Communication Richness in Electronic Mail: Critical Social Theory and the Contextuality of Meaning

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Abstract

Information Richness Theory (IRT) has enjoyed acceptance by information systems researchers throughout the last decade, but recent unfavorable empirical evidence has precipitated a shift away from it and a search for a new theory. Because of this shift, a new definition of communication richness is needed to succeed the IRT definition. Since its inception, IS research on communication richness has been limited to the perspective of positivism and, more recently, interpretivism. In this study, a new perspective to the study of communication richness in computer mediated communication, critical social theory (CST), is introduced. The paper outlines (1) a CST-based definition of communication richness and compares it with positivist and interpretivist definitions of communication richness and (2) a CST-based social action framework for empirical study of organizational communication in any media use situation. The CST definition and framework are used in an intensive investigation of an episode of the managerial use of electronic mail in a company to illustrate how research on communication richness can be conducted from the CST perspective. This illustration also points out the usefulness of the CST perspective in recognizing instances of communication richness in electronic mail communications that would escape detection in not just the IRT perspective in particular, but also positivist and interpretive perspectives in general. Finally, the paper concludes by outlining the potential for future IS research on organizational communication and information technology from the CST perspective. In addition to the specific contribution to the development of a new theory of communication richness in electronic media, this study also contributes an example of CST research on IS and extends the domain of the CST-IS research program.

Keywords: Computer mediated communication, critical social theory, media richness, qualitative research, organizational communication.

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Introduction

Research on managerial and organizational use of information technologies has been central to the field of information systems (IS) since its inception. An important line of this research is information richness theory (IRT, Daft and Lengel 1986), which suggests that: (1) richness (or leanness) is an intrinsic objective property of information technologies that
serve as communication media and (2) managerial use of these media can be described and explained by this intrinsic property. Since 1986, IRT has been influential in both IS research and practice. Many IS doctoral students have researched it and many IS practitioners have used it as a basis for their communications technologies adoption decisions. However, recent empirical studies have presented evidence that calls into question the validity of IRT and its framework for managerial decision making about electronic communication media (El-Shinnawy and Markus 1992; Kinney and Watson 1992; Lee 1994; Markus 1994; Rice 1992). As Markus (1994) has argued: "[T]he weight of informed opinion seems to be shifting [away from IRT] in the direction of social definition theories." Consequently, IS researchers are confronted with the need to replace the IRT perspective on communication richness with a new one. The importance of this endeavor cannot be overstated because one of the primary objectives of IS research is to provide sound theoretical foundations upon which organizations can make decisions about the management and use of information technologies (Zmud 1995). In this regard, this paper offers a new perspective on how richness occurs in managerial communication that uses information technology and an approach to empirical studies on this issue.

A critical social theory (CST) perspective on communication richness is introduced. Although several studies have been conducted on communication richness in electronic media, they can all be classified as instances of positivist research or, more recently, interpretive research. This study is the first to approach research on communication richness in computer mediated communication from a CST perspective. It is motivated by an interest in clarifying how richness occurs in managerial communication conducted via information technology and in contributing to the development of a valid theory of communication richness. Such a theory is important because IS researchers have a vested interest in providing solid theoretical foundations for the management and use of information technologies in organizations (Zmud 1995). Further, there is a need to question the fundamental and implicit assumption that pervades much (although not all) IS research on communication richness which holds (1) that the processing of data into information is primarily, if not exclusively, the job of computer hardware and software and (2) that the primary role of human beings is that of "users" of both the output and the richness produced by the hardware-software system. Empirical material will illustrate that the primary "processing" of data into information, at least in the arena of managerial communication involving an electronic mail system, is performed not by the hardware or software, but by the human beings themselves. It is through the process of enactment that people, not electronic communication media, bring about the richness that they experience in their communications (Weick 1969).

The remainder of the paper is organized as follows. The next section provides a review and critique of information richness theory. The third section outlines the basic ideas and limitations of the positivist and interpretivist perspectives of current IS research on communication richness. The fourth section outlines the CST perspective on communication richness and explains what distinguishes it from positivist and interpretive perspectives. In this section, a new definition of communication richness from the CST perspective is offered and an outline of a theoretical framework for studying communication richness from this perspective is presented. In the fifth section, the usefulness of this CST approach to recognizing instances of people's enactment of coherent meaning in their communication with each other—instances that would escape detection in not just an IRT perspective in particular, but also positivist and interpretive perspectives in general—is demonstrated. In this paper, the approach to this analysis and illustration is an intensive investigation (Weick, 1984) of an episode of the managerial use of electronic mail in a company. The final section concludes with implications for future IS research on communication richness.

