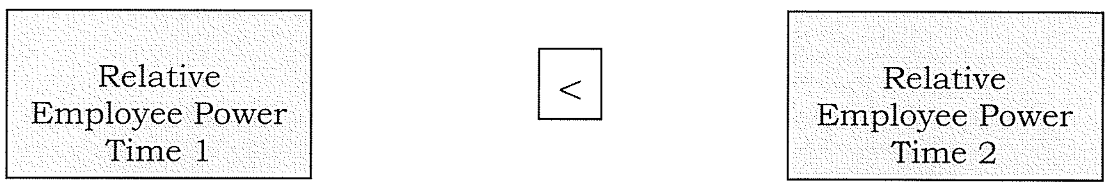
If an asymmetrical distribution of resources among human actors exists, then their interactions will be characterized by inequality (Cohen, 1989). Although actors always retain the capacity to "act otherwise" (Cohen, 1989, p. 152), this capacity may be reduced since an asymmetrical distribution of resources limits opportunities for actors to pursue a wide range of actions. Giddens (1984) argued that actors tend to comply with what they view as 'fixed' or 'real' pre-established social structures in a passive, "dull" (Cohen, 1989, p. 194), or mindless manner because this represents the path of "least resistance" (Cohen, 1989, p. 194).

The existence of this ongoing tension between autonomy and dependence is referred to as the dialectic of control (Giddens, 1984). If a stable dialectic of control persists, it simply perpetuates existing structures of domination as evidenced by an asymmetrical distribution of resources (Cohen, 1989). The dialectic of control is pervasive but can be altered if a shift occurs in the distribution of resources (Cohen, 1989). Indeed, if managers gain access to resources that enhance their scope of control, then they can intervene even more extensively in the day-to-day activities of their employees (Cohen, 1989). The dialectic of control also affects the resources that are available to them and their ability to use these resources to produce additional resources (Burkhardt & Brass, 1990). Thus, resources or power (Pfeffer, 1981b) are self-perpetuating in that those who possess them seek to hold onto them and are in a position to ensure that this occurs. This reinforces and promotes continuity in existing social arrangements. Indeed, Collins (1981, p. 1012) defined authority as a "type of routine in which particular individuals dominate micro-interactions." The theoretical perspectives most closely aligned with the dialectic of control are the agency and social perspectives of change. These will now be discussed.

An Agency Perspective "The relationship between man and society is one of human control, in which society is a derivative of human agency" (Dawe, 1978, p. 375).

Figure 2

An Agency Perspective



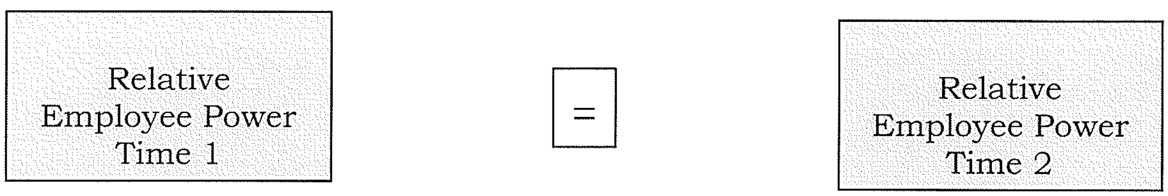
An agency perspective proposes that technology and the existing social structure play a negligible role in generating action and that workers have more control than is normally presumed (Wynne & Otway, 1992). It treats structural properties as being fluid and capable of ongoing transformation and agents as enjoying unlimited freedom in choosing their course of action (Archer, 1982; Ng & Bradac, 1993). This perspective considers workers to be knowledgeable and reflexive in their assessment of their existing conditions and pursuit of action and choices that are consistent with their own interests and agenda (Boden, 1994; Dutton, 1999) (see Figure 2).

According to the agency perspective, even when faced with constraints, workers regularly encounter 'micro-emancipating activities' that contain 'opportunities for liberation,' creativity (Alvesson & Willmott, 1992; Reed, 1998; Strati, 1998), and "linguistic slippage" (Anderson, 1998, p. 574 in Humes, 2000). Thus, the agency perspective would suggest that employees are likely to attempt to reduce the disparity in their power levels in a relatively undifferentiated manner (i.e., the nature of the technology would not be relevant). An indicator that employees are enhancing their relative power would be their adoption of fewer deference-oriented strategies. This perspective emphasizes employee action in a diachronic manner and, as such, differs from the "optimistic view," which considers employee power relative to that of managers in a synchronic fashion. According to the agency perspective, workers may take advantage of the introduction of computer-mediated communication by attempting to enhance their level of power.

A Social Perspective "Structural patterns of interaction become institutionalized over time" (Burkhardt & Brass, 1990, p. 105).

Figure 3

A Social Perspective



A social perspective suggests that although workers can choose from a range of options regarding the nature of the language they use to express themselves (Fairclough, 1995), they tend to rely on tacit, 'naturalized,' 'socially constructed' knowledge regarding how to participate in hierarchical communications. Alternative actions may not be apparent to them (Zack & McKenney, 1995) if they consider hierarchical relationships, "the prototypical relational pattern" (Stohl, 1995, p. 108,119), to be necessary for maintaining order in organizations. As a result, employees may simply perpetuate the status quo (Clair, 1993a, b; Putnam, Phillips, & Chapman, 1996) (see Figure 3). Social norms and stereotypes may become embedded in workers' personal identities in a taken-for-granted manner and become part of their behavioural routines (Postmes et al., 1998; Taijfel, 1978; Turner, 1982, 1987). As such, workers' hierarchical position may constrain the discourse that is available to them (Alvesson & Deetz, 1996; Holtgraves, Srull, & Socall, 1989; McCann & Higgins, 1992) causing an 'orderliness' of interactions in which workers participate in their own subjugation (Knights & Willmott, 1989).

This would be especially evident in a "traditional hierarchical bureaucracy" (Kahn & Kram, 1994, p. 18) in which the "rules of influence" (p. 18) provide predictability and order to interactions, not requiring the negotiation of rules of interaction that may be required in 'new forms.' As argued by Alvesson and Deetz (1996, p. 205), "each person is born into ongoing discourses.... The experience of the world is structured through the ways discourses lead one to attend to the world.... [and] position the person in the world in a particular way prior to the individual having any sense of choice."

According to the social perspective, although there are likely to be minor adjustments and modifications in the relative power of workers and their managers over time, the introduction of communications media is unlikely to significantly alter this pattern. Thus, past communications pre-condition subsequent communications and existing power relations are reproduced and transformed in interactions (Bowles, 1997; Conrad, 1995; Eisenberg & Riley, 1995; Farmer, 1999; Kersten, 1987; Kramarae et al., 1984; Roberts, 1989; Strine, 1987). In other words, the nature of interaction is more a function of social conditions than the communication medium in use (Abel, 1990; DeSanctis & Monge, 1999; Lea & Spears, 1991; Zack & McKenney, 1995). This suggests that power relations are unlikely to be altered as a result of the introduction of new technology (Barley & Tolbert, 1997; Saunders et al., 1994). Technology is more likely to be employed in a manner that echoes or accommodates the existing "relations of power" (Knights & Murray, 1994, p. 91) in an organization rather than serve as a mechanism for social change (Bickson et al., 1987; Blosch & Preece, 2000; Child, 1987; Child & Loveridge, 1990; Danziger, Dutton, Kling, & Kraemer, 1982; Dutton, 1999; Fulk & DeSanctis, 1999; Kling & Zmuidzinas, 1994; Mantovani, 1994; Monge & Fulk, 1999; Saunders et al., 1994). The existing ways of doing things just continue regardless of the medium (Yates, Orlikowski & Okamura, 1999). Since communication technology is implemented within an existing social order (Bloomfield, 1995) or "socio-technical web" (Mantovanni, 1994, p. 3), it retains the pre-existing assumptions about how work should get done and, in particular, how hierarchical interaction should proceed (Bikson, Eveland, & Gutek, 1989; Poole, 1999). Given the foregoing discussion, the social perspective would suggest that, because the meaning of communication technology is socially constructed, the introduction of computer-mediated communication would accommodate the existing power relations between managers and workers.

Several studies support the view that existing communication patterns are retained with the introduction of new communications and information technologies (e.g., Bikson & Eveland, 1990; Bikson et al., 1989). In their survey of 530 office workers from 26 organizations, Gutek, Bikson, and Mankin (1984) concluded that the introduction of office information technology (word processing, data base management, order entry, payroll, etc.) did not significantly alter their task activities, job attitudes, or status within the organization. In her study of technology design and usage, Orlikowski (1992) found that, whereas high levels of agency characterized the design phase of technology introduction, the implementation phase was dominated by pre-existing social structures. Arrow (1997) found that the introduction of computer-mediated communication in groups that had otherwise met on a face-to-face basis caused some slight but temporary fluctuations in member influence structure. After a brief period of adjustment, the group reverted back to its previous influence pattern. Similarly, other research demonstrated that the norms and social conditions of media use are of greater importance in predicting communication patterns than changes in the specific communication media employed (Abel, 1990; Lea & Spears, 1991, Spears & Lea, 1992). In their study, Child and Loveridge (1990) found that existing hierarchical arrangements remained intact after the introduction of new computer-mediated communication systems. Similarly, in their review of the literature, Bonito and Hollingshead (1997) concluded that lower-status group members participated less than higher-status members. Also, lower-status group members were more likely to give in (Schneider & Cook, 1995) or conform (Humphreys & Berger, 1981) to the opinions of higher-status members. In research addressing physician-nurse communications, physicians were found to dominate communications in terms of being addressed by their title, initiating discussions more frequently, offering more suggestions and direction, showing disagreement, and asking for information (Fieger & Schmitt, 1979). Also, Vandenbosch and Ginzberg (1997) found that groupware didn't increase collaboration unless collaboration was already a component of the existing culture. In a student experiment, Weisband, Schneider, and Connolly (1995) found that status affected participation levels more than changes in the media in use. More generally, as illustrated by Milgram's (1974) and Zimbardo's (1973) classic experiments and as concluded by Kahn and Kram (1994, p. 19), "the social structure of situations [drives people to] obey rules of hierarchical authority." Both point to "how powerfully the roles that individuals occupy...shape the relations of authority they create and enact."

Junctural Structuring Events

Structuration occurs through two distinct processes - evolution and revolution (Poole et al., 1992). The primary process of structuration, evolution, involves the continuous reproduction of existing structures. Reproduction, in this case, need not mean replication; rather it involves gradual almost imperceptible changes in structural arrangements that occur over time (Poole et al., 1992). Although both change and stability are possible, stability characterizes most working arrangements given that people need "some degree of organizational routine, order, and steady state to function properly" (Zack & McKenney, 1995, p. 396). As a result, despite their potential for change, social structures tend to have a built-in self-preserving, reproductive bias (Sewell, 1992) that causes agents to be stuck in a rut of routine action (Archer, 1982) by simply drawing on institutionalized patterns of interaction. Forces from outside the system are usually required to push agents out of that rut (Sewell, 1991).

The second process of structuration, revolution, occurs in conjunction with the introduction of junctural structuring events that trigger significant shifts in structural arrangements. Contextual change with 'system disturbing potential' is needed in order to induce a change in the patterning of interactions (Barley & Tolbert, 1997; Burkhardt & Brass, 1990). Without it, individuals are more likely to attempt to integrate a new technology into existing practices (Barley, 1988) and, as such, continue replicating existing structures. This 'exogenous shock' (Barley, 1986) may take the form of new technology or a significant change in the environment or size of the organization (Ranson et al., 1980). The possibility of technology as a junctural structuring event reflects a technological perspective. This perspective will now be discussed.

A Technological Perspective "The computer is the contemporary analog of the clocks and steam engines of the previous six centuries...we will be different people because we live with [technology]" (Bolter, 1984, p. 10).

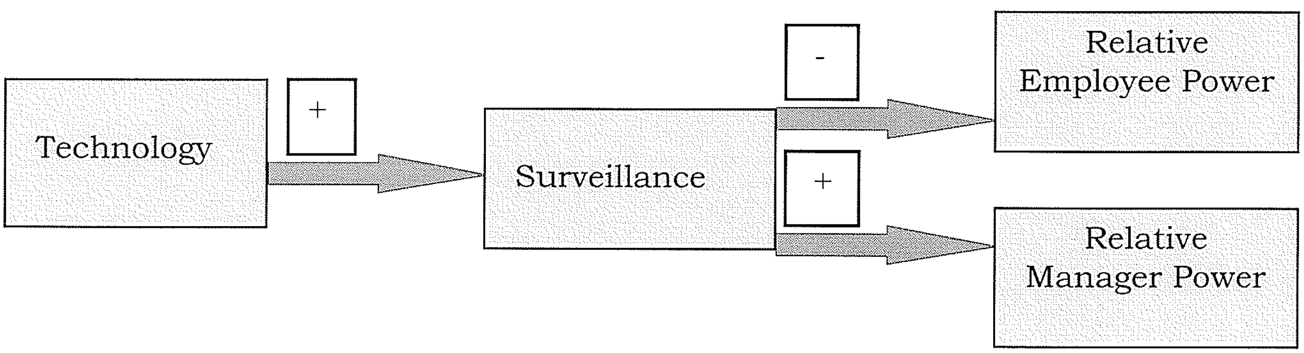
Much of the research regarding computer-mediated communications and group decision support systems has been framed in a technologically deterministic manner (e.g., Fulk & Boyd, 1991; Kiesler, Siegel, & McGuire, 1984; Pinsonneault & Kraemer, 1989; Sproull & Kiesler, 1991; Walther & Burgoon, 1992). This approach posits that technology choice and usage is an environmental force which influences and constrains organizational form (Carter, 1984; Dutton, 1999; Fulk & DeSanctis, 1999; Gerwin, 1981; Harrington, 1991; Huber & McDaniel, 1986; Uber et al, 1979; Mantovani, 1994; Poole & Holmes, 1995). In contrast to the social perspective, a technological perspective views technology as a catalyst of change in organizational functioning (Agervold, 1987; Compton, White, & DeWine, 1991; Culnan & Markus, 1986; Fulk & DeSanctis, 1995; Hulin & Roznowski, 1985; Lemke, 1999; O'Connell, 1995; Yates & Orlikowski, 1992). As argued by Sherblom (1988, p. 51), "the kind of organization that is created is largely determined by the kind of media that is employed."

However, there is some debate regarding the nature of the structural arrangements that may arise. Although the introduction of technology has been associated with increased management control and centralization, it also has the potential to decentralize information and, thus, change how work relationships function (Bloomfield & Coombs, 1992). These represent two distinct views of the potential effects of technology on power relations in the workplace. On the one hand are the pessimists (Hirschheim, 1985) who view technology as simply another means of tightening the panoptic noose around the necks of workers. On the other hand are the optimists (Hirschheim, 1985; Bryant, 1988) who argue that technology democratizes the workplace. Although distinct, both of these views assume that technology plays a direct causal role in the prediction of hierarchical control (Shulman, 1996).

The Pessimistic View "The information revolution will merely reinforce and solidify existing social inequalities" (Robins & Webster, 1987, p. 113).

Figure 4

The Pessimistic View



The pessimism regarding the effects of technology is based on its potential to provide managers with greater oversight of distant operations and, thus, a new (subtle, Spears & Lea, 1994) form of surveillance or remote control (Dutton, 1999; Gillespie & Robins, 1989; Innis, 1951; Robson & Cooper, 1989; Sproull & Kiesler, 1991; Wallace, 1989; Williams, Phillips, & Lum, 1985). Pessimists would argue that technology tends to "fit into an ongoing political system which is centralized and essentially undemocratic...[but giving] the illusion of decentralized power" (Burris, 1986; p. 176). In other words, it may allow organizations to "ignore geography and conduct activities...as though they were local" (Straub & Wetherbe, 1989, p. 12) (see Figure 4). Managers may use technology as a means of enhancing centralized control in a panopticon-like fashion (Beniger, 1990; Blau et al., 1976; Burris, 1986; Crowston & Malone, 1994; Gillespie & Robins, 1989; Malone, 1997; Perrolle, 1991). Foucault (1977) described the panopticon (an invention of Jeremy Bentham) as a correctional institution in which the movements of all the prisoners are visible from a central tower. Because the prisoners don't know if they are actually being watched, over time, they become self-managing. They are prevented from interacting with each other and, thus, become isolated and unable to develop a collective spirit. Spears et al. (1994, p. 440) argue that, in a work context, the fact that workers tend to be "willingly involved in the 'free flow' of information serves, in certain respects, to strengthen rather than undermine the metaphor by further obscuring power relations." Thus, as in a panopticon, employees may willingly (but unknowingly) participate in their own surveillance.

In like manner, the opportunity for almost instantaneous communication afforded by electronic mail may create a form of social panopticism (Finlay, 1987) or a 'superpanopticon' (Gergen & Whitney, 1996) characterized by greater managerial oversight of local operations. Although Handy (1995, p. 46) argued that "trust needs touch," management control in global organizations tends to depend more on trust than day-to-day supervision (Murray & Willmott, 1997) so that such workers function in an autonomous manner (Dutton, 1999). But, e-mail may actually help management tighten control because it makes it easier and quicker for them to communicate directives (Sproull & Kiesler, 1991), shorten the feedback loop (Crowston & Malone, 1994), encourage more frequent reporting (Schwarz & Brock, 1998), and determine if employees are at their work stations (Clegg & Hardy, 1996; Spears et al., 1994). For example, managers may e-mail employees at a time when employees are supposed to be starting work and wait for a reply as a means of determining whether they are at work and, thus, reawakening "memories of the factory 'time-clock'" (Clegg et al., 1996, p. 689). All of these characteristics of e-mail suggest that it might contribute to the development of a panopticon. Akin to a panopticon, "In the workplace of the future, there will be no hiding places, no time out" (Boden, 1994, p. 211). Thus, electronic communications may create new and sophisticated forms of organizational control (Clegg et al., 1996; Lyytinen, 1992) and serve as simply another means of control in organizations (Dutton, 1999).