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2This assumption also pervades IS research on database management systems (see Wybo and Lee 1996).
A Critical Review of Information Richness Theory

Information richness theory (IRT) was originally formulated to help address the question, "Why do organizations process information?" (Daft and Lengel 1986, p. 554). In their articulation of IRT, Daft and Lengel advanced the notion that communication richness (or leanness) is an invariant, objective property of communication media. Due to their efforts and the work of others, this perspective gained wide acceptance and rapidly evolved to provide a theoretical basis for both IS research on and decision making about electronic communication media. For practitioners, IRT has served as a normative theory for the selection of communication media. It provided a conceptual framework for ranking media from the richest to the leanest. In this framework, the richness of any medium and its ranking in the overall richness scale is fixed, regardless of any and all differences in the individuals who use it and the organizational contexts where it is used. For IS researchers, IRT has served as a predictive theory for empirical studies on how managers make communication media choices. In this later role, IRT's ranking of media on a richness scale allowed for the derivation of predictions about peoples' media choices. IRT posits that individuals would choose media higher in richness for those managerial tasks higher in equivocality or ambiguity. The following quotation from the original formulation illustrates IRT's theoretical perspective:

"Information richness is defined as the ability of information to change understanding within a time interval. Communication transactions that can overcome different frames of reference or clarify ambiguous issues to change understanding in a timely manner are considered rich. Communications that require a long time to enable understanding or that cannot overcome different perspectives are lower in richness. In a sense, richness pertains to the learning capacity of a communication. Communication media vary in the capacity to process rich information. . . . In order of decreasing richness, the media classifications are (1) face-to-face, (2) telephone, (3) personal documents such as letters or memos, (4) impersonal written documents, and (5) numeric documents. The reason for richness differences include the medium's capacity for immediate feedback, the number of cues and channels utilized, personalization, and language variety. . . . Face-to-face is the richest medium because it provides immediate feedback so that interpretation can be checked. Face-to-face also provides multiple cues via body language and tone of voice, and message content is expressed in natural language. Rich media facilitate equivocality reduction by enabling managers to overcome different frames of reference and by providing the capacity to process complex, subjective messages. . . . Media of low richness process fewer cues and restrict feedback, and are less appropriate for resolving equivocal issues. However, an important point is that media of low richness are effective for processing well understood messages and standard data." (Daft and Lengel 1986, p. 560)

Although Daft and Lengel originally formulated and proposed IRT to help address the question of why organizations process information, the focus of IRT gradually shifted away from the organizational context toward individual managers, their media choices, and the messages they exchange. Markus (1994) observes that even though it has evolved, "information richness theory remains an individual-level rational choice explanation of behavior" (p. 523). Indeed, IRT has been tested by focusing on the behaviors of individuals in laboratory experiments, where the use of information technology is abstracted completely from any real life organizational setting. However, the results of the numerous empirical tests conducted on IRT have not been favorable. Markus (1994) can be credited with what is arguably the most impressive empirical refutation of IRT to date. Based on both quantitative and qualitative evidence that she collected on the behaviors of managers whom she observed at her field site, Markus summarizes that "their actual media use behavior was inconsistent with the [information richness] theory. In particular, managers, especially senior managers, used the [electronic mail] medium more intensively than the [information richness] theory predicts and in
a manner that the theory regards as ineffective and hence unlikely" (p. 518).

Other empirical studies have also reported evidence that contradicted IRT’s arguments. For example, evidence of e-mail communications that, even according to IRT’s own criteria, are rich, not lean, has been presented (Markus 1991). No support has been found for IRT’s assumptions of symmetry and nonmonotonicity and only mixed support for its “general hypothesis that task analyzability influences the relationship between media usage and performance components” (Rice 1992, p. 493). No empirical support has been found for IRT’s prediction that “[n]o calls for communication via v-mail than e-mail in situations requiring the exchange of information to resolve equivocality” (El-Shinnawy and Markus 1992, p. 97). Instead, evidence to the contrary has been found: that is, the individuals preferred e-mail (El-Shinnawy and Markus 1992, p. 99). No evidence was found to support IRT’s prediction that “differences in decision time and consensus, change as a function of the interaction of medium and task” (Kinney and Watson 1992). Although not specifically performing a test of IRT, one study (Zuboff 1988) reported the presence of richness (“sociality that infuses professional exchange,” p. 376) in communication that uses e-mail and computer conferencing—a richness that IRT would predict not to occur. Evidence has also been presented of how managerial communication using e-mail was still capable of being rich, despite the fact that e-mail has all the lean media characteristics that IRT predicts would lead to lean communication (Lee 1994). These are (1) lack of capability for immediate feedback; (2) a single channel which filters out significant cues from the message’s author; (3) impersonality and reduced language variety.

Another sign that IS researchers are shifting away from IRT is the alternative theoretical perspectives that some of them have advanced to explain the richness observed in so-called lean media. A landmark study that refuted IRT offered an alternative perspective, namely social definition theories (Markus 1994). That study found that, in contrast to individual-level rational choice explanations of behavior such as IRT, social definition theories such as structuration, social construction of technology and institutional theories, emphasize the emergent properties or social determinants of behavior (cf. Markus 1994, p. 508). Other social definition theories that have been proposed for the study of communication richness are the “social influence model” (Fulk et al. 1990); the “emergent network perspective” (Contractor and Eisenberg 1990); and the “genre theory” (Yates and Orlikowski 1992). Recently, yet another alternative, the “channel expansion theory” has been offered (Carlson and Zmud 1994). Common to these alternative explanations is their rejection of the idea that communication richness is an invariant, objective property of the communication medium itself, independent of the social context where the communication takes place. On the contrary, these alternative explanations all regard communication richness or leaness as following not from the properties of the communication medium alone, but as emerging from the interactions between the people, and the organizational context.

Positivist and Interpretivist Perspectives

As stated in the introduction, all previous research on communication richness in electronic media can be classified as instances of positivist and interpretivist research. An overview the underlying theoretical foundations of these two research perspectives is presented before outlining the CST perspective. This overview is relevant because a description of these two research perspectives will help clarify how the CST perspective differs from them. It will also help explain how CST can assist researchers in developing a new theory of communication richness in electronic media that overcomes the weaknesses of the positivist and interpretivist perspectives. Since detailed expositions of positivism and interpretivism already appear in the IS literature (Lee 1991; Mumford et al. 1985; Nissen et al. 1991; Orlikowski and Baroudi 1991), discussion is limited to how these perspectives are manifest-
ed in IS research on managerial communication that uses information technology.

**The positivist perspective on communication richness**

Positivism is also known as the "natural-science model of social-science research" because it proceeds to implement, in social science, the image of how research proceeds in physics, biology, and other natural sciences. Like natural-science theories, social-science theories based on this model must conform to the rules of formal logic (of which the rules of mathematics are a subset) and the rules of experimental and quasi-experimental design. The rules of formal logic govern how a researcher may relate the formal propositions of a theory to one another. The rules of experimental and quasi-experimental design govern how a researcher may relate the propositions, not so much to each other, but to the empirical reality they are intended to explain. These rules of experimental design pertain to procedures for testing predictions and hypotheses, where examples of these procedures are those associated with laboratory experiments, field experiments, statistical experiments, and natural experiments. Whether the propositions are quantitative (taking the form of mathematical statements) or qualitative (taking the form of verbal statements), they typically depict the subject matter in terms of independent and dependent variables. It is by satisfying these two sets of rules that positivist social-science research conforms to the natural-science model.

Almost all of the past empirical studies of IRT have been conducted from the positivist perspective of the natural-science model. In these studies the phenomenon of managerial communication that uses information technology is framed in terms of quantifiable independent and dependent variables, and hypothesis testing, typically involving laboratory experiments and statistical inference. The definition of richness, "[information richness is defined as the ability of information to change understanding within a time interval]" (Daft and Lengel 1986 quoted above), is conducive to the study of managerial communication from a quantitative, positivist perspective. Consistent with the natural-science model, communication in IRT is conceptualized as a physical process of transporting meaning from one person to another. This conceptualization has been labeled the "conduit" metaphor of communication (Contractor and Eisenberg 1990). According to IRT, a communication medium operates like a conduit that transports meaning from one person to another, as if the meaning were something physical. Further, it holds that any difference in the meaning received could not be an improvement but only a loss, due to noise, interference, or other deterioration in the "signal" during the course of its transmission. Where the conduit takes the form of text (such as e-mail), deterioration in the signal would be said to occur from (1) the lack of immediate feedback, needed to correct errors in the transmission; (2) the filtering out of social cues; (3) the confinement to a single channel; (4) the lack of personalization; and (5) the reduction in language variety. Based on these considerations, IRT considers face-to-face interactions to be the richest medium and documents (including e-mail) to be the leanest. As a "conduit," the face-to-face medium is considered superior to documents for transporting meaning from the sender to the receiver without any loss in the "signal" (for instance, loss of facial expressions and other social cues).

Strict application of the positivist natural-science model in social science research (including IS research) has restricted the subject matter of inquiry. A dimension of the subject matter that social scientists examine, that natural scientists do not examine, is the field of phenomenology calls the "lifeworld." The lifeworld, among other things, is the world of consciousness and humanly created meanings. "Unlike atoms, molecules, and electrons, people create and attach their own meanings to the world around them and to the behavior that they manifest in that world" (Lee 1991, p. 347, referring to Schutz 1973). Atoms, molecules, electrons, and other objects of natural-science inquiry do
not “mean” anything to each other (Schutz 1973). However, people—who are integral to the subject matter of the social sciences—do mean something to each other. In this way, the world of humanly created meanings, however “subjective” they may be, is an integral part of the subject matter that the social scientist studies. Because of this, “the social scientist must not only collect facts and data describing purely objective, publicly observable aspects of human behavior . . . but also the subjective meaning this behavior has for the human subjects themselves” (Lee 1991, p. 347). These subjective meanings constitute a different subject matter from objective facts and require research methods that have no counterparts among those of the natural sciences. Consistent with this deficiency of positivism’s natural-science model is the fact that almost none of the positivist IS studies that have tested IRT through laboratory experiments either report or discuss, in any detailed way, the content of what their research subjects actually said or meant in the course of their communications with one another.