Pessimists would argue that communication technologies help managers get "local information ...[and enable them to] make decisions that they, otherwise, may have been unwilling to make" (Huber, 1990, p. 56). Thus, this technology provides managers with greater day-to-day access to their employees' working lives and, as such, more information about their performance, which, in turn, can increase the extent of control that they exercise (Allen, 1994; Gandy, 1993). These increases in managerial power and control would be reflected in the nature of the language employed by managers and employees. The pessimistic view would indicate that, due to its inherent qualities (for example, permitting increased centralization of information and control by managers over distant sites), the introduction of computer-mediated communication would result in an erosion of employees' relative power levels.

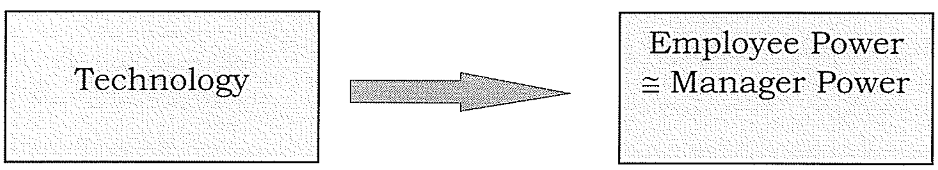
It appears that only one published study has examined the potential for panopticon-like outcomes resulting from the introduction of communication technology. In his historical review of the effects of the introduction of telephones, Brooks (1976) and Pool (1983) found that managers located in headquarter offices used the telephone as a means of increasing control over distant operations. The introduction of the telegraph also resulted in increased centralization of decision-making (Chandler, 1977). Other evidence from American and European organizations indicates that the introduction of computer information systems tended to reinforce existing structures (Bikson, 1987; Kraemer & Dutton, 1979; Laudon, 1974; Robey, 1981). Similarly, Vallas (1988) found that automation reduced autonomy and the complexity of skills required.

As argued by Young (1987, p. 121), "information technology, however advanced, if mediated by a class system, will tend to strengthen and preserve ideological class relations."

The Optimistic View "Many theorists of equality and democracy invest their hopes in technology" (Young, 1987, p. 118). "With the dawning of the new age [comes the destruction of] ...superior-subordinate command-control...[thus making the notion of a hierarchy into a] dinosaur" (Schwarz & Brock, 1998, p. 73).

Figure 5

The Optimistic View



Technology is often viewed as a driver of democracy in society and within organizations (Allen & Morton, 1994; Blanton et al., 1992; Deetz, 1992; Kiesler, 1986; Koch, 2000; Piore, 1994; Rathenau, 1982; Schwarz & Brock, 1998; Sproull & Kiesler, 1991; Taylor & Van Every, 1993). This potential is partially attributed to the ability of computer mediated communication to remove social context cues, thus hiding a member's status, and, consequently, resulting in greater equalization of participation (e.g., Dubrovsky, Kiesler, & Sethna, 1991; Herring, 1993; Kiesler & Sproull, 1992). Computer mediated communication also allows greater access to people and information (Slembrouck, 1998), thus offering the possibility "for more active means to resist and subvert traditional channels of power....[and supporting] upward influence, not just downward managerial control" (Spears & Lea, 1994, p. 435). As such, the introduction of new communications technology is expected to decentralize decision-making (Jonsher, 1994; Tapscott & Caston, 1993; Taylor, 1981) and foster greater collaboration (Hinds & Kiesler, 1995) (see Figure 5). In their study, Mitchell, Crawford, and Madden (1985) found that people expect e-mail to flatten the hierarchy, increase the quantity of information available, and enhance decision-making speed. Optimists (Kaplan, 1990; Toffler, 1980) posit that communication technology will be central in "undermining traditional political categories and oppositions, opening up a site for resistance and renewal" (Spears & Lea, 1994, p. 428). Indeed, Cleveland (1985) argued that the global information society would spawn the twilight of hierarchy and the dawning of democracy. Similarly, the concept of a virtual organization is often associated with the development of a flat, decentralized organizational structure that incorporates "leadership as a shared responsibility among colleagues, not as a superior-subordinate relationship" (Miles & Snow, 1995, p. 13) and lateral communications among workers who may be geographically dispersed (Dutton, 1999). Communication technology is expected to provide workers who are located in distant parts of the world with the global information they need to make decisions that are consistent with overall organizational goals (Fulk & DeSanctis, 1999; Slembrouck, 1998). Thus, the optimistic view predicts that the introduction of new communication technology would be accompanied by an equalization of relative power levels for employees and their managers and suggests that, due to its inherent qualities (for example, hiding social context cues, facilitating improved access to people and information), the introduction of computer-mediated communication will result in increased power for employees.

However, there is little empirical evidence that supports the optimistic view. Although group decision-making experiments indicate that, compared with face-to-face discussion, participation in e-mail-based discussions results in greater equalization of participation (Chidambaram, 1996; Dubrovsky, Kiesler, & Sethna, 1991; Kerr & Hiltz, 1982; McGuire, Kiesler,& Siegel, 1987; Siegel, Dubrovsky, Kiesler, & McGuire, 1986;

Weisband, 1992), this research suffers from several weaknesses. First, these studies tended to measure equality of participation by considering only the relative proportions of members' participation in discussions (using a metric of minutes in a face-to-face conversation or words in a computer-mediated interaction). This approach failed to consider the linguistic structure of the communications and did not provide sufficient evidence for the democratization properties of computer-mediated communications. "What if, when one of the low-status members is speaking, the others do not listen?" (Mantovanni, 1994, p. 49). Also, although some evidence of a positive relationship between the relative proportion of one's contribution to a discussion and one's dominance or power in a group exists (Kirscht, Lodahl, & Haire, 1959), this may be most evident only at very high or very low levels of participation (Walther, 1992). Moreover, the actual influence of the lower-status participants needs to be gauged.

In addition, these laboratory studies relied heavily on the use of ad hoc groups of students working on an artificial problem in which they had no stake. This may have resulted in reduced status effects and may not be an accurate indicator of the persistence of status effects in a natural setting where relationships are long-term and the issues and the consequences are real (Spears et al., 1992). As argued by Spears and Lea (1994, p. 434), "lived power relations are often relatively long lasting, stable, and have material consequences for those involved."

Pre-existing social norms condition participation in computer based group discussions. As argued by Postmes et al. (1998, p. 708), "cyberspace may provide the ideal opportunity to create a new virtual society, but if people fall back on the tried and trusted categories of the old world and actively carry over the constraints of their own everyday identities, this new world will rapidly resemble the old one." Indeed, field research indicates that participants in electronic communications tend to draw more heavily on social contexts and norms for appropriate social behaviour in deciding how to communication. (Spears & Lea, 1992). Relative to individuals who communicate face-to-face, participants in e-mail communications are more likely to draw on the existing social and normative context as a means of interpreting the e-mail messages they receive and structuring the messages they send (DeSanctis & Monge, 1999; Ferrara, Brunner, & Whittlemore, 1990; Spears & Lea, 1992). Similarly, Saunders et al. (1994) found that, over time, one's occupational role became even more salient in determining communication patterns (i.e., patterns became more pronounced). Status differences in member influence of group decisions tend to persist in computer-mediated communications when the identities of members are known to each other (Hollingshead, 1996; Postmes, Spears, & Lea, 1998; Saunders, Robey, & Vaverek, 1994; Spears & Lea, 1992). Likewise, Weisband, Schneider, and Connolly (1995) found that, regardless of the communication medium used, group members who were identified as having higher status were more influential and spoke more than lower status members. Other research has not found equalization effects (Adrianson & Hjelmquist, 1991; Jarvenpaa, Rao, & Huber, 1988; Poole, Holmes, & DeSanctis, 1991; Wilkins, 1991).

Furthermore, other research indicates that the concept of a virtual organization is still just that - a concept. In her survey of 500 managers, Applegate (1994) found that the traditional organizational structure and hierarchy were still in place. She concluded that "the hierarchy is not dead" (Applegate, 1999, p. 34). In her more recent study, Applegate (1999) found that "the shift to an 'empowered,' fast-cycle firm demanded even tighter controls" (p. 50) and retained traditional hierarchical relationships but with fewer management layers. Also, Smeltzer (1992) found no difference in decision quality, communication style, and participant satisfaction when comparing the use of teleconferencing with face-to-face communications. Finally, in their historical analysis of the introduction of technology, Winter and Taylor (1999) concluded that the flexible, decentralized organization typically attributed to the introduction of technology actually existed prior to its introduction and, thus, their association represents “a widely held societal myth” (p. 102).

Technological Change as a Junctural Structuring Event

Structuration theory emphasizes the mutual influence of technology and organizational structure (Barley, 1986; Lea, O'Shea, & Fung, 1995; Markus & Robey, 1988; Zmud, 1990). In this manner, designing organizations and designing technology become the same task (Beniger, 1990; Fulk & DeSanctis, 1995, 1999; Zack & McKenney, 1995). Technological change may serve as a junctural structuring event to the extent that it represents a radical (versus incremental) innovation. An incremental innovation allows workers to gradually adopt the new technologies under existing interaction patterns (Barley, 1988). Technological change can either enhance or destroy existing competencies (Burkhardt & Brass, 1990). If it requires the use of new skills or knowledge, then the introduction of communication technology may present an opportunity to redefine roles and, as such, create discontinuities in the distribution of control (Barley, 1986, 1988; Burkhardt & Brass, 1990; Tushman & Anderson, 1986). Thus, structuration theory suggests that the introduction of computer-mediated communication will influence the power relations between managers and their employees to the extent that it serves as a junctural structuring event.

A structuration framework has been applied in previous studies that have examined the effects of the introduction of technology on power relations (e.g., Barley, 1986). Barley (1986, p. 106) found that new technology, CT scanners, became "social objects whose meanings were defined by the context of their use." Although the introduction of the scanners presented an 'occasion' for change, the technology itself did not predetermine the direction that structuring would take (Markus & Robey, 1988). Although the technology introduced in two hospital radiology departments was identical, its effect on de/centralization (as evidenced in changes in the interaction order) was affected by the pre-existing pattern of relations between radiologists and technologists. Likewise, in their study of the effect of the introduction of new database management and analysis systems in a government agency on social network structure and power, Burkhardt and Brass (1990) found that individuals who were influential prior to the introduction of the new technology retained their influence after implementation. Similarly, Zack and McKenney (1995), in their study of editorial groups of two daily newspapers, found that each group appropriated identical communication technology in a manner that tended to reinforce its existing social structure. Also, both Vandenbosch and Ginzberg (1997) and Orlikowski (1992) found that the use of groupware only increased levels of collaboration when a culture of collaboration already existed. However, in a study of the introduction of computers in five organizations, Gash (1987) found that this introduction was accompanied by successful attempts to reformulate work roles and distribute power.

Changing Communications Media as Junctural Structuring Events

The predictions made by structuration theory regarding the ability of communication technology to 'pry open' existing social arrangements hinge on whether or not the introduction of communications media will place the existing social system into disequilibrium and, thus, serve as a junctural structuring event. In this section, I argue that the introduction of fax and e-mail significantly alter the nature of the communication that is possible. Having argued that this potential exists, I then elaborate on how the existing structural arrangements are likely to change. In other words, in order to support the view that the introduction of a new communications medium serves as a 'frame changing' event, it is necessary to demonstrate that a medium structures communications in a manner that is significantly different from the communications permitted by another medium.

> "Each medium of communications structures and formats experiences differently. The structural or formal features of each medium highlight certain types of stimuli but not others... Channels of communication or media systems are not neutral conduits. Media systems are active determinants of what is perceived or 'what is' (Chesebro, 1989, pp. 7-8).

There are two opposing views regarding the structuring potential of communication technology. Some researchers argue that a change in the form of communications may not be of sufficient magnitude to call into question and/or disrupt the existing, long established patterns of power relations. They argue that communications technologies are not likely to change who communicates with whom and, thus, are likely to be employed in a manner that reinforces existing social arrangements (Zack & McKenney, 1995). Similarly, it has been argued that information technology (including communications technology) can be implemented in a variety of ways and, as such, are more vulnerable to influence from existing social structures than production technology which offers fewer alternatives for implementation (Gutek, Bikson, & Mankin, 1984). In sum, the introduction of communication technology has been regarded as an incremental change not requiring a significantly different skill or knowledge base (Walther, 1992).

However, others argue that communication technologies are especially likely to instigate major changes in the direction of structuration (Fulk & DeSanctis, 1995; Huber, 1990; Lemke, 1999; Lyytinen, 1992; Rice & Bair, 1984; Poole & DeSanctis, 1992). As such, it may "change the psychology and sociology of the communication process itself" (Turoff, 1978, p.10). Each form of technology (including communications technology) carries with it structuring constraints and potential that differentiate it from other forms of technology (for example, some are richer than others) and, thus, influence how communication can occur (Chesebro & Bonsall, 1989; DeSanctis & Poole, 1994; Iedema and Wodak, 1999; Lemke, 1999).

Few studies have been undertaken regarding the use of facsimiles. Indeed, fax tends to be viewed as a "low tech solution ...[serving] transitional needs" (Straub & Wetherbe, 1989, p. 13). In her study of Finnish business people, Louhiala-Salminen (1995) found that faxes were central to their communications and that people were more concerned about conveying their message rather than adhering to grammatical rules. She also found that more concise, informal language that closely resembled speech was used in faxes in comparison with business letters. Relative to couriered letters, faxes permit more frequent and regular communications between two parties. However, the 'per page' cost of transmitting facsimiles is likely to constrain their length, the frequency with which they are sent, and the ability to 'attach' lengthy informational documents. The added cost of using fax versus letters may imply that whatever is being communicated by fax is more urgent (Thornton, 1993). Thus, Grice's (1975) maxim of communicative efficiency is likely to be especially salient in using fax. In other words, communications via fax are likely to be brief and to the point, without much attention paid to social niceties or explaining decisions or requests in detail. If this is the case, then the introduction of facsimiles is likely to represent a shift in the communication practices of managers and employees relative to the use of couriered letters.

Given that e-mail messages represent a unique form of discourse, the transition to e-mail may have implications for control and power. "The words chosen during electronic mail interactions can function to either reduce or increase the psychological distance and social presence, thereby also affecting perceived control of the interaction" (Golden, 2000, p. 20). Unlike Barley's (1986) change in technology, the introduction of e-mail is not expected to be accompanied by significant shifts in terms of who possesses the skills that are critical for success. However, the increased frequency, speed, and ease of communications associated with e-mail (Straub & Wetherbe, 1989) may increase managers' knowledge of distant operations and, as such, provide them with more opportunities for involvement and control in these operations. The asymmetrical distribution of resources accorded to managers and employees would be evident in managerial dominance of the interactions. Thus, the unique features of e-mail (low-cost, high frequency of communications, fast cycle time, distinct language) may serve as a catalyst in the distribution of resources.

Relative to faxes, it appears that the introduction of e-mail is likely to serve as a catalyst for change in structural arrangements given that it enables a form of communication that is significantly different from that found in other forms of written communication. Three characteristics of e-mail are likely to distinguish it from other forms of written communication - its reduced cost structure, the potential for quick turnaround, and the form of discourse it employs. E-mail permits geographically dispersed individuals to communicate more quickly (Bachmann et al., 1996; Culnan & Markus, 1989; Currid, 1992; Eisenberg, 1994; Fulk & DeSanctis, 1995; Fulk &

DeSanctis, 1999; Hiemstra, 1983; Kerr & Hiltz, 1982; Monge & Fulk, 1999; Rice & Bair, 1984; Sproull & Kiesler, 1986, 1991) and more easily at less cost (Fulk & DeSanctis, 1995, 1999; Monge & Fulk, 1999; Rice & Bair, 1984; Rice & Love, 1987; Sproull & Kiesler, 1991). Also, e-mail permits information to be collected more rapidly (Culnan & Markus, 1986; Huber, 1990) and may allow decisions to be made more quickly (Crawford, 1982). "IT makes distance less important in determining where decisions should be made by brining information to decision makers wherever they are....Companies should use IT to bring decisions to where the most important sticky information [difficult to communicate] is located" (Malone, 1997, p. 28). Given that the cost of using e-mail is not determined by the number of transactions carried out, its use tends to increase the frequency of communications that occurs (relative to postal mail and facsimiles and in general), particularly between managers and employees (Bachmann et al., 1996; Culnan & Markus, 1986; Currid, 1992; Eisenberg, 1994; Feldman, 1987; Foster & Flynn, 1984; Hiltz, 1983; Hiltz & Turoff, 1985; Lippitt, Miller, & Halamaj, 1980; Monge & Fulk, 1999; Palme, 1981; Rice & Case, 1983; Sproull & Kiesler, 1986; Tapscott, 1982). For example, in their study on electronic messaging within a marketing department, Lippitt et al. (1980) found that the volume of hierarchical communications increased as a result of the introduction of e-mail. Other research has found an increase in the frequency of upward communication upon the implementation of electronic mail in a software development firm and a university (Conrath & Bair, 1974; Hartman et al., 1991; Rice & Case, 1983). Similarly, other research found an increased volume and frequency of communication with e-mail relative to 'paper alternatives' (Foster & Flynn, 1984; Williams & Wilson, 1997). An increase in the frequency of communication (as measured by an increase in the number of e-mail messages) has been associated with increased decentralization (Harrison, 1985; Krone & Ludlum, 1990), increased trust (Jarvenpaa & Leidner, 1999), improved relationship functioning (Williams & Rice, 1983), and increased relationship satisfaction (Williams & Rice, 1983).

The language employed in e-mail messages is considered to be distinct (Baron, 1998; Cossette, 1998; Kochen, 1978). Indeed, Kochen (1978, p. 22) refers to e-mail as a "new linguistic entity with its own vocabulary, syntax, and pragmatics." Although viewed as unique, the form of discourse employed in e-mail is often placed on a continuum between verbal communication and other forms of written communication (Baron, 1998; Beaman, 1984; Ferrara et al., 1990; DeSanctis & Monge, 1999; Foertsch, 1995; Huff, Sproull & Kiesler, 1989; Wilkins, 1991; Georgakoupoulou & Goutsos, 1997). Depending on the features that are emphasized, there is some disagreement regarding where e-mail falls on this continuum.