The interpretivist perspective on communication richness

Recognizing some of the limitations of positivism, a few IS researchers have introduced interpretivism to the study of richness in managerial communication that uses information technology. Interpretivism gives explicit recognition to the lifeworld, the very subject matter, that does not fit positivism’s natural-science model. It uses research methods such as those associated with ethnography, participant observation, and hermeneutics, all of which give explicit recognition to the world of consciousness and humanly created meanings. A recent study of communication richness employs the interpretive tradition of hermeneutics to interpret the meanings that managers themselves enact in their use of e-mail (Lee 1994). In another study mixes positivism (involving hypothesis testing) and interpretivism to examine what some managers themselves meant in the e-mail mes-

4The subject matter to which the methods of positivism’s natural-science model of research are well suited to studying.

sages they sent to one another (Markus 1994). But Lee goes beyond the positivist perspective by noting that communication that uses information technology involves the creation and interpretation of symbols by human beings, rather than just the physical transporting of bits through a conduit. The interpretive perspective considers the capacities of the sender and receiver to enact and apprehend richness in “messages” (signals) as central to the study of communication richness. As with most interpretive approaches, the central idea in Lee’s hermeneutic approach is “mutual understanding”—the phenomenon of one person’s reaching an understanding of what another person means.

In summary, interpretive and positivist research invoke starkly contrasting images of the human beings who communicate with each other via information technologies. The positivist IRT perspective, in depicting communication as a physical process of transporting a material substance from one person to another person through a conduit, treats the latter person as nothing more than a passive receptacle of the transported symbols. In contrast, the interpretive perspective (Lee 1994; Markus 1994) treats a person not merely as a passive receptacle, but as an intelligent being in a shared social context who can transform whatever “lean” words and cues he or she receives into an understanding of what the speaker or writer meant. IS research that takes a positivist IRT perspective conceptualizes communication richness as a function of channel capacity (i.e., the flow through a conduit), while IS research that takes an interpretive perspective conceptualizes communication richness as a function of mutual understanding (i.e., one person’s reaching an understanding of what another person means). The following section examines how a third research perspective—critical social theory (CST)—conceptualizes communication richness.

A Critical Social Theory Perspective

There are many excellent reviews of critical social theory both in IS, general management
and social research literature (e.g., Alvesson and Willmott 1992; Hirschheim and Klein 1994; Lyytinen and Hirschheim 1988; Lyytinen and Klein 1985; Mumby 1988; Ngwenyama 1991; Orlikowski and Baroudi 1991; Tice and Slavens 1983; White 1988). We will not replicate those reviews here, but we will outline some fundamental CST concepts and focus specifically on Habermas' theory of communicative action, the basis of this study. The term “critical social theory” was coined by Max Horkheimer who, in the 1930s, set out to contrast the work of certain social theorists (Adorno, Fromm, Marcuse and himself) from that of traditional social theory, which developed along the lines the positivism (cf. Bernstein 1976; Frisby 1972). Whereas traditional social theorists see themselves as observers of social situations whose research is completed when they achieve a sound explanation or understanding of it, critical social theorists believe that they cannot be mere observers. CST researchers believe that, by their very presence, they influence and are influenced by the social and technological systems they are studying. Moreover, CST, in contrast to the positivist perspective, posits that (1) there is a difference between observing nature and observing people and (2) inquiry into social activity should focus on understanding their meanings from within the social context and lifeworld of actors. For critical social theorists, the responsibility of a researcher in a social situation does not end with the development of sound explanations and understandings of it, but must extend to a critique of unjust and inequitable conditions of the situation from which people require emancipation.

This study uses the critical social theory of Jürgen Habermas (1979, 1984, 1987). One reason for working within Habermas’ framework is that his work has had a greater impact on the IS discipline than any other CST school of thought. By adopting Habermas’ critical social theory, we will be building on a foundation that has already gained recognition among IS scholars (cf. Hirschheim and Klein 1994; Lyytinen 1992; Lyytinen and Hirschheim 1988; Lyytinen and Klein 1985; Mingers 1981; Ngwenyama 1987, 1991; Ngwenyama and Lyytinen 1997; Truex 1993). Moreover, Habermas (1984, 1987) has already developed a theory about communication, the theory of communicative action. The CST perspective on IS research differs from positivist perspective in the following ways:

1. It is sensitive to the lifeworlds of the organizational actors and is oriented to interpreting and mapping the meanings of their actions from their perspective.

2. It adopts pluralistic methods of inquiry such as participation, observation, and the analysis of contextual data.

3. It does not separate (as would the laboratory experiments of positivism) the subjects of inquiry from the organizational context within which they are situated.

4. It recognizes that the organizational context is not only important to meaning construction, but to social activity as well (cf. Ngwenyama 1991).

Unlike the positivist perspective of IRT, CST views people not as passive receptacles of whatever data or information that is transported to them, but as intelligent actors who assess the truthfulness, completeness, sincerity, and contextuality of the messages they receive. For this reason, we agree with and will use the CST terms, human actor and organizational actor, when we refer to what positivist IS research refers to as “users” and “human subjects.” Finally, unlike most interpretive approaches (e.g., Lee 1994), the CST perspective requires the researcher to attend not only to the matter of mutual understanding, but also the matter of the emancipation of organizational actors from false or unwarranted beliefs, assumptions, and constraints.6

6Lee (1994) alludes to the possibility of a reader's coming to understand an author better than the author knows himself or herself, but his hermeneutic approach stands independently of this concept.
Richness of E-Mail Communication

Basic concepts of communicative action

Habermas' theory of communicative action describes four main types of intentional behavior or social action: instrumental, communicative, discursive, and strategic. Although each action type has a specific focus and orientation, together they represent different aspects of human behavior in social settings. With regard to this study, the four social action types are significant for the following reasons. First, in contrast to the positivist perspective in IRT's conduit metaphor, the four social action types depict human beings as active processors or interpreters who are not mere receptacles of meanings transported to them, but who create or enact the meanings that they come to hold. Second, in contrast to the interpretive perspective, the four social action types recognize that a person who reads, listens to, or otherwise receives a message need not restrict her meaning for the message to just mutual understanding, but instead can be critical of it. From a CST perspective, communication richness is not a function of the channel capacity as in IRT's positivist conception. Further, it is not restricted to how well one person comes to understand what another person means as in the interpretivist conception. In CST, communication richness involves not only understanding what the speaker or writer means, but the testing of validity claims associated with the action type enacted by the speaker or writer. The results of the tests enable the listener or reader to detect and analyze distorted communications. By distorted communication we mean communicative acts that are false, incomplete, insincere, or unwarranted. Communication richness in a CST perspective is gauged not by channel capacity or by how well a person recreates a meaning that another person intends, but instead by how well a person, through her assessment of the validity claims made by the person communicating to her, succeeds in emancipating herself from distorted communications. From this perspective, one realizes that any portrayal of human beings as simply ascribing face validity to the communications directed to them would be unrealistic in CST. However, this is precisely the portrayal offered by IRT's positivist perspective and the interpretive perspective. Neither of these two perspectives addresses the validity of what is being communicated in the first place, but this is exactly what is considered to be pivotal in the CST perspective on communication richness.

Organizational Contextuality

In CST, "social" in the term "social action" refers to the orientation of a person's action to other individuals and to the action being embedded in an organizational context. Through its social and institutional structures, the organizational context defines, for all organizational actors, the possibilities and potential for social action. In everyday interactions, an organization's policies, norms, and resources serve to enable, constrain, and sometimes outright determine what is proper and improper, and to lend meaning to the actions of individuals. The organizational context also defines the power, authority, and status relationships of the individuals within it. However, as intelligent and knowledgeable agents, organizational actors can, within limits, choose to act in accordance with or against organizational norms. To well-socialized actors, the organizational context is a taken-for-granted store of knowledge or a set of pre-interpreted patterns of meaning about the organization. The organizational context serves as a reference schema that enables actors to act and to interpret the actions of others. As actors mediate action situations, they draw upon these stocks of knowledge, as well as material and nonmaterial resources of the organization. In executing social actions, an actor relies upon the fact that he or she shares every aspect of the organizational context with the other actors involved in the action situation. Thus contextuality of social action has numerous practical consequences for daily organizational life and for researchers who observe it. The following examples should clarify this issue.

1. It is because of contextuality that, first, an actor cannot simply construe any meaning he would like for his own actions or the actions of others and, second, an actor can-
not simply exercise complete free will in how she chooses to act. Hence a researcher cannot build a valid explanation or interpretation by examining just individual factors alone. In fact, the sociologist C. Wright Mills (1977, p. 67) dismissed such research efforts as committing the methodological error of “psychologism.”

2. Because of their shared organizational context, even different individuals who hold different opinions on the same matter and who are motivated by conflicting interests can end up with negotiated meanings for the same action and even choosing the same way in which to act.

3. The same publicly observable behavior can have completely different meanings in different social contexts. As has been stated, “The same overt behavior (say a tribal pageant as it can be captured by a movie camera) may have an entirely different meaning to the performers. What interests the social scientist is merely whether it is a war dance, a barter trade, the reception of a friendly ambassador, or something else of this sort” (Schutz 1993, p. 54).