Research on the characteristics of speech versus writing (Chafe, 1982, 1985; Georgakopoulou & Goutsos, 1997; Sulzby & Zecker, 1991) suggests that writing is more likely to contain a complex syntax, nominalizations, a more formal tone, passives, hedges, and modals whereas speech is more likely to be colloquial and employ the present tense, actions and agents, first person pronouns (I, we, my), and emphasizers, intensifiers, and repetition. Although, e-mail messages are like letters in that they are asynchronous in nature and text based (Baron, 1998; Huff, Sproull & Kiesler, 1989), for the most part, e-mail language seems to share the characteristics of speech. Like speech, e-mail provides more opportunity and expectation for immediate feedback (Foertsch, 1995; Slembrouck, 1998) and a shared burden of discourse formation (Foertsch, 1995). Also, most e-mail messages are composed quickly and demonstrate reciprocity, turn taking, and interactive dialogism (Georgakopoulou & Goutsos, 1997). They contain more topic shifts and tangential asides, more colloquialisms, and humor. E-mail messages tend to adopt a more friendly (Turner, 1988) and informal tone than printed memos (Ferrara et al., 1990; Slembrouck, 1998; Sproull & Kiesler, 1986;

Turner, 1988) and serve as reminders of "moments in a conversation" (Slembrouck, 1998, p. 5). E-mail messages are also signficantly briefer/shorter than postal mail (Bachmann et al., 1996; Currid, 1992; Eisenberg, 1994; Slembrouck, 1998; Sproull & Kiesler, 1986; Turner, 1988) (cf. Easton, Eickelmann, and Flately, 1994). Although both e-mail and fax are asynchronous and fast (Sproull & Kiesler, 1991), given the features of e-mail (reduced transmission costs, transmission costs not dependent on length of communications, increased frequency of communication, and a unique discourse style), the transition from fax to e-mail is likely to serve as a catalyst for change in existing social arrangements.

The foregoing suggests that the introduction of new communication media is likely to serve as a junctural structuring event. In doing so, it will reduce the influence of the existing social system as a constraint on the power relations between managers and employees. The nature of the power relations evident in hierarchical communications will be a function of what the medium allows; i.e., the particular media in use is germane in determining the nature of the language employed. The power relations that existed prior to the introduction of a new medium will serve as an indicator of the pre-existing social system. For example, communications that occur via couriered letter will serve as the "base point" that can be used to determine if power relations have changed as a result of the introduction of facsimiles.

Politeness as a Linguistic Manifestation of Power

The previous discussions examined the potential for differences in power relations between managers and their employees. These differences tend to be expressed linguistically given that the existing system of hierarchical authority embedded in an organization both shapes and is shaped by the pattern of interactions within that organization (Barley & Tolbert, 1997). The fact that individuals have been assigned roles in a hierarchy influences the language that they use and, as such, it is not possible to have a nondistorted communicative experience when differences in hierarchical position exist (Thomas, 1993). Because interaction occurs within existing social structures, it tends to reflect and reproduce these structures (Conrad, 1995; Cushman & Kovacic, 1994; Fairclough, 1993, 1995; Fowler, 1985; Giles & Coupland, 1991; Goody, 1978; Kessapidu, 1997; O'Barr, 1982; Putnam, Phillips, & Chapman, 1996; Scholes, 1985; Slembrouck, 1998). These consistencies in language use represent orders of discourse (Fairclough, 1993) and are reflected in politeness - how individuals "show consideration for the feelings of others" (Morand, 1991, p. 27). Politeness theory has been widely used as an analytical lens through which to view the linguistic enactment of power. As such, it will be used in the present research as a means of operationalizing the construct of power relations. This section provides elaboration of politeness theory and concludes with a description of how power relations can be operationalized through politeness theory.

Overview of Politeness Theory

Most of the literature that addresses organizational communication in general and business writing in particular assumes that there is a parallel or equivalence between efficient and effective communication and writing (i.e., they are usually viewed as communicating in a clear and direct manner). Business communication textbooks and effective writing guidebooks usually advise readers to speak and write in a manner that is consistent with Grice's (1968 in Lakoff, 1974) maxims of communication. These maxims, whose overall goal is to ensure clarify and efficiency in communications, indicate that efficient communication is: (a) sincere (i.e., truthful and of reasonable quality), (b) informative, (i.e., of reasonable quantity, only what is needed), (c) relevant, and (d) clear (e.g., presented in a reasonable nonambiguous manner). But, these maxims are regularly violated.

Such violations, and the difference between efficient and effective communication, can be accounted for by the rules of politeness (Lakoff, 1974, 1975), which stand in contrast to Grice's maxims. Indeed, politeness is viewed as a deviation from communicative efficiency (Brown & Levinson, 1978). The rules of politeness include: (a) don't impose (i.e., use formality and maintain distance from others and from what is being said), (b) allow the addressee options (i.e., use hesitancy, give the other person a way out), and (c) make the addressee feel good (i.e., act as though the two parties are equal in status). The first two reflect the need that people have for autonomy and are considered to be deference-oriented politeness strategies. The third rule reflects the need that people have for approval and is referred to as a solidarity-oriented politeness strategy, but is effective only when the communicator is of higher status than the addressee (because the lower status person is being "raised" to the level of the higher status person; Brown & Levinson, 1978, 1987).

According to politeness theory, the language that people employ is a reflection of their relative social status or power (Ng & Bradac, 1993). It suggests that managers and workers are likely to employ distinct levels of deference and solidarity given the differences in their relative social power (Brown & Levinson, 1978/1987; Holtgraves, 1992). It predicts that individuals with greater social ranking are more likely to employ solidarity-oriented politeness strategies than those of lower ranking. Although politeness theory predicts that individuals with lower social ranking will use a larger number of politeness strategies (overall), it does not predict that these individuals will employ deference-oriented politeness strategies more often. However, this is implicit in its assumption that employees will be more polite but less solidarity-oriented than managers. The reason for this is that while assuming 'familiarity' is a risky proposition for employees, maintaining social distance is not risky for their managers. In most situations, however, employees are expected to show deference to their managers (Lively, 2000). An employee "must follow the boss's lead in conversation, must not speak out of turn at meetings, must laugh at his boss's jokes while not making jokes of his own that upstage his boss, [and] must not rib the boss for his foibles" (Jackall, 1988, p. 19). In other words, managers can freely use solidarity or deference, but employees are generally confined to a restricted range of lexical strategies – deference (Morand, 1991).

Politeness theory is based on the notion of face - a universal desire to have autonomy and to be approved by others (Brown & Levinson, 1978/87). It represents "the public self-image that every member wants to claim for himself" (Brown & Levinson, 1978, p. 66). The notion of face originated in 4th century B.C. China (Ho, 1975 in Penman, 1994). The starting point for research examining aspects of face was Goffman's (1959, 1971, 1972) seminal work on self-presentation in day-to-day interactions. Goffman's work spawned research in two general areas - social psychology and sociolinguistics (Penman, 1994). The former included research on self-presentation (Baumeister, 1986; Schlenker, 1982) and emotional labour (Hochschild, 1983). The latter included research on politeness (Brown & Levinson, 1978/1987). It is in this latter stream of research that the present research belongs.

Face is always open to being threatened in interactions. For example, even simply saying "Hello" to someone is an imposition (however minimal) because a response is expected. Thus, face is "something that is emotionally invested, and that can be lost, maintained or enhanced and must constantly be attended to in interaction" (Brown & Levinson, 1978, p. 66). In their explication of politeness theory, Brown and Levinson (1978, 1987) focused on the strategies that individuals employ as a means of saving the face of others. A face-threatening act is any communication that threatens the public self-image of another (FTA) (i.e., any act that may impose on others in any way; in particular on their sense of autonomy or self esteem). Being polite means accounting for these two face needs; i.e., "phrasing things in such as (sic) way as to take into consideration the other person's feelings" (Morand, 1996, p. 545).

The original formulation of politeness theory was concerned only with mitigating the threat to others' face in interactions. It indicated that either negative or positive face will be threatened at one time and that only one strategy would be selected (Brown & Levinson, 1978; Lim, 1990; Wilson, Kim, & Meisckke, 1991/1992). However, some acts may involve multiple face threats to one's own and other's face (Baxter, 1984; Craig, Tracy, & Spisak, 1986; Holtgraves, 1992; Penman, 1990; Trees & Manusov, 1998; Wilson, Aleman, & Leatham, 1998; Wilson et al., 1991/1992). For example, "Do more work" communicates disapproval <u>and</u> constrains future behaviour. "Pass the salt," in contrast, does not communicate disapproval. As argued by Craig et al. (1986), strategies may be selected based on a consideration of both parties' face. Additionally, people may use multiple strategies at a time in a hybrid manner (e.g., mainly positive but some negative strategies) (Brown & Levinson, 1987; Craig et al., 1986; Wilson et al., 1998).

The focus of politeness is how things are said rather than what is said. As argued by Sillince (1999, p. 493), communication "is as much about style [how] as it is about substance [what]." Whereas some researchers argue that task characteristics such as the purpose of the discourse and the contextual significance of the task can affect language use (Donohue & Diez, 1985; Hirokawa, Mickey, & Miura, 1991; Kasper, 1990; Levinson, 1991; Novick, 2000), others argue that the nature of the interaction should not vary with the task (Zack & McKenney, 1995). In contrast with message content, how something is said is more likely to be remembered (Holtgraves, 1997), have an effect on others (Holtgraves, 1997), "mediate friction and establish cooperation and rapport" (Morand, 1995, p. 56), and influence the achievement of goals, for example the success of a change initiative (Ford & Ford, 1995). As a means of examining politeness theory's contention that how something is said is relevant rather than what is said, a sample of the documents that represented three topics of distinct levels of importance to the Chad operation was employed in the current study.

Politeness pervades all social life (Morand, 1995; Forgas, 1999) and is a central component in the perception of communication competence (Sriussadaporn-Charoenngam & Jablin, 1999). In terms of overall effectiveness, polite requests result in greater perceived message effectiveness (Goldsmith & MacGeorge, 2000) and greater compliance than impolite requests (Ohbuchi, Chiba, & Fukushima, 1996). Other research has found that directly threatening face resulted in perceptions of reduced interactional fairness, communicative competence, and satisfaction with outcomes, and increased anger (Carson & Cupach, 2000).

Politeness Theory's Predictions

The politeness literature demonstrates rather consistently that social status affects levels of politeness. In particular, this literature indicates that lower status individuals tend to be more polite overall and tend to use more 'deference-oriented' politeness strategies (see Table 2) in contrast with higher status individuals who are more likely to adopt 'solidarity-oriented' politeness strategies (see Table 1) (Morand, 1996). Similarly, in their analysis of samples of requests from diverse groups, Blum-Kulka et al. (1985) found that as communicators' power increased, their directness also increased.

According to politeness theory, because of the costs (in terms of effort and reduced clarity) associated with employing highly polite strategies, interactants will generally not choose strategies that are more polite than required (Brown & Levinson, 1978; Craig et al., 1986; Trees & Manusov, 1998). According to Brown and Gilman (1987), there are three alternative strategies available in undertaking an action. The first strategy is to perform the FTA on record, baldy, and without redressive action (i.e., perform it directly through bluntness and/or imperatives). This approach conforms to Grices' maxims (Brown & Levinson, 1987). It is used when the speaker is more interested in efficiency than in maintaining the other's face (e.g., in an emergency situation) or when the speaker doesn't want to satisfy the other's face (due to the power of the speaker) (Brown & Levinson, 1987).

The second strategy is to perform an FTA on record with redressive action as a means of moderating the effects of the statements. This can be accomplished by using specific politeness strategies. Positive politeness strategies are solidarity-oriented statements aimed at maintaining the other's esteem and thus can be threatened by criticisms, insults, disagreements, etc. (see Table 1). There are three mechanisms for employing positive politeness: (a) claiming common ground; (b) conveying that speaker and other are cooperators; and (c) fulfilling other's want for something and multiple strategies that address these mechanisms. These can be further divided into two general groups: (a) those that claim common ground; and (b) those that employ "casual talk" or linguistic devices that suggest that there isn't a need for formality.

Table 1

Solidarity-Oriented Politeness Strategies (Brown & Levinson, 1987)

Strategy	Example
1. Compliment or show interest. Notice/attend to addressee (interests, wants, needs, goods); notice addressee's faux pas but do not express embarrassment (e.g., make a joke of it — negative politeness would be ignoring it).	Your work on the report so far is interesting; I'll let you work your magic on the rest of it.
2. Exaggerate (interest, approval, sympathy with addressee). Use (a) intensifying modifiers (e.g., fantastic, marvelous, extraordinary, devastating, wonderful, fabulous, delightful, ravishing, divine, appalling, ghastly, outrageous, despicable, revolting, ridiculous); and (b) empathic word particles (such as for sure, really, exactly, absolutely, completely).	Your work is absolutely fabulous.
3. Intensify interest to addressees. (a) Use the present tense to make what you're saying sound interesting; (b) Use directly quoted speech; (c) Exaggerate facts.	Your proposed "Policy on Empowerment" is the best!
4. Use in-group identity markers. Use: (a) address forms, use "tu" to claim solidarity; use nicknames or endearments, or use first name; (b) use in-group language; (c) use jargon, slang, phonological slurring, or colloquialisms; and (d) use contradiction and ellipsis (the latter requires that there exist some shared understanding which remains unspoken).	Anny Bannany, how about finishing the report (nickname)? Gimmi a hand on the report, willya? (phonological slurring) Hey man, let's make tracks with this report (colloquialisms). [Do you] Mind finishing the report (ellipsis)?
5. Seek agreement. (a) Raise safe topics that permit the addressee to agree with speaker; and (b) Repeat what the addressee has said.	So, you said....
6. Presuppose or assert common ground. (a) Employ small talk (this indicates that speaker is not <u>just</u> interested in getting the addressee to do something); (b) Use point-of-view operations: (i) Speak as if you and the addressee shared knowledge and viewpoints; (ii) Use an inclusive 'we' even though you're just talking about the addressee; (iii) Use 'you know' when the addressee is not likely to 'know'; (c) Use presupposition manipulations (e.g., Speak as something	(b) I had a hard time with that situation, didn't I (i)? We're having trouble finishing that report (ii). You know how he is with late reports... (iii). (c) Wouldn't you (or don't you/isn't it?)...

were mutually assumed).	
7. Assert or presuppose your awareness of and concern for addressee's wants	"I know you've got a lot on your plate..."
8. Offer, promise a reciprocal exchange of favours. Claim that you'll help addressee get what they want.	If you finish the report, I'll put in a good word for you.
9. Be optimistic (presumptuous) in expressing your own wants as though they are what addressee wants	So, you'll finish the report this weekend?
10. Include both speaker and addressee in the activity by using the inclusive 'we' or 'us' even though only the speaker or addressee is intended.	Let's work on it (i.e., you). We need to get this report ready (i.e., you).
11. Provide a reason for an action so that it comes across as being reasonable.	Since you led the team, it makes sense that you prepare the report.
12. Give gifts (tangible or intangible) to addressees such as goods, sympathy, caring, understanding, and/or cooperation.	I think that you're doing a great job. Keep up the good work.

Negative or deference-oriented politeness reflects how politeness is typically viewed in Western countries. It is "the heart of respect behaviour [and]... the stuff that typically fills the etiquette books" (Brown & Levinson, 1987, p. 129-130). Deference-oriented politeness is an attempt to maintain another person's autonomy; the latter can be threatened by commands, requests, or even the provision of advice. Deference is enacted through multiple strategies reflecting four mechanisms (see Table 2): (a) don't coerce others; (b) don't presume/assume anything about the other or the other's wants, and beliefs or interests; (c) communicate the speaker's desire to not impose on others; and (d) redress other wants of the hearer as a means of compensating the hearer for a face threat. These categories can be further collapsed into two distinct approaches to communication: (a) formality and (b) hesitancy.

Table 2

Deference-Oriented Politeness Strategies (Brown & Levinson, 1987)

Strategy	Example
Don't coerce other - give other an 'out'; minimize threat; give other an option to not act.	
1. Be indirect by using modal verbs or the subjunctive (e.g., couldn't), words that convey possibility (e.g., possibly, perhaps, by any chance), or by saying 'please.'	Is there any chance that you could possibly work on this report? Can I ask you to finish the report? Could I ask you to finish the report?
2. Be pessimistic regarding asserted statements so that you assume that other is not likely to do something by attaching tag or possibility expressions and/or using hedges.	You couldn't possibly prepare the report for me, could you?
4. Minimize the imposition and the "intrinsic seriousness of the imposition...leaving only [social distance and power]... as possible weighty factors" (Brown & Levinson, 1987, p. 176).	Can I just get you to make a few very quick changes to the report? Can I get just a little more help?
5. Give deference by humbling oneself and 'raises up' other, thus conveying that other is of higher status. This can be accomplished through the use of honorifics such as titles (e.g., Dr.) or address terms such as 'sir', more formal language (e.g., use dine rather than eat).	Sir, would you finish the report? Might I ask you to bring the report to its final status?
Don't presume/assume anything about other, other's wants, and beliefs or interests.	
3. Use hedges to soften potential threat - "a particle, word, or phrase that modifies the degree of membership of a predicate or noun phrase in a set" (Brown & Levinson, 1987, p. 145 (e.g., sort of, regular, true, rather, pretty {sure}, quite, not {technically} correct, {I} suppose, guess, think).	Can I perhaps ask you to finish it?
Communicate speaker's want to not impose on other	
6. Apologize by: (a) acknowledging impingement (e.g., I need to ask you a big favour...); (b) indicating reluctance to impose on other (e.g., I hate to bother you...); (c) Beg forgiveness (e.g., excuse me, but... I'm sorry to bother you...).	I'm sorry to have to say this, but...
7. Impersonalize both parties. This can be accomplished through the use of: (a) agent deletion (e.g., it seems that ...); (b) passive sentence construction (e.g., It is expected that...); (c) indefinites rather than 'I' and 'you' pronouns (e.g., one shouldn't go there...); (d) plural forms of 'you' and 'I' pronouns (vous, we to be inclusive).	Is it possible to get the report completed?
8. Refer to a general rule as an explanation.	The policy statement indicates that you should prepare the report.
9. Nominalize [e.g., rather than say that someone sang (verb) well refer to their singing (noun)]	The completion of the report by the end of the week was one of the organization's

	requirements.
Redress other wants of hearer as a means of compensating hearer for the face threat.	
10. Go on record as incurring a debt or as not indebting other.	I'd be forever grateful if you would agree to write the report.