4. The same publicly observable behavior (for instance, an order or a command) could be meaningful when coming from one person to another (such as from an Air Force Captain to one of her troops), but not when involving a different dyad (such as the president of a university and the president of the university’s faculty union). Again, publicly observable behavior alone is not meaningful; a social context is necessary for it to have meaning.

Norms of Social Action

Habermas’ theory of communicative action posits that all social action assumes a basic set of norms. The norms hold that actors are allowed to express fully their opinions and must honor the outcome of open rational argument. Further, each type of social action entails its own specific set of validity claims. Therefore, any action by an individual carries with it specific claims of validity. According to the theory of communicative action, breakdowns in communication occur when an actor fails to observe the norms or fails to apprehend the actions of other actors. Thus, a breakdown raises doubts about the validity claims of the social action being considered. Routine social interaction requires that organizational actors monitor the action situations within which they operate and reflect upon their actions and the actions of others. When doubt arises in the mind of an actor about validity claims of any action, the actor first enters a cycle of critical reflection (Ngwenyama 1991) to test the claims. In testing the claims, the actor draws upon his knowledge of the organizational context (norms of interaction, power, status relationships, etc.), the particular action situation itself, and the orientation of the other person whose action is being contested. By critically reflecting in this manner, the actor can free himself not only from false or unwarranted beliefs and assumptions about the other person or her action, but also from constraints to enacting coherent meaning of the situation and taking appropriate counteraction. If the actor is unable to redeem the claims via personal reflection, he can then enter into a discourse with the other party in order to clarify and settle the issue. If the issue still cannot be settled in the discourse, other organizational actors are called into an open debate either to redeem the validity claims or to reject the action and sanction this person.

The Basic Types of Social Action

We will now describe the four main types of social action: instrumental, communicative,
discursive, and strategic. Although each social action type has a specific focus and orientation, together they represent different aspects of intentional human behavior in social settings. In everyday organizational life, actors easily shift from one social action type to another as they seamlessly interact in a web of social activity. However, the theory of communicative action posits that when an actor executes a specific social action type, he/she must be ready to defend the validity claims associated with it. Table 1 summarizes the action types and validity claims.

**Instrumental action** is behavior that is oriented to attaining rational objectives. When employing this type of action, a person views her opponent as if he were a mere object or organizational resource (rather than another actor) and attempts to manipulate the opponent to act according to her wishes. Depending on the authority and status relationships between these two persons within the organizational context, she could issue an order to him or use other means to obtain compliance. In trying to enact coherent meaning of the action and the action situation, the person who is subjected to instrumental action will normally reflect upon the contextuality or appropriateness of the action (i.e., a basic validity claim that is associated with this action type). The fundamental question is: Does the organizational relationship make such action appropriate? For instance, does the person who is issuing an order to another person have the authority or standing within the organization to issue the order in the first place? Validity claims to efficiency and effectiveness are also relevant here. With regard to effectiveness, the concern is: Does the person who is executing the instrumental action have the resources to make the action stick? This person may also ponder the question: Is the action efficient for achieving the required ends?

**Communicative action** is concerned with achieving and maintaining mutual understanding (one person’s coming to understand what another person means) among all those who are involved in a coordinated organizational situation. Actors engage in communicative action to inform each other about states of affairs, organizational events, decisions taken, and so on. Communicative action assumes that everyone in the action situation is an actor in a social context (rather than a person who does not share the context or a person who is, as the positivist perspective in IRT’s conduit metaphor portrays, a passive and unreflective object in a physical landscape). Organizational actors involved in communicative action depend on a common language and a shared understanding of the organizational context in order to enact meaning from each other’s communicative actions. When the listener or reader of a communicative act (e-mail, memo, letter, etc.) fails to understand it, she would normally reflect upon it and try (again) to enact

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Table 1. Types of Social Action and Applicable Validity Claims
some coherent meaning for it. The process of enacting coherent meaning from the “text” is a critical reflection cycle in which the reader/listener tests the validity claims of **clarity**, **completeness**, **contextuality**, and **truthfulness** associated with this type of action. The listener or reader would ponder questions such as: Is the message clear; is there some jargon that I don’t understand? Is the message complete? What is the context of this message; how does it fit within the wider organizational context? From the speaker’s or writer’s own perspective, is his message true? If the reader or listener still does not enact a coherent meaning or is unsure that her enacted meaning is shared by the speaker or writer, she would initiate a discourse (discursive action) with the other person.

**Discursive action** is oriented toward achieving or restoring agreement and redeeming validity claims. Discursive action is initiated when organizational actors need to achieve agreement for joint action. In such a situation, the individuals would generally engage each other in a debate of the issues until they agree on a course of action. The second general application of discursive action is restoring agreement in situations of breakdown. When questions are raised about the validity of a person’s actions, the mode of interaction of the actors involved with these questions generally shifts to discursive action. In such situations, the shared aim is either to re-establish confidence in what is being said or done or to find rational explanations for the actions whose validity has been called into question. This requires that the actors suspend (if only momentarily) their immediate objectives in order to search for good reasons to justify or refute the validity claims that are in question. Discursive activity unfolds through critical debate and argumentation which forms the basis for joint decision making and agreement. Participants of discursive action draw upon a common medium of communication, shared protocols for interaction, and intuitive (a priori) knowledge of the ground rules of discourse. Discursive action typically evokes validity claims of **clarity and contextuality** and can also sometimes involve additional validity claims of **truthfulness and sincerity**.

**Strategic action** is concerned with an actor’s influencing and transforming the behaviors of others so as to conform to the actor’s desires or goals. Like instrumental action, a person’s strategic action is also oriented to attaining rational objectives. However, the person who engages in strategic action treats her opponent not as a mere object or organizational resource (which is the case in instrumental action), but as another actor—a person capable of intelligent counteraction. People who execute strategic actions often try to exploit and manipulate organizational influence, organizational processes, resources, and “the rules of the game” to their advantage. Strategic action may be open or covert, depending upon whether the conflict situation is openly admitted or hidden. A well known example of covert strategic action in everyday organizational life is “office politics.” Typical examples of overt strategic activity are negotiation and bargaining. Participants in strategic activity utilize both personal and organizational resources, such as social status, authority, and items of exchange value (time, expertise, etc.). They also rely on knowledge of what is feasible to achieve and knowledge of opponent’s goals, positions, and potential for counteraction. The primary validity claim associated with strategic action is **contextuality**. The subject of a strategic act would ponder: Is the action legitimate, given the organizational context? Does the person who is executing a strategic action to change my behavior have the formal organizational standing or the moral authority to do this in the first place? Strategic action is deemed legitimate and valid when it conforms to organizational norms, policies, authority structure, and “the unwritten rules of the game.” When it does not conform, the person who is subject to it can consider it “dirty tricks.”

**Reading Communication Richness From the CST Perspective**

The CST definition of communication richness (stated earlier) recognizes that, in attempting
Richness of E-Mail Communication

to enact coherent meaning from a "text," a listener or reader can go beyond achieving a mutual understanding with the speaker or writer. The listener or reader accomplishes this by critical reflection, that is, assessing one or more validity claims pertaining to what the speaker or writer expressed (cf. Table 1). Furthermore, a listener's or reader's reflection can lead her not only to the ordinary outcome in which she comes to understand what the speaker or writer means (i.e., mutual understanding), but also the critical outcome in which she emancipates herself from distorted communicative acts. An example of emancipation from distorted communicative acts can involve an instance of communicative action where the listener does not accept the speaker's utterance at face value, but questions its validity claims and sees that it is incomplete, false, unclear, or inappropriate. Another example can involve an instance of either instrumental or strategic action in which the reader does not accept the writer's message at face value, but questions its validity claim of contextuality (appropriateness) and sees that the speaker has no formal organizational standing to execute the action in question.

The concept of emancipation from distorted communication distinguishes the CST definition of communication richness from earlier positivist and interpretive definitions. The positivist IRT perspective would recognize richness to occur even when the listener or reader assesses no validity claims and the communication was intentionally distorted (i.e., incomplete, false, unclear, or inappropriate). This is because IRT's conduit metaphor conceptualizes the listener or reader as a passive receptacle even for any distorted communication that is transported to him or her. The interpretive perspective in the hermeneutic approach (Lee 1994) would recognize richness to occur even when the listener or reader achieves a "mutual understanding" of a communicative act that is incomplete, false, unclear, or inappropriate. What CST research offers that positivist and most interpretive research does not is the recognition that communication among everyday actors also involves their need to assess the validity or rightness of what is being communicated in the first place. CST's four main social action types, and the set of validity claims specific to each (cf. Table 1), describe the situations where such assessments can take place and communication richness can occur.

Two important points about this study's CST definition of communication richness require elaboration. First, the CST perspective, as the interpretive perspective, conceptualizes the role of social cues (such as facial expressions, body language, and tone of voice) in a way altogether different from the positivist IRT perspective. IRT has presumed that more such cues automatically entail the consequence of more communication richness and that fewer such cues automatically entail the consequence of less communication richness. In contrast, the CST and the interpretive perspectives make no presumption of any direct relationship between the quantity of social cues and the level of communication richness. However, these two perspectives do acknowledge that social cues can contribute to communication richness, but that there is no a priori reason to suppose that facial expressions, body language, tone of voice, or other social cues are necessary conditions for communication richness to readily occur. The second important point is that the CST definition of communication richness goes beyond both the positivist IRT focus on features of the process of communication (social cues and channel capacity) and the interpretivist focus on mutual understanding (the listener's or reader's coming to understand what the speaker or writer meant). In addition, the CST perspective focuses on the listener's or reader's critique of the validity or rightness of what is being communicated and, if needed, the listener's or reader's emancipation of herself from distorted communications. Table 2 summarizes the differences among the three definitions of communication richness. It also summarizes what the CST perspective contributes that is new and different from the other perspectives. In the next section, an empirical illustration of communication richness from the CST perspective is presented.
Table 2. Comparison of Three Definitions of Communication Richness