The third strategy is to do an FTA off-the-record. Doing it very indirectly and ambiguously allows for multiple interpretations. This strategy is being used if there are several viable interpretations and meanings that can be inferred from a statement (Brown & Levinson, 1987, p. 212). This may be accomplished by: (a) using hints or clues (e.g., It's cold in here; I've got such a headache); (b) presupposing a prior event or understatement as a way of making a veiled criticism (e.g., she left the door open again; that's an interesting hair style); (c) overstating as a way of excusing one's own behaviour for not doing or doing something (e.g., I left 20 messages and then gave up...); (d) using tautologies (e.g., life is life) or contradictions (e.g., yes and no); (e) being ironic [saying the opposite of what is meant (e.g., Nice weather, eh?)]; (f) using metaphors (e.g., she's a dead weight) or euphemisms (e.g., domestic engineer); and (g) using rhetorical questions (e.g., How was I to know?). Relative to the previous strategies, this is the lowest risk strategy (in terms of the extent to which it is potentially threatening to the face of others) but it is also the strategy that is least likely to be effective. This is the most polite strategy on a continuum ranging from 1 (least polite) to 3 (most polite). Next on this continuum is negative politeness, followed by positive politeness, and, finally, performing the FTA on-the-record without redressive action.

As an example, if a manager wants an employee to prepare a report by a particular deadline, that manager has several ways to communicate this desire:

I. The manager tells the employee, in no uncertain terms, that the report is to be completed by the deadline. This direct order, involving absolutely no ambiguity, is an example of an "on record bald strategy" which leaves no room for misinterpretation by the employee.

II. The manager acts in a 'chummy' fashion towards the employee by providing compliments or offering rewards in exchange for the completion of the report. These strategies are examples of positive politeness, attempts to build another person's self esteem by showing him/her recognition, appreciation, or solidarity. It reflects a desire to demonstrate respect to others by providing them with support and affirmation.

III. The manager acts in a hesitant and formal fashion towards the employee by saying something such as, "Would it be at all possible for you to have the report completed by the deadline?" This is an example of negative politeness, an attempt to minimize the imposition on someone else's autonomy.

IV. The manager embeds the message that the report must be completed by the deadline in another message, thus making the manager's statement ambiguous and open to multiple interpretations. This is an example of an "off record" strategy.

Research Support for Politeness Theory

Politeness theory is frequently invoked as a means of explaining variation in lexical choice (Albrecht & Hall, 1991; Ambady, Koo, Lee, & Rosenthal, 1996; Caplan & Samter, 1999; Dillard & Kinney, 1994; Dillard, Kinney, & Cruz, 1996; Harris, 1992; Holtgraves & Yang, 1992; Lambert, 1995; Lee, 1993, 1999; Lim & Bowers, 1991; Tata, 1998; Tracy & Baratz, 1993; Trees & Manusov, 1998; Wagoner & Waldron, 1999; Wilson et al., 1998). Politeness theory has been used to study: compliance gaining (Baxter, 1984; Wilson et al., 1998), criticism (Trees & Manusov, 1998), disclosure (Schimanoff, 1987), arguments (O'Keefe & Shepherd, 1987), negotiation (Donahue et al., 1983; Wilson & Putnan, 1990), accounts (McLaughlin, Cody, & O'Hair, 1983), and requests or directives (Craig et al., 1986; Tracy et al., 1984; Wilson et al., 1991/1992). Although numerous researchers have examined elements of politeness theory (Baxter, 1984; Blum-Kulka, Danet, & Gherson, 1985; Levinson, 1982; Shimanoff, 1977; Zimin, 1981), few have examined its predictions regarding hierarchical power or politeness in naturally occurring discourse (Craig et al., 1986; exception: Shimanoff, 1977). Researchers have consistently found that high social status is associated with reduced politeness (Bardovi-Harlig & Hartford, 1993; Blum-Kulka et al., 1985; Holtgraves, 1997; Holtgraves & Yang, 1990, 1992; Leichty & Applegate, 1991) and low social status is associated with increased deference (Berger & Bradac, 1982; Dillard & Burgoon, 1985). Also, people remember the remarks of a higher status person as being more 'direct' in comparison with the same statements made by someone of lower status (Holtgraves, Srull, & Socall, 1989). Similarly, in a study of compliance tactics, managers used more control strategies than their employees and employees, in turn, used more nonconfrontational strategies than the managers in the sample (Putnam & Wilson, 1982 in Cody et al., 1986). In sum, existing research supports the view that social status affects how people talk and, thus, talk "provides cues about their relationships"

(Grimshaw, 1989, p. 15). In examining the relationship between power (operationalized as age) and politeness, Rintel (1981) found some support for the predictions of politeness theory. In their samples of communication from four Shakespearian tragedies, Brown and Gilman (1989) found that, as per politeness theory, politeness increased as power dropped. Similarly, Blum-Kulka et al. (1985) found that indirectness (a negative politeness strategy) was negatively associated with power in Israeli society.

In general, people who are more polite (in the traditional manner; i.e., deference-oriented) are viewed as less credible and less attractive (Erickson et al., 1978 in Holtgraves, 1992). People who tend to use 'deference-oriented' politeness strategies tend to be evaluated in fairly negative terms. For example, people who use hedges and hesitations are evaluated as less competent, authoritative, and attractive (Bradac et al., 1981; McCroskey & Mehrley, 1979; O'Barr, 1982). In contrast, people who use solidarity-oriented strategies such as intensfiers are perceived as having more power (Bradac & Mulack, 1984). Also messages that contain solidarity-oriented politeness are rated more favorably and viewed as being more helpful than messages containing deference-oriented politeness (Caplan & Samter, 1999; Goldsmith, 1994). Fulk and Mani (1986) found that, when supervisory communication was friendly, supportive, and considerate (i.e., employed solidarity-oriented politeness), upward communication was less distorted and more frequent.

Most of the studies that have employed politeness theory as their theoretical and analytical framework have not been undertaken in an organizational setting, thus limiting their potential generalization to the workplace. Of the existing politeness-related studies, the study that was most closely undertaken in an 'organizational' setting was Morand's (1991) experimental study of students who were functioning in superior-subordinate roles. Morand asked students to read a scenario that addressed a workplace situation and then respond to it in the manner that they would likely choose 'in real life' (into a microphone). Morand hypothesized that, because of supervisors' ability to punish and control their employees, employees would be more careful in addressing their supervisors out of fear of being placed in their 'out groups.' He found that students who served as employees used politeness tactics to a significantly greater extent than the supervisors but that the latter were significantly more likely to use the solidarity-oriented forms of politeness than employees. This is consistent with Brown's (1980) work in which a position of inferiority was associated with the use of negative forms of politeness. Morand also hypothesized that members of organizations that value participation and greater egalitarianism among all organizational members would be more likely to be treated in such a manner, without consideration of one's hierarchical position; i.e., employees and supervisors should use politeness tactics in a symmetrical manner. However, Morand found that the existence of egalitarian norms (operationalized as academic major of participants - social work or masters of business administration) did not influence the symmetry of politeness tactic use. Although Morand's study can be more easily generalized to an organizational setting, its reliance on an experimental protocol undertaken with students is not likely to be entirely representative of the day-to-day communications that occur between managers and their employees in an actual organization.

Operationalizations

The preceding section examined how social status influences the extent of deference and solidarity that is evident in the nature of the language that individuals employ and, as such, provided a means of operationalizing the distribution of power in hierarchical relationships. It is necessary to note that, given that only higher status persons have the "right" to initiate solidarity strategies, the following operationalizations are not in parallel form. In particular, politeness theory offers the following gauges:

(a) Low levels of employee power are evident in any one or more of the following:

(i) the frequent use of deference strategies;

(ii) the use of a restricted range of linguistic strategies (i.e., a reliance on deference strategies as indicated by deference strategies forming a high proportion of the politeness strategies used by employees).

(b) High levels of managerial power are evident in any one or more of the following:

(i) the frequent use of solidarity strategies;

(ii) the use of multiple linguistic strategies given that managers can freely use solidarity or deference (i.e., as indicated by the use of both solidarity and deference strategies).

(c) An equalization of power levels between two individuals is indicated by a lack of significant differences in the number of solidarity strategies they employ within a time period (i.e., symmetry).

(d) An asymmetry of power levels between two individuals is indicated by significant differences in the number of solidarity strategies they employ within a time period.

(e) An increase in employee power relative to that of their managers is indicated by a significant reduction in the number of 'deference-oriented' politeness strategies that employees use from one time period to another.

(f) A reduction in employee power relative to that of their managers is indicated by a significant increase in the number of 'deference-oriented' politeness strategies that employees use from one time period to another.

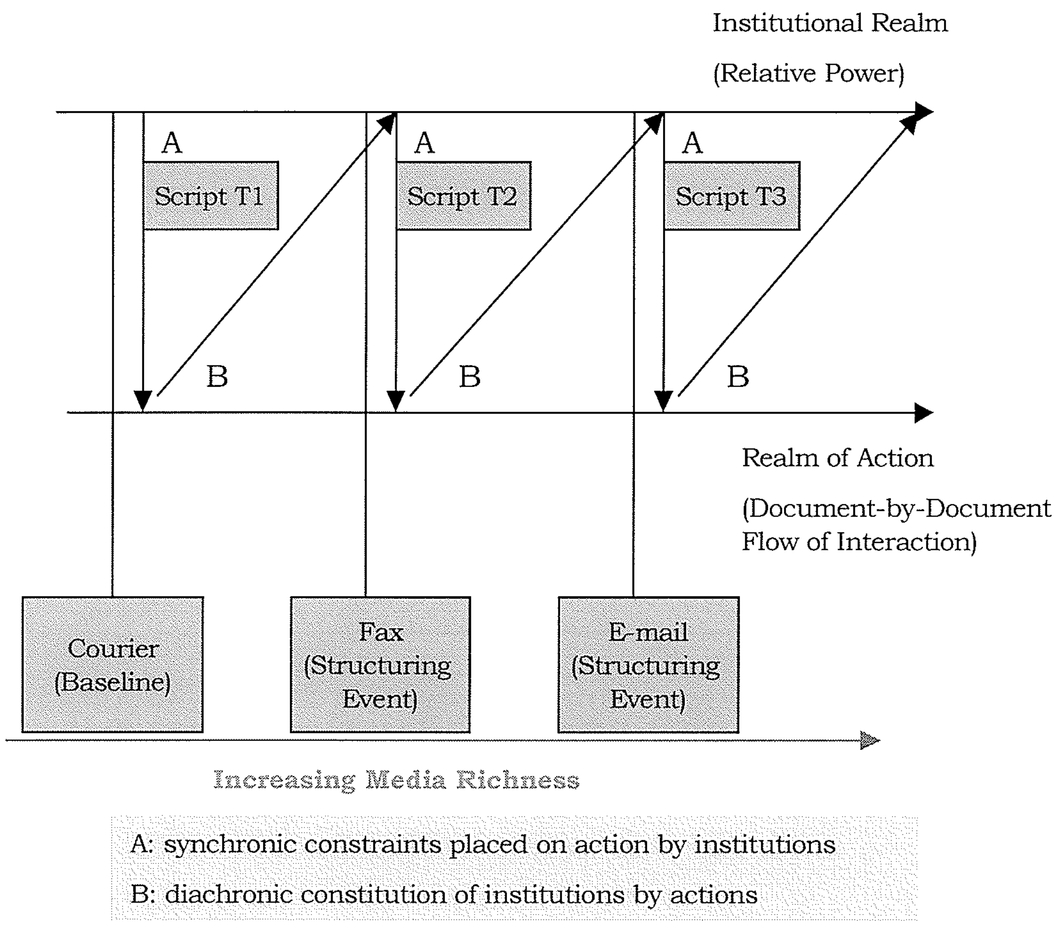
Propositions

There exists a dialectic relationship between structure and action within organizations (see Figure 6). Structure (institution), as represented by the existing system of hierarchical authority embedded in an organization, both shapes and is shaped by the orderliness of interactions that occur over time within that organization (Barley & Tolbert, 1997). This orderliness of interactions is instantiated in individual action represented by language in use that, in turn, forms the basis for patterned regularity. Over time, the latter becomes institutionalized (Ranson, Hinings, & Greenwood, 1980) and has normative force in future interactions. This system exists in a state of general equilibrium unless acted upon by a junctural structuring event (Barley & Tolbert, 1997).

Figure 6

Dialectic Relationship Between Structure and Action

(Adapted from Barley & Tolbert, 1997)



The potential for 'individual action' to shape interactions is reflected in the agency perspective, which proposes that the introduction of new communication media would be accompanied by an increase in employee power as evidenced in a reduction in employee deference-oriented politeness. In contrast, the patterned interactions that have normative force in future interactions reflect the social perspective. This perspective suggests that the introduction of a new communication medium would not be accompanied by significant changes in the level of employee power. Rather, the social perspective would predict a lack of significant differences between media in the number of deference strategies used by employees and the number of solidarity strategies used by managers. However, given that there is some support for the possibility of the introduction of communication technology serving as a junctural structuring event, it is necessary to focus on the predictions offered by the technological perspectives. Also, it is important to note that, in the absence of research that has examined the combined effects of all the factors under consideration in this study over time, the specific nature of this effect is necessarily undecided. Thus, two alternative propositions are presented:

According to the pessimistic view:

P1a: The introduction of new communication media will be accompanied by a reduction in employee power as evidenced by: (i) an increase in employee deference-oriented politeness and (ii) the use of a restricted range of linguistic strategies by employees.

P1b: The introduction of new communication media will be accompanied by an increase in managerial power as evidenced by: (i) an increase in solidarity-oriented politeness on the part of managers and (ii) the use of multiple linguistic strategies by managers.

According to the optimistic view:

P2: The introduction of new communication media will be accompanied by an equalization of power levels as evidenced by generally equivalent levels of solidarity strategies employed by managers and employees when communicating via the new medium.

Finally, it is possible that all of the perspectives (technological and social determinism and agency) need to be understood together in order to develop a satisfactory explanatory framework for the phenomena under study given that the process of change is relatively complex. This possibility should be considered.

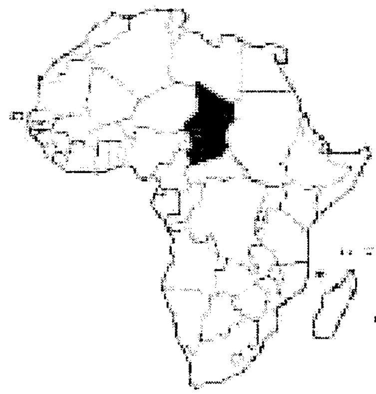
Chapter 3: Methods

Research Setting

As indicated in the Introduction, the setting for this research is the Chad operation of the Mennonite Central Committee (MCC). Chad is a landlocked, developing country located in north central Saharan Africa, south of Libya, north of the Central African Republic, and northeast of Nigeria (see figures 7 and 8). Chad's population is approximately nine million people, 50 percent of whom are Muslim with the remaining 50 percent consisting of Christians (25 percent) and individuals who adhere to indigenous beliefs (25 percent). Given that about one out of 10 infants die at birth, the life expectancy of approximately 50 years of age, and the literacy rate of 48 percent, it is not surprising that Chad ranked 155th out of 162 countries on a Human Development Index. Chad has a low per capita income with approximately 40 percent of its economy based on agricultural production, especially cotton, textiles, and meatpacking. Chad was a French colony until 1960 at which point it suffered approximately three decades of unrest including invasions from Libya. Its northern area is still heavily mined and considered to be a high-risk area for travel. Chad currently has a republican style of government whose focus is economic development and dealing with oil developments in the South, both of which have caused tensions.

Figure 7

Chad's Location Within Africa



http://www.dfait-maeci.gc.ca/africa /chad_country_profile-en.asp

Figure 8

Map of Chad

http://home.golden.net/~psweber/tchad2.htm

MCC began their involvement in Chad in 1973 in response to a widespread drought and famine. In 1976, their focus shifted to developing water resources and carrying out a variety of agricultural projects. The country experienced a civil war in 1980 (during which time MCC workers were evacuated to other countries where they assisted Chadian refugees). Upon their return to Chad in 1982, MCC workers have provided service in five primary areas: well building, agricultural development, education, community development, and health education. Up to 1985 when it signed its own agreement with the Chadian government, MCC worked under the overall 'authority' of EMEK (the European Mennonite Evangelism Committee) and the local sponsorship of the "Mission Evangelique Unie" (MEU). MCC has maintained a close association with MEU and a variety of other religious organizations. MCC functions as a Non-Governmental Organization (NGO) within Chad, needing to seek the approval of the government, specifically the Ministere de Secrétaire Permanent des ONG (SPONG), for proposed programs and hiring decisions.

Although SPONG would prefer that NGOs make capital investments in Chad and various church organizations tend to seek monetary assistance from MCC, MCC's focus is the provision of expertise, facilitation, and, more generally, "soft" forms of assistance with a focus on developing personal relationships with Chadians at a community level. In a letter to SPONG, the MCC country representative described MCC's role in the following manner:

> Notre contribution en tant qu'étrangers est d'encourager et d'aider les gens a voir en sois-memes le potentiel de changer leur propre vie avec les élements qui sont déjà sur place.... Pour comprendre (méme si imparfaitement) la situation d'un villageois, il faut vivre avec lui, travailler avec lui, boire du thé avec lui, avant meme de pouvoir travailler ensemble pour la solution d'un probléme.

[Translation: Our role is to help people realize their own potential and take charge of their lives with the resources that they already have. We realize that before we can even hope to work together with Chadians to solve problems, we need to join them in their lives by living with them, working with them, and drinking tea with them.]

MCC Chad works closely with a network of Chadian organizations that have their own health, social, and education development projects. Although they co-ordinate their activities with several Chadian denominations such as l'Assemblee Chretienne au Tchad (ACT), les Assemblees Evangeliques au Tchad (AET), l'Eglise Evangelique au Tchad (EET), and l'Eglise Fraternelle Lutherienne (EFL), their primary interaction is with the ecumenical organization of l'Entente des Eglises et Missions Evangeliques (EEMET) and its divisions, Co-ordination des Actions d'Education de Developpement Economique, Social et Culturel (CAEDSCE) and l'Ecole Superieur de Theologie Evangelique Shalom (ESTES).

MCC's activities have been centred in four primary locations: Djimtilo (CB), Bitkine (Guera), Mongo, and N'Djaména (the capital city of Chad). MCC's primary focus has been addressing water issues in a multitude of villages (40+) in central Chad. This is accomplished by: (a) facilitating arrangements for the development of garden and village wells and micro-dams; and (2) training local people to engage in water security measures (to ensure that their water supply is clean, disinfected, and maintained). In Bitkine and Djimtilo, MCC's focus has been building and installing wells or water pumps and pursuing community health initiatives such as offering nutrition sensitization and training village women to assist in the birth and care of children. In Mongo, in addition to addressing water issues, MCC has been involved in 'appropriate technology' and education. MCCers (as the workers are known) have also undertaken initiatives involving planting trees, planting living fences, and instructing farmers in dry land gardening techniques. MCCers have also provided support for non-violence and human rights groups, particularly the Chadian Association for Non-Violence (ATNV), in southern Chad.

MCC Chad's overall focus is to develop and train groups of villagers to become self-sufficient teams in the areas of well development and health. During times of famine and drought, MCCers have co-ordinated their efforts with CAEDESCE (a church relief agency in Chad) to obtain grain supplies that could be used for farming. MCC also assisted with the development of 'libraries' or 'reading rooms' in Bitkine, Mongo, and N'Djamena that contain a variety of francophone reading materials. The more recent addition to MCC's mandate was the employment of a couple that is working with Entente, MCC's national church partner, to promote peace initiatives and train church members and villagers in mediating conflict situations, for example, between farmers and the military or herders.

In Chad, MCC's water or appropriate technologist positions are generally filled by agricultural engineers. These have tended to be married men whose wives become engaged in offering education or health facilitation services. Employment levels have remained fairly steady ranging from approximately 8 to 10 expatriates. For example, in 1990, the Chad operation consisted of 8 expatriates; in 1998, the Chad operation consisted of 9 expatriates. Locals are also employed as a means of facilitating the interactions of MCCers with villagers. In addition, the position of administrative assistant in N'Djaména has been filled by a Chadian (Levy) for over a decade. MCC Chad also participates in the SALT program in which North American youth (generally recent high school graduates) live and work with local families as an immersion experience. In return, Chadians participate in an exchange program as part of MCC's International Visitor Exchange Program (IVEP). ENTENTE and other church organizations are involved in approving SALT candidates and nominating and selecting IVEP candidates.

Data Collection and Sampling

As per Saunders et al. (1994), this study is designed in the form of recurrent one group experimentation. The data collection in the present study is archival in nature and, thus, is unobtrusive, removing any possibility of response bias. As a means of finding communications between the Africa Desk manager and the Chad country representative using the three media, it was necessary to include correspondence dating back to 1988 in the data set.

A review of the correspondence provided a rough estimate of the number of documents likely to be contained in the final sub-sample. This review indicated that there were approximately 500 documents contained in the MCC archives for the study period. About 20 percent of these documents were either generated from or addressed to individuals who did not occupy the role of country representative or director (Africa Desk). For example, these included letters written to MCC by other agencies (donor agencies, other Mennonite agencies, or Chad church organizations). These were excluded from this study. The remaining 418 documents represented the correspondence between the Chad country representative and the director (Africa Desk) (see Table 3). Paired-sample t-tests indicated that there were no significant differences in the mean levels of overall correspondence per year given the medium in use (Couriered documents=12.27, Faxes=15.27, E-mails=10.46). Further analyses (also using paired-sample t-tests) indicated that the mean levels of employee-generated correspondence did not vary significantly with the medium in use. This was also the case for managers. These results suggest that the medium of communication did not affect the frequency of communication; a finding that is contrary to the 'panopticon' thesis.

As can be expected, there were some personnel changes during this 11-year period. First, there was a change in country representatives in the spring of 1992 and another change in the summer of 1994 with a three-month interim period in which the administrative assistant (Levy) served as the acting country representative. In the summer of 1996, the existing Director (Africa Desk) retired and was replaced by the individual who was the Chad country representative from 1992 to 1994. In the summer of 1998, the term of the Chad country representative ended. Levy, again, served as an interim acting country representative until early 1999 when the position was filled. ANOVAs indicated that there were no significant differences in politeness levels resulting from personnel changes.

Table 3

Correspondence Between the Chad Country Representative

and the Director (Africa Desk) from 1989 to 1999

	Courier		Fax		E-mail		Total
	From AD	From Chad	From AD	From Chad	From AD	From Chad	
1989	6	10	0	2	0	0	18
1990	16	20	1	6	0	0	43
1991	9	13	8	7	0	0	37
1992	1	22	16	13	0	0	52
1993	5	6	24	28	0	0	63
1994	5	4	10	13	0	0	32
1995	9	5	12	24	2	5	57
1996	3	1	2	2	17	26	51
1997	0	0	0	0	12	11	23
1998	0	0	0	0	18	5	23
1999	0	0	0	0	16	3	19
Total	54	81	73	95	65	50	418
	Total Courier: 135		Total Fax: 168		Total E-mail: 115		

As a means of examining politeness theory's contention that how something is said is relevant rather than what is said, a sample of documents that represented three topics of distinct levels of importance was identified. These topics included: (a) communications regarding 'vehicles' (assumed to represent a low risk or mundane topic); (b) communications regarding the Country Representative's, and hence MCC's, relationship with the many governmental and nongovernmental agencies working within Chad (assumed to be a highly contentious issue); and (c) communications regarding the role of Levy, the administrative assistant, in the organization (an issue representing middle-of-the-road importance). The choice of these particular issues is based on the fact that they vary in terms of their import to the operation. Also, the director of the Africa Desk and the country representative have discussed them on an ongoing basis through the use of the three media. Although personnel matters, travel arrangements, and the transfer of funds were also consistently discussed throughout the study period, a review of the correspondence revealed that the country representative addressed these issues primarily with the personnel office, the Africa Desk's administrative assistant, and financial services soon after the introduction of the fax machine. This sampling approach yielded an average of 26 documents per year that addressed the topics under consideration. However, there was some overlap, which suggests that a complete set of correspondence addressing the issues would be contained in 20 documents per year or approximately 200 documents (or 440 pages).

Photocopies of all archival documents pertaining to Chad were obtained from the MCC Archives in Akron, Pennsylvania, scanned into WordPad, and corrected for scanning errors. These documents, combined with the e-mail databases provided by the Africa Desk located in Winnipeg, Canada, resulted in a complete set of written communications that was undertaken in relation to the MCC Chad operations. Each document was then closely examined and only those in which the correspondents were the Africa Desk and the Country Representative and any of the three topics were discussed were retained for further analysis. The remaining subset of documents was then coded.

Data Coding Process

The data were coded through the use of Atlas.ti for media, writer, topic, purpose of communication (e.g., approvals), number of words contained within the text pertaining to a particular purpose (e.g., everything that is said in relation to a particular request), and politeness strategies including deference and solidarity oriented strategies. The first step in this process involved identifying the words to be coded as reflecting solidarity-oriented and deference-oriented politeness. This was accomplished by referencing prior studies that examined politeness in language such as those of Brown and Gilman (1960), Brown and Levinson (1987), Blum-Kulka, Danet, and Gherson (1985), and, especially, Morand (1996).

Also, the correspondence was reviewed in its entirety five times as a means of identifying the pertinent words employed by the managers and their employees while discussing interorganizational relationships, vehicles, and the administrative assistant. This resulted in a lengthy list of codes, particularly in relation to the agencies with which the country representative must co-ordinate his activities.

The next step in this process involved coding the correspondence. This was done by, using the terminology of Atlas.ti, creating free codes for each of these pertinent language elements. Atlas.ti's auto coding feature was then used to code each of these language elements. For example, Atlas.ti searched for the word "guess" and then coded its presence in a particular text.

Given the likelihood that the auto coding process resulted in errors (for example, not taking into account the context in which a particular language element presented itself) and given the need to directly code the statements that were made in the French language, the documents were reviewed in a series of successive rounds to ensure that they were coded appropriately. This 'checking' was undertaken in two ways: (a) each quotation for a particular code was reviewed in a systematic manner; and (b) each document was reviewed to determine if there were any language elements that were improperly coded or that were not coded but should have been. Finally, Atlas.ti's query function was employed to create super codes such as "All couriered documents created by employees." The results were then exported into SPSS. All the remaining analyses were undertaken in SPSS.

Nature of the Data Set

As indicated in Table 4 and depicted in Figure 9, the final data set consists of 202 documents including 78 couriered documents, 58 faxes, and 66 e-mails. There were significant differences in the frequency of document types given the year in which they were produced (Chi-square = 245.07 (22), p=.000). Table 5 identifies the source of the documents in addition to the topic under discussion and the medium in use. Table 6 identifies the topics discussed in each year. These tables indicate that managers and employees have discussed all three topics using all three media with the majority of the communications being on the topic of interorganizational relationships. This is not surprising given that this is the most challenging issue that the country representative handles. All the topics were discussed in each year with the exception of vehicles, which was not discussed in two years. Although there is no particular pattern discernable in the frequency with which a particular topic was discussed, the number of communications for all topics began to decline in 1995.

Table 4

Year by Media Crosstabulation

		MEDIA			
		Cour.	Fax	E-mail	Total
	1988	1			1
	1989	15	1		16
	1990	18	2		20
	1991	10			10
	1992	9	15		24
	1993	12	13		25
	1994	7	12		19
	1995	6	15	5	26
	1996			23	23
	1997			16	16
	1998			10	10
	1999			12	12
Total		78	58	66	202

Figure 9

Frequency of Document Type Given Year (1989 – 1999)

Table 5

Source by Topic by Media Crosstabulation

		MEDIA			
		Courier	Fax	E-mail	Total
Employee	Vehicles	9	4	5	18
	Interorganizational Relations	27	24	26	77
	Levy	8	9	9	26
Total		44	37	40	121
Manager	Vehicles	2	1	5	8
	Interorganizational Relations	30	15	12	57
	Levy	2	5	9	16
Total		34	21	26	81

Table 6

Year by Topic Crosstabulation

	Vehicles	Interorganizational Relations	Levy	Total
1988		1		1
1989	2	14		16
1990	6	12	2	20
1991	1	8	1	10
1992	2	15	7	24
1993		23	2	25
1994	2	8	9	19
1995	5	16	5	26
1996	3	15	5	23
1997	3	12	1	16
1998	1	4	5	10
1999	1	6	5	12
Total	26	134	42	202

In addition to examining the topic and source of the documents as well as the medium in which they were developed and transmitted, it is helpful to understand some of their basic properties. As is evident in Table 7, there were significant differences among the media in terms of the mean number of words in a document [$F=6.58$ (2,199), $p=.000$], the average length of the words that were employed [$F=3.41$ (2,199), $p=.04$], the number of sentences [$F=4.62$ (2, 199), $p=.01$], and the number of words per sentence [$F=13.90$ (2, 199), $p=.000$). In all cases, there were significant differences in the properties of e-mails in relation to faxes. Relative to the latter, e-mails tended to have more words ($p=.001$), longer words ($p=.085$), more sentences ($p=.007$), and more words per sentence ($p=.001$). The conciseness of the fax as a medium of communication is consistent with the findings of Louhiala-Salminen (1995). However, the results stand in contrast to those of Bachmann et al. (1996) who found more words in e-mails than in postal mail. Although differences between couriered documents and faxes could also be observed in the same direction, significant differences existed only in regard to the length of words employed ($p=.04$) and the number of words per sentence ($p=.000$).

Further analyses indicated that with one exception [greater word length for employees relative to managers when using e-mail; $F=7.64$ (1,64), $p=.01$], there were no significant differences in the properties of the documents produced by managers and their employees. For example, managers and employees used an equivalent number of words when communicating by fax. The foregoing represent the “traditional” measures of equalization as identified in the media effects literature (e.g., Dubrovsky et al., 1991) and, as such, support an interpretation that participation in this sample of written communications was evenly distributed between managers and employees.

Table 7

Basic Properties of the Documents

SOURCE			Mean	Std. Deviation
Employees	WORDS	Courier	440.52	311.42
		Fax	204.62	166.44
		E-mail	531.17	593.97
		Total	398.36	419.32
	WRDLNGTH	Courier	4.86	.51
		Fax	4.76	.49
		E-mail	4.97	.16
		Total	4.87	.43
	SENTENCE	Courier	75.55	53.29
		Fax	43.03	30.74
		E-mail	99.80	120.44
		Total	73.62	80.83
	WRD_SNTC	Courier	5.61	1.50
		Fax	4.51	.69
		E-mail	5.30	.97
		Total	5.17	1.21
Managers	WORDS	Courier	354.53	354.82
		Fax	324.86	417.43
		E-mail	568.50	760.01
		Total	415.52	536.04
	WRDLNGTH	Courier	4.97	.17
		Fax	4.71	.46
		E-mail	4.77	.43
		Total	4.84	.37
	SENTENCE	Courier	73.38	83.66
		Fax	65.00	85.64
		E-mail	99.88	139.34
		Total	79.72	104.85
	WRD_SNTC	Courier	5.50	.83
		Fax	4.76	.83
		E-mail	5.23	1.21
		Total	5.22	1.00

Chapter 4: Results

Preliminary Analyses

Unit of Analysis Consistent with existing politeness research (e.g., Brown & Levinson, 1987; Morand, 1996), the document is the unit of analysis employed in the present research. This permits the examination of the number of deference strategies employed in couriered documents, for example, relative to the deference levels in faxes and e-mails. It allows us to ask, for example, if an employee is more deferential when communicating by fax versus e-mail. Thus, it is important to consider politeness levels in relation to "opportunities to communicate" (i.e., documents). This is also consistent with Yin's (1989) argument that the units of analysis that are employed should mirror those that have been used by others. Given that politeness involves the use of strategies that cause it to be a deviation from communicative efficiency, it is inherently more "wordy." For example, instead of saying, "I insist that you allow us to hire an interim administrative assistant," an individual who is being polite would express this same idea but through the use of multiple strategies (and hence sentences and words). As such the number of words and sentences employed are expected to be highly correlated with deference and solidarity levels. One-tailed correlation analyses indicated that levels of deference and solidarity are extremely highly correlated with the number of sentences employed (.80 and .62, respectively, $p=.01$) and the number of words employed (.88 and .68, respectively, $p=.01$). These results suggest that document length and politeness are naturally "bound up with each other" and, as such, to use another unit of analysis such as the sentence would confound the results.

Topic Effects Although no specific propositions were identified regarding the potential influence of the topic under discussion on levels of politeness, some preliminary analyses were undertaken as a way of ruling out any such effects. A factorial ANOVA indicated that there were no significant differences in the levels of overall politeness, deference, or solidarity given the nature of the topic under discussion. In other words, communications dealing with the topic of vehicles were as polite as communications dealing with interorganizational relationships and Levy. Also, as is evident in Table 8, all three media were employed to discuss all three topics. The use of particular media seemed to coincide with their availability rather than being a reflection of the nature of the topic under discussion. These results suggest that it is not necessary to control for topic in examining the propositions.

Table 8

Frequency of Topic Discussed Given Media Type

(Percentage of Documents Addressing a Particular Topic Using the Noted Medium)

	Vehicles	Interorganizational	Levy	Total
Couriered	11	57	10	78
Documents	(42.3%)	(42.5%)	(23.8%)	(38.6%)
Facsimiles	5	39	14	58
	(19.2%)	(29.1%)	(33.3%)	(28.7%)
E-mail	10	38	18	66
	(38.5%)	(28.4%)	(42.9%)	(32.7%)
Total	26	134	42	202
	(100%)	(100%)	(100%)	(100%)

Chi-square = .16.

Social Status Effects According to politeness theory, the relative social status of individuals influences their level of politeness (deference and solidarity) in communicating with each other. In contrast to politeness theory, in the current study, employees did not use more politeness strategies than their managers (see Table 9). In general, managers appeared to be more polite than employees. Also, employees used fewer deference strategies than their managers. This is not entirely unexpected given that, although employees are expected to demonstrate higher levels of deference towards their managers than the reverse (hence the overall higher levels of politeness expected), politeness theory also indicates that higher status individuals are "at liberty" to use whatever forms of politeness that they choose to use. As such, they may choose to display high levels of deference (or not). In summary, synchronic measures of politeness indicated that managers appeared to have higher overall levels of politeness than their employees. This stands in contrast to the results found by several researchers (Holtgraves, 1997; Morand, 1991). Also, in contrast to Dillard et al. (1985), employees were less deferential than their managers.

Politeness theory also indicates that only higher status persons have the "right" to initiate solidarity strategies (strategies that display collegiality with others) and that employees may employ such strategies but at much lower levels and only in response to solidarity shown by their higher status managers. In support of politeness theory, managers used more solidarity strategies than their employees ($F=4.13$ $(1,200)$, $p=.04$), especially Common Ground strategies ($F=5.64$ $(1,200)$, $p=.02$). Thus, consistent with existing research (e.g., Morand, 1991), managers employed higher levels of solidarity-oriented politeness than did their employees. It is important to note that these results do not reflect potential differences in language use given particular media – that is at the heart of the following analyses.

Table 9

Social Status Effects – Overall Levels of Politeness

		Mean	Std. Deviation
Overall Politeness	Employee	12.6	13.33
	Manager	15.7	16.90
	Total	13.8	14.90
Deference	Employee	8.83	9.55
	Manager	10.4	12.41
	Total	9.45	10.79
Deference - Hesitancy	Employee	5.81	6.54
	Manager	6.54	8.01
	Total	6.10	7.15
Deference - Formality	Employee	3.02	4.08
	Manager	3.84	5.24
	Total	3.35	4.59
Solidarity	Employee	3.74	4.65
	Manager	5.31	6.34
	Total	4.37	5.43
Solidarity - Common Ground	Employee	1.79	2.91
	Manager	3.04	4.58
	Total	2.29	3.71
Solidarity - Casual Talk	Employee	1.96	2.74
	Manager	2.27	2.84
	Total	2.08	2.77

<u>P1: The Technological Perspective – The Pessimistic View</u> - This proposition predicted that the introduction of communication media would be accompanied by an increase in deference-oriented politeness on the part of employees and the use of a restricted range of linguistic strategies by employees. In contrast with P1a(i), the level of deference used by employees, specifically formality, declined significantly upon the introduction of facsimiles relative to their levels in couriered documents (see Table 10). This result is the reverse of what was expected. Employees' usage of hesitancy declined upon the introduction of facsimiles but not significantly. Although there was an increase in employee deference levels (both forms) upon the introduction of e-mails (relative to facsimiles), these differences were not significant. Given the foregoing, P1a(i) is not supported. P1a(ii) predicted that employees would use a restricted range of linguistic strategies. As indicated in Table 11, the results indicate that employees continue their heavy reliance on deference, particularly hesitancy, when communicating. This provides support for P1a(ii).

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Table 10

Mean (Standard Deviation) Levels of Employee Deference and Managerial Solidarity Per Document

	Courier	Fax	E-mail
Employees			
Overall Deference	11.39 (9.28)[a]	5.54 (5.28)[a]	9.05 (11.94)
Deference – Hesitancy	7.23 (6.36)[b]	4.03 (4.36)[b]	5.90 (8.02)
Deference - Formality	4.16 (4.68)[c]	1.51 (1.76)[c]	3.15 (4.54)
Managers			
Overall Solidarity	5.06 (4.95)	3.38 (3.49)	7.19 (8.93)
Solidarity – Common Ground	3.06 (3.75)	1.33 (1.91)[d]	4.38 (6.44)[d]
Solidarity – Casual Talk	1.94 (2.27)	2.00 (2.32)	2.92 (3.74)

Note: Mean values of cells with matching superscripts a, c, and d are different at $p<.05$. Mean values of cells with matching superscript b are nearly significantly different at $p = .07$.

Table 11

Range of Linguistic Strategies Used by Employees as a Percentage of Overall Politeness

	Courier	Fax	E-mail
Deference	69.03	72.26	69.88
Hesitancy	43.82	54.02	45.56
Formality	25.21	20.24	24.32
Solidarity	30.97	25.74	30.12
Common Ground	14.85	13.81	13.51
Casual Talk	16.12	11.53	16.99

P1b proposed that the introduction of new media would be accompanied by an increase in managerial power as evidenced by an increase in solidarity by managers and their use of multiple linguistic strategies. As indicated in Table 10, overall levels of solidarity usage by managers dropped upon the introduction of fax and increased upon the introduction of e-mail but not significantly. However, their levels of Common Ground solidarity increased significantly upon the introduction of e-mail. This provides some support for P1b(i). However, as indicated in Table 12, managers seemed to use a restricted range of linguistic strategies as evidenced by the large percentage of deference strategies employed. This stands in contrast to P1b(ii).

Table 12

Range of Linguistic Strategies Used by Managers as a Percentage of Overall Politeness

	Courier	Fax	E-mail
Deference	64.96	66.37	67.14
Hesitancy	46.47	42.69	37.25
Formality	18.56	23.68	29.89
Solidarity	35.04	33.63	32.86
Common Ground	21.19	13.23	20.02
Casual Talk	13.43	19.90	13.35

P2: The Technological Perspective – The Optimistic View - According to this proposition, the introduction of new communication media should be accompanied by generally equivalent levels of solidarity strategies employed by managers and employees when communicating via the new medium. Contrary to this expectation, there were significant differences in managerial and employee politeness levels (see Table 13). When using fax, managers employed more solidarity strategies than employees, specifically, casual talk. When using e-mail, managers employed more solidarity strategies, especially common ground. The foregoing does not support P2.

Table 13

Mean (Standard Deviation) Levels of Solidarity Per Document

	Courier	Fax	E-mail
Overall Solidarity			
Employees	5.11 (5.36)	1.92 (2.29)[a]	3.90 (4.98)[b]
Managers	5.06 (4.95)	3.38 (3.49)[a]	7.19 (8.93)[b]
Solidarity – Common Ground			
Employees	2.45 (3.66)	1.03 (1.86)	1.75 (2.65)[c]
Managers	3.06 (3.75)	1.33 (1.91)	4.38 (6.44)[c]
Solidarity – Casual Talk			
Employees	2.66 (2.83)	.86 (.82)[d]	2.20 (3.44)
Managers	1.94 (2.27)	2.00 (2.32)[d]	2.92 (3.74)

Note: Mean values of cells with matching superscripts are different at $p<.05$.

In summary, the technological perspective did not seem to provide an adequate explanation for the effects of the introduction of new communication media on the distribution of power in hierarchical relationships. Given the foregoing, the data were examined from the agency and social perspectives. The agency perspective predicted that employees would reduce their levels of deference-oriented politeness upon the introduction of new media as a means of adjusting their power levels relative to that of their managers. Analyses indicate that the level of deference [$F=3.97$ (2,118), $p=.02$] used by employees, specifically formality [$F=4.51$ (2,118), $p=.01$], declined significantly upon the introduction of facsimiles relative to their equivalent levels in couriered documents (see Table 10). Employees' usage of hesitancy [$F=2.47$ (2,118), $p=.08$]

declined upon the introduction of facsimiles but not significantly. Although the levels of all forms of deference used by employees increased upon the introduction of e-mail, these differences were not statistically significant. In summary, this perspective was not fully supported given that the introduction of e-mail was not accompanied by declines in any form of deference on the part of employees and levels of employee hesitancy did not significantly decline upon the introduction of facsimiles. This perspective was partially supported with respect to reduced levels of formality with the introduction of facsimiles.

The social perspective posited that the preexisting social arrangements would influence politeness levels to the extent that the introduction of new communication media would not result in significant changes in the levels of deference and solidarity strategies employed by employees and managers respectively. In general, mean levels of politeness [$F=5.69$ (2,199), $p=.001$], deference [$F=4.53$ (2,199), $p=.01$], hesitancy [$F=3.21$ (2,199), $p=.04$], formality [$F=5.50$ (2,199), $p=.001$], solidarity [$F=5.29$ (2,199), $p=.01$], common ground [$F=4.02$ (2,199), $p=.02$], and casual talk [$F=3.59$ (2,199), $p=.03$] all varied significantly depending on the communication medium in use. The overall pattern seemed to be that e-mail and couriered documents had relatively similar levels of politeness (although the former was higher) especially in contrast with fax communications, which exhibited relatively low levels of politeness.

Further analyses indicated that there was a decline in overall politeness levels for both managers and employees when they communicated by fax rather than by couriered document. This was followed by an increase in politeness upon the adoption of e-mail. In general, this increase was lower than the original levels (i.e., in couriered documents) for employees but higher than the original levels for managers.
The communication medium influenced the extent to which managers adopted strategies that were polite [$F=3.18$ (2,78), $p=.05$], deferential [$F=2.73$ (2,78), $p=.07$],

formal [F=5.69 (2,78), p=.01], and common ground-oriented [F=2.68 (2,78), p=.08]. Although there were no significant differences in the extent to which managers employed any of these strategies upon the introduction of facsimiles relative to couriered documents, they used higher mean levels of politeness (p=.04), deference (p=.06), formality (p=.02), and common ground (.06) in e-mails than in faxes. The transition from facsimiles to e-mail did not significantly influence managerial levels of hesitancy, casual talk, or overall solidarity.

The medium in use also influenced the extent to which employees used strategies that were polite [F=4.95 (2,118), p=.01], deferential [F=3.97 (2,118), p=.02], formal [F=4.51 (2,118), p=.01], solidarity-oriented [F=5.10 (2,118), p=.01], or casual talk-oriented [F=4.84 (2,118), p=.01]. In particular, employees used higher mean levels of all of these strategies in couriered documents than in faxes (all significant at .01). The levels of hesitancy and common ground strategies used by employees in faxes were not significantly different from those used in couriered documents. In addition, there were no significant differences in the mean levels of any of the forms of politeness for employee facsimiles and e-mails.

The preceding discussion indicates that the data provide mixed support for the social perspective. The supportive evidence is reflected in: (a) the lack of significant differences in the mean levels of <u>all</u> the politeness strategies upon the introduction of facsimiles relative to couriered documents for managers and upon the introduction of e-mail relative to facsimiles for employees; (b) the lack of significant differences in the mean levels of hesitancy, casual talk, and overall solidarity for managers during transition from facsimiles to e-mail; and (c) the lack of significant differences in the mean levels of hesitancy and common ground used by employees in faxes relative to couriered documents. However, there were a number of significant differences in politeness levels as previously noted.

In summary (see Table 14), there are several patterns evident in the results: (a) the introduction of facsimiles appeared to influence employee communications in the direction of increased employee power; (b) the introduction of facsimiles did not seem to influence managerial communications although there did seem to be nonsignificant reductions in their levels of politeness; and (c) the introduction of electronic communication did not significantly influence employee communications although there were nonsignificant increases in their levels of politeness.

Table 14
Summary of Results for Traditional Perspectives

	Transition from Courier to Fax	**Transition from Fax to E-mail**
Technological Perspective – Pessimistic View H1a: New media → reduced employee power		
(i) increase in employee deference	Not supported. The opposite occurred; i.e., employee formality declined significantly.	Not supported but in the right direction. Employee hesitancy increased but not significantly.
(ii) restricted range used by employees	Supported. Reliance on deference (72% of politeness), particularly hesitancy.	Supported. Continued reliance on deference (70% of politeness), particularly hesitancy. Increasingly restricted range is evident.
Technological Perspective – Pessimistic View H1b: New media → increased managerial power		
(i) increase in managerial solidarity-usage	Not supported. Solidarity usage by managers dropped upon the introduction of fax but not significantly.	Some support. Solidarity usage by managers increased upon the introduction of e-mail but not significantly. However, Common Ground solidarity increased significantly upon the introduction of e-mail.
(ii) managerial use of multiple linguistic strategies	Not supported. Restricted range of linguistic strategies evident.	Some support. There appears to be more "balancing" in the types of deference employed.
Technological Perspective – Optimistic View		
H2: generally equivalent levels of managerial and employee solidarity	Not supported. Significant differences in managerial and employee solidarity levels. When using fax, managers employed more solidarity strategies than employees, specifically, casual talk.	Not supported. Significant differences in managerial and employee solidarity levels. When using e-mail, managers employed more solidarity strategies, especially common ground.
Social Perspective		
No significant in employee deference level and managerial solidarity level.	Partially Supported. No change for managers but reduced employee deference levels.	Partially Supported. No change for employees but increased managerial common ground solidarity levels.
Agency Perspective		
Reduced employee deference levels.	Partially Supported. Employee formality declined significantly; hesitancy declined but not significantly.	Not Supported. Employee deference increased but not significantly.

Post-Hoc Analyses

Supplementary analyses that identified the frequency of various indicators of hierarchical control given various media were undertaken. These analyses (following Barley, 1986) provide an additional indicator that corroborates the findings that were undertaken through the examination of politeness levels. Table 15 presents the percentage of documents of a particular type in which the indicators were present (e.g., In 11.8% of couriered documents, managers were providing approval for employees to take action). In general, the results are mixed. Although there were no variations in the frequency with which managers provided approval given the different media, differences existed in the frequency with which they provided advice to their employees (Chi-square=5.17, p=.075). Initial high frequencies that were evident in courier communications stood in contrast to lower levels in e-mails and much lower levels in faxes. The frequency with which employees sought advice followed this general pattern; i.e., there appeared to be a temporary dip in how frequently employees sought advice when using fax that rose when they employed e-mail. Also, managers provided information to their employees much more frequently by fax than by any other medium (Chi-square=8.87, p=.01). This pattern was not evident when employees were seeking information. Finally, employees did not inform their managers of decisions they had made locally as frequently when they used faxes or e-mails rather than couriered documents (Chi-square=8.11, p=.02).

Table 15

Percentage of Hierarchical Control Given Medium

(Frequency of Indicators in Documents of a Particular Medium)

	Courier	Fax	E-mail	Total
Manager Provides Approval	11.8%	19.1%	12.3%	13.6%
	(4)	(4)	(3)	(11)
Manager Provides Advice	79.4%	47.6%	65.4%	66.7%
	(27)	(10)	(17)	(54)
Manager Provides Information	14.7%	61.9%	23.1%	29.6%
	(5)	(13)	(6)	(24)
Employee Seeks Approval	18.2%	10.8%	12.5%	10.7%
	(8)	(4)	(1)	(13)
Employee Seeks Advice	27.3%	29.7%	42.5%	33.1%
	(12)	(11)	(17)	(40)
Employee Seeks Information	2.3%	5.4%	5%	4.1%
	(1)	(2)	(2)	(5)
Employee Informs Manager of Decision	68.2%	32.4%	32.5%	45.5%
	(30)	(12)	(13)	(55)

Table 16

Proportion of Indicators Given Medium

	Courier	Fax	E-mail
Manager Provides Approval/ Employee Seeks Approval	.65	1.77	4.92
Manager Provides Advice/ Employee Seeks Advice	2.91	1.54	1.54
Manager Provides Information/ Employee Seeks Information	6.39	11.46	4.62

Table 16 indicates that, as new communication media were being introduced, managers were providing approval and permission for employee actions in greater proportions than what employees were actually seeking. In other words, they were attempting to retain or perhaps even build their level of control. A review of these documents indicated that managers responded to every employee request for approval but sometimes also provided approval (i.e., authorization for employee action) when none was requested. This would occur, for example, when an employee would describe a situation in an "fyi" manner to the manager but the manager would reply with, "I give you permission to…." This suggests that managers were attempting to retain some control over distant operations. Managers were also providing unsolicited advice (i.e., more advice than was sought). However, the extent to which they were doing this dropped upon the introduction of fax and remained at that level when e-mail was introduced. This drop in an "informal" form of control stands in contrast to the increases in the “formal” control mechanism of providing approval. Finally, managers were providing much more information than employees were seeking. The extent to which they were providing information increased dramatically with the introduction of fax but then, with the introduction of e-mail, dropped to levels lower than what existed in couriered documents. Taken together, these results suggest that: (a) managers tended to provide more approval, advice, and information than was solicited from their employees; and (b) there existed fluctuations between centralization and decentralization of information and decision-making. In summary, with each new medium, managers attempted to retain control.

Textual Analyses

The previous analyses indicate that, although the individual perspectives contribute to our understanding, they do not appear to provide a coherent and complete explanatory framework for the phenomena under study. This suggests that all three perspectives may need to be understood together in order to identify: (a) the presence of scripts or cohesive patterns of interaction and (b) how these patterns changed over time. These results are presented in Figure 10.

T1 – Couriered Documents High levels of politeness, particularly deference using hesitance, characterized employee communications by couriered documents at Time 1. Employees tended to use couriered documents to ask for advice, provide information, and ask for their managers' approval. An example of this is a couriered letter that was sent to the Africa Desk on August 25th, 1989 regarding the need to purchase a vehicle. This letter included a formal greeting and closing and multiple examples of deference. It is reproduced below (with numerous sentences eliminated for the sake of brevity) with instances of deference (formality and hesitance) underlined:

Document #3 – 89aug25courier – Author: Country Representative

On August 17 we sent you a FAX in which we informed you of the theft of our Peugeot 404 pick-up truck.... If I'm not mistaken, Paul talked about MCC Nigeria having lost 4 vehicles to theft already....Enclosed you will find a very "official" looking copy of the Nigerian police report!

Up to this point the 404 had not been heavily used, but it was nonetheless quite useful.... We were hoping to use it as one of the vehicles that would transport the music team to the Guera early next year. As we look at the personnel picture for this next year, we may end up with an appropriate technologist (single, couple or family) which will likely need to do some traveling as a part of their work. We were thinking that if we can replace *the 404 with something that would allow us to have a vehicle available (at least part time) for that position. We would also like to be a bit less dependant on MAF whenever possible.*

As you can see, we are trying to make a case for requesting another vehicle. Part of the reason for bringing it up so soon is that, if you will note in our 3rd quarter budget comparison, we should be underspent by aprox. $40.000 this year. If we are able to fill our personnel openings this coming year, and if budgets are not allowed to increase, then there will most likely not be sufficient funding for a vehicle in the 1990 FY. We have been thinking in terms of some kind of four wheel drive.... A 4WD would allow me to do more trips by land, and the vehicles could also be shared depending on the needs...If we are buying another vehicle anyway, we are not as inclined to buy a 2 wheel drive which would be less versitile and not that much cheaper... At any rate, one can always make due without that vehicle by taking other measures, especially if it only benefits us in N'Djamena. However, if it will allow more possibilities with our AT position, worker vacations, less dependancy on MAF etc, then I think it should be given serious consideration. Just for your information, Air Tchad has not been flying to Mongo for almost a year now...

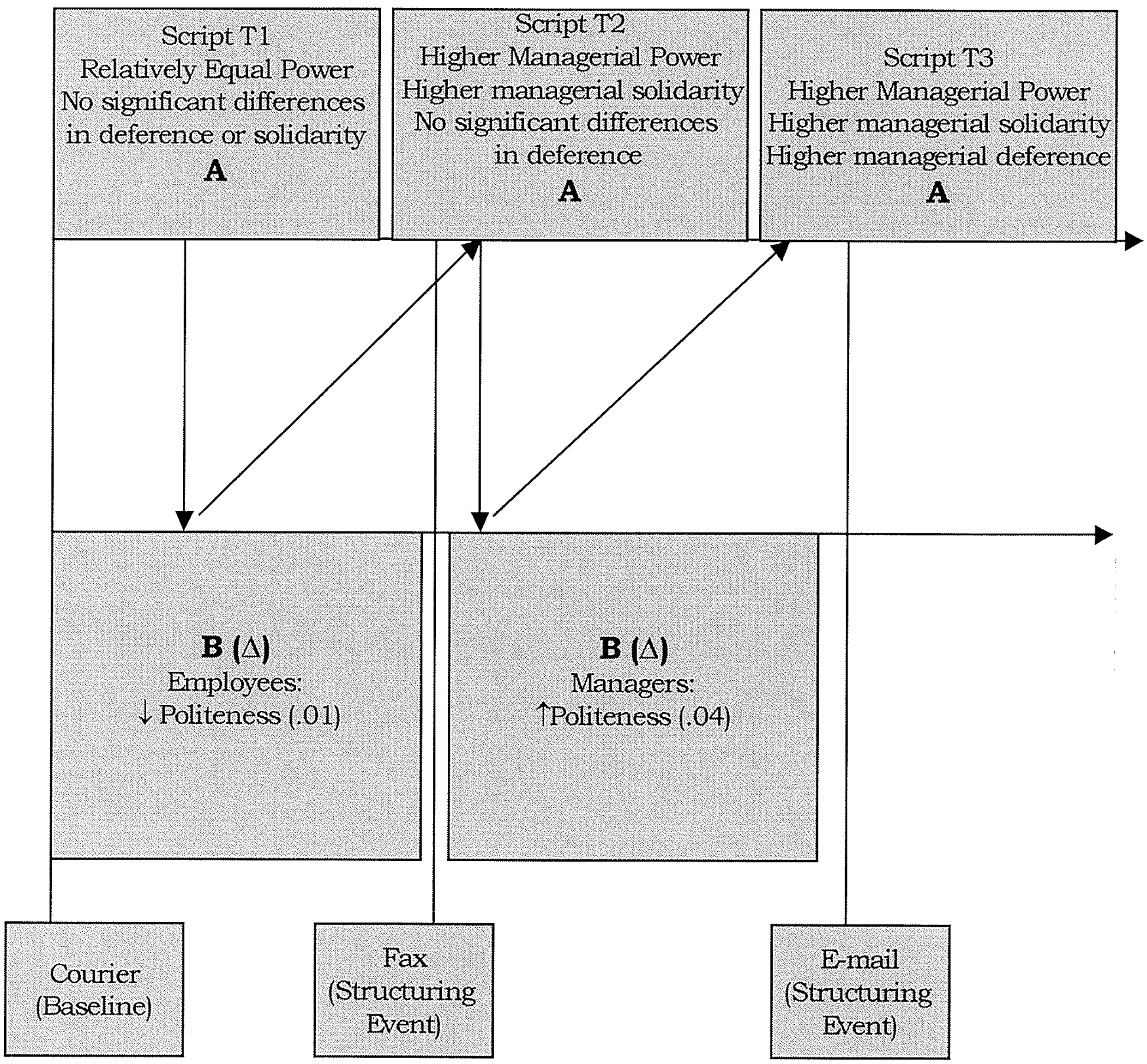
Hopefully the above gives you some idea of our thinking re replacing the 404. We are requesting your approval/ disapproval of a vehicle purchase and also your advice in light of what has been said. If we are thinking in terms of using this years budget (should your advice be positive), then we would be happy for your soonest reply so that can look into the options further, including whether or not we can get duty exemption.

We look forward to your response.

In contrast to their employees, managers employed somewhat lower levels of politeness in couriered documents. They tended to use more solidarity-oriented politeness in which Common Ground with employees was expressed. Managers used couriered documents to provide advice and support in response to information provided by employees. The foregoing is consistent with the predictions of politeness theory (i.e., that employees are more likely to be deferential in comparison with managers who are more likely to employ solidarity-oriented politeness). However, none of these differences were significant at .05. In other words, there was relative symmetry evident in the power levels of employees and managers at T1 (couriered documents). There was also symmetry in the purposes of the documents in that employees were seeking and receiving advice and approval and they were providing information and receiving feedback on this information in return.

Figure 10

Summary of Dialectic Relationship



A: synchronic constraints placed on action by institutions

B: diachronic constitution of institutions by actions

T2 - Faxes The transition to faxes was marked primarily by changes in the way that employees communicated with their managers (rather than the reverse). In other words, the adoption of the facsimile as a means of communication served as a junctural structuring event for employees but not managers. The changes were characterized by significant reductions in levels of employee politeness, deference, hesitancy, formality, common ground solidarity, and casual talk, all of which suggest that employees were giving primacy to efficient communication rather than saving the face of others. However, it must be noted that there is still evidence of deference and solidarity in the fax communications. The reduction in deference (underlined) is particularly evident when comparing the previously presented document with the following fax on a similar topic from an employee dated September 26th, 1994. Reduced levels of deference suggest that employees are adopting more powerful language and a more powerful stance relative to their previous position.

Document #115 – 94spet26fax – Author: Country Representative

Eric:

Vehicule situation: We got a quote from the local Toyota Dealer (Tchami) for the cost of replacing one of the Toyota Hi-Lux desil, 4x4, double cab pickups - a cool $32,000. I assume that we don't have the $ to run out and buy two of them. The advantage of buying from Tchami is that we would get exactly what we want (they have the model in stock) and the necessary paperwork is pretty much taken care of. In other words its quick, easy and expensive.

Importing vehicles may be more economical but is potentially more of a hassle. You know the system - the cars arrive in Douala and are delivered to N'Djamena under the scrutiny of every customs agent, policeman, gendarme and highway bandit between here and Doula.

Another option is to keep our eyes peeled for deals in N'Djamena. A fair number of vehicles change hands here over the course of a year - it could be that something interesting and affordable will come up even used vehicles tend to be bought at premium prices here. I saw a Toyota Land cruiser being offered at $16,000 this week.

What to do? I guess we could buy the brand new Toyota Hi-Lux now and look around for a suitable replacement in the next few months. What do you think? Do I include the cost of this proposed vehicle purchase in the '94 projected budget?

These changes would normally suggest that this particular technology served as a springboard for an upward shift in employee power. However, although there were still no significant differences between managers' and employees' levels of deference with the introduction of faxes, their levels of solidarity-oriented communications began to differ significantly, resulting in higher managerial levels of solidarity. This latter finding is an indicator of an increase in managerial power but was obtained as a result of employee actions.

T3 – E-mails This pattern changed once again with the introduction of electronic mail. This transition was discernible by changes in the way that managers communicated with their employees. In particular, managers began to use higher levels of politeness than employees. The nature of their politeness was very broad, including both deference (especially formality) and solidarity-oriented politeness (especially Common Ground). In contrast, employees continued to rely heavily on the hesitancy form of deference. Employees were asking for advice and providing information and managers were reciprocating by providing advice and responding to the information provided by employees. This resulted in higher levels of managerial solidarity – a marker of increased managerial power but, this time, at the hands of the managers themselves. The lack of significant changes in the nature of employee politeness levels is evident in the following e-mail sent by an employee on July 12th, 1997 again on the topic of vehicles. The tone of this e-mail is very similar to that employed in the fax; i.e., very matter of fact and focused on describing alternatives without the formal language and hesitancy apparent in the couriered document, which provided more contextual information regarding the need for a new vehicle.

Document #170 – 97july12email – author: Country Representative

... As I mentioned in my first quarter report the Blue HiLux has been out of commission since January. This last week Levy brought in a mechanic who has been repairing it. It seems to be running okay. It appears that the work that they did on the truck in Moundou in January was not of very good quality. We have already paid customs charges on the Blue truck and submitted our request (to the government) to include the Pathfinder in our automobile park. We have been using the Pathfinder since October with the Alliance Biblique title. This relatively straight forward proposition - exchanging the Pathfinder for the HiLux as MCC admin vehicle - is a big hassle. This is partially the fault of "structural adjustment" policies – the Chadian government must create revenue and what better place to get money from than foreign NGOs.

The question now is, "What to do with the Blue Hilux. " Several options have come to my mind: 1) Sell it on the market for the best price possible. 2) Sell it to a "most favored employee" for a reasonable price. 3) Give it to a Chadian partner. 4) Keep it as an MCC vehicle a few more years.

1- Selling it for a market price is not as easy as it sounds. One would have to find a "go between" that would give us a fair deal and then show it to prospective buyers. I estimate that one could sell it for $4, 000 to $5,000 that way.

2- According to the Chadian view of entitlement this is the right thing to do. The problem in this case is which employee to favor. Both Idriss and Levy are very interested in this vehicle. I am not too keen to have to choose between them and I do not necessarily share the Chadian entitlement perspective <u>in this case</u>. MCC-Chad recently helped four employees buy mobilities - this was one thing that I wanted to accomplish before we left. I proposed giving them a monthly travel allowance that they <u>could</u> use to pay their own private transportation to and from work. Levy has bought and sold two cars in the last 6 months with money borrowed from his travel allowance and the MCC cash box. An employee <u>would</u> buy it for$ 1,000 to $2,000.

3- This seems the most attractive to me. I was thinking specifically of the AET (guera) church. The vehicle <u>would</u> continue to <u>be used</u> for the purpose for which it was bought – to minister to the guera churches. The question is, "Can the guera church maintain it?" Are we putting them in a position of acquiring something that they can't reasonably use?

4- The fourth option is not all that serious in my mind. I <u>don't think</u> we <u>could</u> really justify it.

I <u>would like</u> your opinion of the choices that I put forward. And, if you feel it is appropriate, your support to explore option #3. Another <u>somewhat</u> related vehicle issue has to do with the Peugeot 504. In our four-year plan we have proposed to replace the 504 with another car in 1998. What is the best way to look at this in terms of budget? The estimates for a new 504 are around $20,000. The same 4 options I outlined above <u>are applicable</u> to the 504 as well as the HiLux. <u>It may be possible</u> for us to "put away" some money from this years budget to be used for a vehicle purchase next year. I am <u>pretty sure</u> that we won't have S20,000 to spare in October 1997 though. The question is, "Is MCC prepared to give us vehicle plan to arrange a vehicle purchase with-in the current (flat budget) scenario?"

Chapter 5: Discussion and Conclusions

Although the traditional perspectives did not provide a complete explanation for the effects of the introduction of new communication media on the distribution of power in hierarchical relationships in this particular organizational setting, they did point to some patterns that became evident when all the perspectives were considered together. These patterns were as follows: (a) the introduction of facsimiles appeared to influence employee communications in the direction of increased managerial power; (b) the introduction of facsimiles did not seem to influence managerial communications although there were nonsignificant reductions in their levels of politeness; (c) the introduction of electronic communication did not significantly influence employee communications although there were nonsignificant increases in their levels of politeness; and (d) the introduction of electronic communication appeared to influence managerial communications in the direction of increased politeness, specifically solidarity.

Changes in politeness levels seemed to depend on the nature of the medium being introduced and the hierarchical level of the communicator in this organizational setting. As reported in the discussion of personnel changes in the Data Collection section, there were no significant differences in politeness levels resulting from the personnel changes. This suggests that any individual differences that would have contributed to differences in communication styles were overshadowed by the social role in which a person functioned. This is consistent with the expectations of politeness theory (Brown & Levinson, 1987) and research on relational control (Fairhurst, Green, & Snavely, 1984a, 1984b). Both are consistent with the typical micro-organizational behaviour research result that 'strong situations' to influence outcomes to such an extent that individual differences play a greatly reduced role, if any, in predicting outcomes.

The language employed by managers and their employees varied with the nature of the medium being employed. This will be described in detail in the following paragraphs.

Shift From Courier to Fax Communications The introduction of facsimiles served as a junctural structuring event that shifted the existing pattern of communication from high to low levels of politeness for employees. Communication in couriered documents was more deferential than in faxes. More specifically, relative to communications via couriered documents, the introduction of facsimiles resulted in lower levels of employee politeness, deference, formality, solidarity, and casual talk. In contrast, the introduction of facsimiles did not appear to serve as a junctural structuring event for managers given that it did not result in significant changes in managerial politeness levels. This latter result is consistent with the social perspective, which suggests that the existing way of doing things simply continued (for managers, at least). The drop in politeness that occurred with the introduction of facsimile communication was accompanied by a drop in the extent to which managers provided advice, employees sought approval, and employees informed their managers of decisions they had made. Although these suggest that hierarchical control was being decentralized and that managers had access to less local information (Huber, 1990), managers were also providing more information, an indication that information was centralized. In other words, the net effect may have been increased control.

Shift From Fax to E-mail Communications The introduction of electronic communication, on the other hand, served as a junctural structuring event for managers. It resulted in significantly increased levels of managerial politeness, deference, formality, and common ground. These results are somewhat supportive of the pessimistic view (technological perspective). In contrast and consistent with the social perspective, the introduction of electronic communication did not appear to serve as a junctural structuring event for employees given that it did not result in significant changes in their politeness levels. Although the extent to which employees informed managers of their decisions returned to original levels with the introduction of e-mail, managers also began to provide more advice (although not at the original levels) and employees sought out managerial advice at higher levels than with couriered communications. The latter findings are consistent with the centralization of hierarchical control due to the centralization of information and expertise. It also suggests the possibility that managerial intervention (Cohen, 1989) and the scope of managerial control and oversight (Gergen et al., 1996) were expanding.

Managers employed more solidarity-oriented politeness strategies in their e-mails than in their couriered documents. If employees were using an equivalent level of solidarity-oriented politeness strategies, then this would represent an increase in informality and reduced social distance. However, this was not the case, thus highlighting the distinctions between managerial and employee power levels. Other results point in a similar direction. Managers' levels of formality also increased significantly with the introduction of e-mail. The use of formal authority tends to be associated with centralization of authority (Krone & Ludlum, 1990) and weak interpersonal bonds (Perreault & Miles, 1978 in Krone & Ludlum, 1990), and can signal a "breakdown of the relationship" (Lakoff, 1974, p. 31).

The language employed in the e-mails seemed to resemble that of couriered documents to a much greater extent than that of faxes. However, despite this "similarity," these media have different "histories" and, consequently, different meanings. For example, e-mail was introduced after a transition to fax had already been made. This latter transition brought with it increased managerial power, which was reaffirmed when e-mail was introduced.

Conclusions

Methodology The present study made a unique contribution to the literature by employing a longitudinal approach to examine the actual interactions of managers and their employees that shape the perceptions, experiences, and outcomes of leadership (Dansereau & Markham, 1989; exceptions: Boden, 1994; Fairhurst et al., 1984a, b; Watson, 1982a, b). This stands in contrast with existing computer-mediated communication studies that have been primarily experimental in nature and, as a result, haven't told us whether such communications "undermine or reflect and influence [the hierarchy]" (Spears & Lea, 1994, p. 434). The evidence regarding the effects of new communication media tends to be either anecdotal in nature or has been derived from research that has occurred in laboratory settings with ad hoc groups lacking a shared history and anticipated future (Spears et al., 1994). This also stands in contrast with most leadership research, which requires that employees and managers make judgments and provide their assessments of the nature of their relationship (e.g., Graen & Scandura, 1987). Indeed, most of our knowledge regarding the leadership process [i.e., the extent to which managers "prescribe rather than negotiate role expectations and other job issues" (Fairhurst et al., 1987, p. 397)] comes from studies that rely exclusively on the perceptions of leaders, their followers, or observers (Moch, Cammann, & Cooke, 1983). As argued by Fairhurst and her colleagues (1987), this emphasis on 'perceptions' and 'interpretations' is subject to numerous weaknesses (e.g., social desirability, rating errors), provides little understanding of how leadership is exercised at the microstructure level, and loses the dynamism that is possible when organizations are studied "as they happen" (Boden, 1994, p. 10).

The Linguistic Enactment of Hierarchical Relationships These results confirm the presence of differences in language use given power levels. As argued by Boden

(1994), communications are not neutral; rather, meanings are "constructed interactively" (p. 18) and enacted within a social context. Fine-grained analyses indicated that deference – hesitancy was the form of politeness persistently employed by employees. This is consistent with the predictions of politeness theory (Lively, 2000) and represents a restricted code (Morand, 1991) in that employees appear to be choosing from a limited range of linguistic strategies. This signals the presence of an asymmetrical distribution of resources, an essential inequality in interaction and the continuation of social distance (Cohen, 1989; Lakoff, 1974). This result is further compounded by the finding that managers tended to employ multiple strategies in a hybrid manner (Craig et al., 1986) thus making their communications more complex and difficult to process. As argued by Morand (1991), polite communications are more likely to be distorted and unclear. The foregoing suggests that social status <u>does</u> matter in that it influences the language-in-use (i.e., the order of discourse) and results in patterned interactions (Zack & McKenney, 1995).

This finding is consistent with structuration theory's perspective that one's hierarchical position places constraints or boundary conditions on the nature of the linguistic moves that individuals may undertake. As agents, people have choices in how they enact their relationships with others through language (Fairclough, 1995). However, people make their choices from a limited range of options; the latter are influenced by their position within an organizational hierarchy. The choices in language use are sensitive to the interactional context (Brown & Yule, 1983) and one's role within that context (Drew & Heritage, 1992). One's hierarchical position shapes access to resources, including linguistic resources, and one's ability to use these resources. As gatekeepers to the system, managers can use language as a strategic resource. As such, there is a built-in self-preserving bias in the system. As found in the present study, employees and managers tended to communicate in a way that reinforces or recreates existing hierarchical arrangements. This accounts for the coherence and regularity that is evident in the linguistic choices made by individuals (Drew & Heritage, 1992; Labov, 1966; Ervin-Tripp, 1969). There is a correspondence between one's hierarchical position and one's "discursive rights and obligations" (Drew & Heritage, 1997, p. 49). "Lexical choice is a significant way through which speakers evoke and orient to the institutional context of their talk" (Drew & Heritage, 1992, p. 29). In other words, people don't consciously think about what they're doing or saying or the social rules that guide their behaviour (Collins, 1981). Even in organizations that function in an essentially democratic manner such as MCC, hierarchical relationships represent a pervasive symbol of asymmetry in relations of control that appear to endure regardless of the nature of the technology that is introduced (e.g., Stohl, 1995).

Understanding hierarchical interactions is particularly important given that the quality of this relationship predicts organizationally relevant outcomes such as employee performance and satisfaction (Deluga & Perry, 1994; Rawlins, 1983; Smeltzer, 1992; Strickland, Guild, Barefoot, &Paterson, 1978). Some research suggests that one's relationship with one's manager, in particular, a lack of support from one's manager, is a major source of stress for workers (Moyle, 1998 in Emler & Cook, 2001). Also, how work gets done on a day-to-day basis is a result of the interactions between managers and their employees (Ford & Ford, 1995; Gronn, 1983; Kahn & Kram, 1994; Shaw & Weber, 1990). Finally, according to Tyler's research (1998), the quality of treatment that the employees receive from individuals in authority influences their self-esteem, their willingness to defer to authority, and their perceptions of their organizational status.

The variations in politeness levels and types noted in the present study are especially salient given that the use of deference-oriented strategies results in negative evaluations (Bradac et al., 1981) and the use of solidarity-oriented strategies results in perceptions of competence (Bradac & Mulack, 1984). This fits with Collins' (1981) argument and Mulder's (1977) finding that, whereas taking a dominant role increases emotional energy, taking a subordinate role reduces energy. If managing relationships is central to one's sense of well-being (Wiemann et al., 1997), then it is important to understand how relationships are linguistically enacted. Research undertaken in a wide variety of interpersonal contexts and social structures indicates that participation and egalitarianism are defining features of interpersonal relationships (see Wiemann, 1985 for a review of this research). "Situations of giving and taking orders...seem to be the most important behavior-shaping experiences in the world of work....The most powerful effect on a person's behavior is the sheer volume of occupational deference given and received" (Nichols, 1984, p. 37). The extent to which individuals exercise some form of control in the workplace has been associated with numerous psychological and psychological outcomes (Deetz, 1992) and, thus, may even represent an ethical imperative (Sashkin, 1984). Given work's centrality in the lives of most adults (Joulain, 1997), to understand control as exercised in work relationships is, essentially, to understand a defining force in people's lives.

It may be helpful to use this approach to study the process of leader member exchange. In addition to collecting information directly from leaders and their employees, the language they employ in communicating with each other may serve as a more direct measure of the nature of their relationship. This approach may also be usefully employed in the context of cultural change in which there is an attempt to enhance the decentralization of decision-making. As argued by Giltrow (1998), language use needs unpacking. An implication of the foregoing is that, if they wish to be more effective, employees need to be more assertive and less hesitant in their communications. Also, managers may wish to attempt to directly influence their LMX levels (a measure of the quality of the exchange relationships they have with their employees) by altering their language in use. This is consistent with Krone and Ludlum (1990) who found that higher LMX levels were associated with the use of fewer influence strategies. Future research should examine the implications of language on well-being.

The Structuring Potential of Media This longitudinal study found that the extent and nature of the politeness language employed changed over time given differences in hierarchical position and communication medium in use. As the medium of communication changed, relative power levels shifted significantly. Despite the extensive literature concerning the effects of the introduction of computer-mediated communication, the biggest changes seemed to occur with the introduction of facsimiles. In this sense, the introduction of facsimiles represented "a quiet revolution" in communications that went relatively unnoticed. Faxes structured communications in a manner that altered the language in use and, consequently, the power relations that were evident.

The present study found that the existing system was not simply preserved and did not just evolve with gradual changes (Poole et al., 1992). This stands in contrast to Barley (1984, 1986) who found that the existing social context predetermined future social structures. Contrary to the social perspective that suggests that the existing system would simply continue regardless of the medium in use (Yates et al, 1999), there were significant variations in the nature of communications that occurred. Although some aspects were reproduced (the use of deference – hesitancy by employees, the tasks performed), a change in medium did appear to bring with it changes in the communications that occurred depending on who was doing the communicating.

It appears that each medium of communication is associated with a particular set of structuring constraints that distinguish one from other (Lemke, 1999) and that influence what is possible. E-mail replaced traditional means of communication as argued by Baron (1998) but so did fax (but more gradually). Although managers were not faced with the same cost constraints, faxes were viewed as an expensive means of communication that needed to be "rationed." As with faxes, e-mail offered the possibility of more frequent communications but with no cost implications of lengthy documents.

Other Settings Any conclusions to be drawn from the present research must be tempered by the fact that this research was undertaken in a single organization. As such, the results may reflect the idiosyncratic nature of this organization and, thus, may not generalize to all organizations or even to other nongovernmental organizations. As argued by Elsbach and Sutton (1992, p. 728) in their research that was undertaken in a unique organizational setting, the extent to which the results generalize to other organizations, "can only be determined by hypotheses testing research in larger, representative samples." Attempting to extend this research to other settings is particularly important because, it is also possible that the effects that were found in this study were attenuated given MCC's espoused culture of participation and de-emphasis of hierarchy. MCC's organization chart is in the shape of a plant, with each continent (e.g., Africa, Asia,...) that receives MCC's assistance representing one flower all connected to a central stem (or mission). However, MCC may actually function in a more hierarchical manner than is evident in their organization chart. First, the communications that occurred between MCC Chad and MCC headquarters were almost strictly along the lines of the hierarchy. For example, the employees who report to the country representative rarely, if ever, communicated with the country representative's director; rather, they work through the country representative who, in turn, reported to the Director of the Africa Desk. This vertical pattern of communication persisted with the introduction of new communication media, despite the diagonal and other patterns of communication that new communication media are supposed to make possible (as suggested by Spears & Lea, 1994 and others).

More generally, however, because of its drive to remain accountable to its funding sources, MCC functions in a highly systematized fashion. Although MCC field workers may work in a collaborative and 'organic' fashion in relation to their clients, they themselves are managed in a way that reflects a high degree of formalization, unity of command, and a clear division of labour. This is evident in MCC's extensive personnel policies and procedures, which clearly define roles and responsibilities, procedures, and require documentation that reflect every possible contingency. The country representatives and many of the employees are required to have a university degree and their job responsibilities and requirements are described in detailed job descriptions. As managers, country representatives develop and manage programs and budgets (both of which are approved at several successive levels in the hierarchy), manage staff, and engage in reporting as required. This perspective that MCC functions in a hierarchical manner is consistent with Shank 's (1992, p. 41) finding that, "Middle management seemed conscious of a discrepancy between the theory of being participative and the reality in MCC. Although personal experiences varied, several administrators said directly that MCC is not participatory, and that hierarchy exists." The foregoing suggests that, although MCC is probably not a 'prototypical' hierarchical organization, it does tend to function in a hierarchical manner, nevertheless.

Future research should be undertaken as a means of examining the persistence of these patterns given the introduction of facsimiles and electronic mail in other settings. This research is especially important in global organizations, given the dual constraints of time and space, the luxury of selecting a medium whose richness "fits" with the nature of the message being communicated may not be entirely possible. In such organizations, because some hierarchical relationships are virtual in the sense that they are "mostly conducted over technology" (Maznevski & Chudoba, in press, p. 5), it may be necessary to communicate important decisions via electronic mail. This mismatch may result in poor understanding and reception of the message (Thomas & Trevino, 1989). In sum, in bridging time and space constraints, new communication technologies may also influence how organizations function (Fulk & DeSanctis, 1999). This is particularly important given the centrality of communication (or talk, Boden, 1994) as the means for 'getting work done' in organizations (Culnan & Markus, 1986; Penley et al., 1991; Sillince, 1999). Indeed, Ford and Ford (1995) argue that, if communication changes, then the nature of the work also changes. It may also be useful to examine the introduction of communication media in other global organizations, for example, as a means of attempting to determine if the results found in this study were unique to the study's setting or whether the results are replicable in more traditionally structured and hierarchical organizations in other sectors of the economy.

The Dialectic of Control in Practice The findings of the present study appear to reflect Gidden's (1984) dialectic of control in which there is ongoing tension between autonomy and dependency. On the one hand, the multiple strategies, high levels of politeness, the increased provision of advice by managers, and the asymmetry in the nature of the communications appeared to represent a "tightening" of the panoptic noose. This is consistent with the view that communication technologies have considerable consequences for communication processes and resulting organizational outcomes (Alexander et al., 1987; Jablin, 1982; Rice et al., 1984; Sherblom, 1998). Given that "organizational functioning is based on control through a social hierarchy" (Emler & Cook, 2001, p. 279), hierarchical control tends to be inevitable and viewed as legitimate. "Even when organizations strive to be democratic and egalitarian, effective power ends up being limited to a minority" (Emler & Cook, 2001, p. 281). In the present study, it appears that MCC employed the new media by adopting the "default" approach; i.e., in a manner that they are traditionally used. Perhaps, organizations that seek to be democratic need to relearn how to accomplish this by paying particular attention to their members' interaction patterns in the context of changing technology.

On the other hand, the reduced politeness levels, and the reduction in the number of requests for managerial approval by employees all point to a "loosening" of the panoptic noose. As argued by Goody (1978, p. 192), we need to ask not only why certain "resources are chosen and with what effect but also...why [some]...were not chosen." The combination of choices on the part of managers and their employees forms a complex pattern that is not entirely supportive of either the social or technological perspective. Instead, it appears that the patterns found in this study reflect a certain amount of agency on the part of the managers and employees. Rather than just "automating" the existing hierarchy, the introduction of communication technology appears to have given employees the opportunity to "informate" their work in a manner that provides them with a certain amount of autonomy (Zuboff, 1988). In this sense, communications technology was advantageous (Allen & Hauptman, 1987) for employees.

The Need For Multiple Perspectives Finally, the results of the present study reaffirm the need to examine the process of change from multiple theoretical perspectives and to "conduct multiple interpretations of the same phenomenon" (Alvesson & Deetz, 1996, p. 212). Each provides a unique lens through which to view complex social phenomena and, collectively, permit researchers to develop strong inferences regarding their efficacy in explaining phenomena (Platt, 1964). Structuration theory offers a processual view that allows both technology and structure to be "interpretatively flexible" (Roberts & Grabowski, 1996, p. 417). These multiple perspectives may be necessary to understand how the "coupling" of structure and individual action occurs and, hence, to address “a critically important question for organizational theory and social theory more generally” (Boden, 1994, p. 37).

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Appendix - Coding Manual

Note: The strategy numbers are those assigned by Brown and Levinson (1987).

Deference - Negative Politeness Strategies

1. **Don't coerce other** - give other an 'out'; minimize threat; give other an option to not act.

Strategy 1 - Be indirect by using subjunctives (e.g., couldn't), words that convey possibility (e.g., possibly, perhaps, by any chance), or by saying 'please.'

Code words:

(Possibility: possibly, perhaps, by any chance)

(Please: please, s'il vous plait)

(Subjunctive: could, would, should, might)

(Modals: can, may, will, would, could, might, shall, must)

(Can: can)

(Could: could)

(Should: should)

(Would: would)

Strategy 2 - Be pessimistic regarding asserted statements so that you assume that other is not likely to do something by (a) attaching tag or possibility expressions (e.g., You couldn't possibly attend the meeting for me, could you?); using hedges.

Code words:

(Hedge: perhaps, possibly, at first glance)

(Guess: guess, I suppose)

Strategy 4 - Minimize the imposition and the "intrinsic seriousness of the imposition,...leaving only [social distance and power]... as possible weighty factors" P. 176. (e.g., Can I just ask you a very quick questions?).

Code words:

(Minimizer: just, minor, kind of)

Strategy 5 - Give deference by humbling oneself and 'raises up' other, thus conveying that other is of higher status. Ths can be accomplished through the use of honorifics such as titles (e.g., Dr.) or address terms such as 'sir', more formal language (e.g., use dine rather than eat).

Code words:

(Forms of address: Sir, vous)

(Formal words: might I, continue to)

(Asking for advise: advise, wisdom, helpful, comment, advice, reaction, recommendation, opinion)

2. **Don't presume/assume anything about other, other's wants, and beliefs or interests.**

Strategy 3 - use hedges to soften potential threat - "a particle, word, or phrase that modifies the degree of membership of a predicate or noun phrase in a set" (Brown & Levinson, 1987, p. 145

Code words:

(Hesitance: unsure, reluct, hesita, uncertain)

(Hedge: sort of, regular, true, rather, pretty {sure}, quite, not {technically} correct, {I} suppose, guess, think).

3. **Communicate speaker's want to not impose on other**

Strategy 6 - Apologize by: (a) acknowledging impingement (e.g., I need to ask you a big favour...); (b) indicating reluctance to impose on other (e.g., I hate to bother you...); (c) beg forgiveness (e.g., excuse me, but... I'm sorry to bother you...).
Code words:
(apology: sorry, apolog, but)
(Favour: favor)

Strategy 7 - Impersonalize both parties. This can be accomplished through the use of: (a) agent deletion (e.g., it seems that ...); (b) passive sentence construction (e.g., It is expected that...); (c) indefinites rather than 'I' and 'you' pronouns (e.g., one shouldn't go there...); (d) plural forms of 'you' and 'I' pronouns (vous, we to be inclusive);
Code words:
(It, there)
[Note: These coded elements were potentially problematic given their frequency of appearance in documents (regardless of their actual use) and, therefore, were directed coded.]

Strategy 8 - State the FTA as a general rule, thus indicating that speaker has no option but to do the FTA (e.g., Students will not run in the hallways.)
Code words:

(Policy_Rule: rule, policy)

Strategy 9 - Nominalize [e.g., rather than say that someone sang (verb) well refer to their singing (noun)]

Code words:

(Distancing: my thinking, my feeling, almost, virtually, I think, in effect, I believe, in a way, I feel, to some extent, practically, I suppose)

(My feeling: my feeling)

(No agent: been)

(Nominalization: the meeting, writing, understanding, the feeling, thinking, following, etc.)

4. **Redress other wants of hearer as a means of compensating hearer for the face threat.**

Strategy 10 - Go on record as incurring a debt or as not indebting other (e.g., I'd be grateful if you can...).

Code words:

(Admit debt: indebt, appreciat, grateful, welcome)

(Thankful: thank)

Solidarity - Positive Politeness Strategies

1. **Claiming common ground** - claiming that they have similar attributes, wants, etc. This includes the following strategies:

a. express interest in other's interests (strategies 1 to 3)

Strategy 1 - Complimenting or showing interest. Notice, attend to other (interests, wants, needs, goods); notice other's faux pas but not expressing embarrassment *e.g., make a joke of it —negative politeness would be ignoring it).

Code words:

(Compliment: compliment, helpful)

Strategy 2 - Exaggerate (interest, approval, sympathy with other) by using:

(a) intensifying modifiers

Code words: fantastic, marvelous, extraordinary, devastating, wonderful, fabulous, delightful, ravishing , divine, appalling, ghastly, outrageous, despicable, revolting, ridiculous.

Adjectives of emphasis: positive, real, total, complete, pure, very

(b) empathic word particles

Code words: such as for sure, really, exactly, absolutely, completely, always.

Adverbs of emphasis: just, quite, completely, really, positively, totally, entirely, purely, simply, very much)

Strategy 3 - Intensify interest to others by:

(a) using present tense to make what you're saying sound interesting;

(b) using directly quoted speech;

(c) exaggerating facts.

b. stress common membership (strategy 4)

Strategy 4 - Use in-group identity markers such as:

(a) address forms, use "tu" to claim solidarity; use nicknames or endearments, or use first name;

Code words: tu

(b) use in-group language;

(c) use jargon or slang; and

(d) use contradiction and ellipsis (the latter requires that there exist some shared understanding which remains unspoken).

Code words:

(Ellipsis: absence of that where it should be present)

[Note: These were directly coded.]

c. claim common point of view (strategies 5 to 8)

Strategy 5 - Seek agreement by:

(a) raising safe topics which permit other to agree with speaker; and

(b) repeating what the other has said.

Code words:

(Common viewpoint: agree, support, share)

Strategy 6 - Presuppose or assert common ground by

(a) employing small talk;

(b) using point-of-view operations such as:

(i) speaking as if you and other shared knowledge (e.g., I had a hard time at the funeral, didn't I.);

(ii) using an inclusive 'we' even though you're just talking about other (e.g., We're having trouble taking that medicine.);

Code words:

(Inclusive we (talking about we in general): we)

(iii) using 'you know' when other is not likely to 'know' (e.g., I had a hard time at the funeral, you know.);

(c) using presupposition manipulations such as:

(i) speaking as if something were mutually assumed (e.g., Wouldn't you, don't you, isn't it?);

(d) providing a reason for an action.

2. **Convey that speaker and other are cooperators**.

Strategy 8 - Assert or presuppose speaker's knowledge of and concern for other's wants "I know you..."

Strategy 9 - Offer, promise - claim that you'll help other get what they want.

Strategy 10 - Be optimistic (presumptuous) in expressing your own wants as though they are what other wants; e.g., so, you'll lend me your car this weekend?

Strategy 11 - Include both speaker and other in the activity by using the inclusive 'we' or 'us' even though only the speaker or other is intended. E.g., Let's work on it (i.e., you); we are unhappy (i.e., I).

Strategy 12 - Give (ask for reasons) e.g., why not..., why don't....

Strategy 13 - Assert reciprocity - I'll do this if you do that...

3. **Fulfill other's want for something.**

Strategy 14 - Give gifts to others (goods, sympathy, caring, understanding, cooperation).

Additional codes

Disagree with writer: have some concern, not entirely agree, reservation

Providing advice: comments, opinion, reaction

Asking question:?