<table>
<thead>
<tr>
<th>Social cues (such as facial expressions, body language, and tone of voice)</th>
<th>When the number of social cues increases (or decreases)</th>
<th>When determining whether or not communication richness is present, researchers focus on...</th>
</tr>
</thead>
<tbody>
<tr>
<td>... are necessary to maximize communication richness.</td>
<td>... can contribute to, but are not necessary to maximize, communication richness. Communication richness can readily occur even in the total absence of social cues.</td>
<td>... the communication richness correspondingly increases (or decreases).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Communication richness from...</th>
<th>X</th>
<th>X</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>... the positivist perspective in IRT's conduit metaphor:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>... the interpretive perspective in the hermeneutic approach of Lee (1994):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>... this study's CST perspective:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
An empirical illustration of communication richness

The empirical material used here is drawn from a case study of a company called HCP (Markus 1994, p. 510). Whereas this material was used in the case study to investigate the merits of IRT, the material will be used here to investigate how communication richness, as conceptualized from the CST perspective, can emerge in the managerial use of e-mail. Table 3 should be studied before proceeding with the rest of this section.

The illustration begins by turning our attention to the meaning that Sheila enacts for 124, a message that Ted sends to her. According to CST, when one person interacts with another, either can engage in any or all of the following: communicative action, instrumental action, strategic action, and discursive action, where a set of validity claims (cf. Table 1) accompanies each of these action types. In this vignette, Sheila is engaging in communicative action. As explained earlier, communicative action is concerned with achieving and maintaining mutual understanding among individuals engaged in coordinated organizational action. In processing the validity claims accompanying this communicative action, Sheila evolves her own meaning for Ted's communicative act in 124. As explained in detail below, the result is that communication richness, in this vignette, involves not only the ordinary outcome in which Sheila successfully "downloads" the semantic content of the e-mail message that other managers previously "uploaded" to HCP's computer (as IRT's conduit metaphor suggests). Rather, the result is that communication richness additionally involves (as CST would explain) the critical outcome in which Sheila undertakes actions to test the validity claims of what is "downloaded" and, where necessary, to redeem these claims.

Observations in this vignette are begun by noting that Sheila's understanding of 124 is not solely a function of the dictionary definitions of the words with which Ted composed 124, but continues to develop and emerge as additional messages join 124 over time. At time 16:23, the message set is 124; at 21:16, it is 124-143-147-148-151; and at 21:49, it is 124-143-147-148-151-161. At each of these times, the meaning that Sheila enacts for 124 is different. To emphasize the changes or the development in the meaning that Sheila enacts for 124, we ask the reader to visit Tables 3a through 3c, so as to view 124 as Sheila would view 124 at these successive points in time.

For Sheila at time 16:23 (Table 3a), 124 begins with the meaning of a straightforward and routine information request (about whether HCP has a particular tracking system) that Ted makes to her. As Sheila's response in the form of 143 (displayed in Table 3) allows us to interpret, Sheila's understanding of 124 at this time is that it is a routine matter and that there is no indication of any serious problem requiring more-than-routine attention.

However, at time 21:16 (Table 3b), Sheila not only receives another message from Ted (151), but also receives copies of two e-mail messages (147 and 148) that Mike had just sent privately to Ted and that Ted forwards to Sheila along with 151. At this point, the message set for Sheila grows to 124-143-147-148-151. For Sheila, even though the set of words with which Ted composed 124 remains constant from time 16:23 to time 21:16, Sheila enacts a different meaning for 124 at the latter time. The two forwarded messages, 147 and 148, and Ted's new message, 151, all place 124 in a new light: 124 is no longer a straightforward and routine information request, but emerges with the meaning of a diplomatically stated assertion from a regional vice president (Ted) that there is a serious problem that requires more-than-routine attention. Also, the additional messages 147, 148, and 151 place 124 in a broader, organizational context; what 124 means to Sheila at this point depends not only on the words with which Ted composed 124, but also on the interests of other organizational actors (Ted as well as Mike), as evidenced in 147, 148, and 151.

Finally, at time 21:49 (Table 3c), Sheila enacts yet another meaning for 124. At this point, Sheila makes copies of 147, 148, and 151 and forwards them along with a copy of 124 when
Table 3. The Complete Set of Empirical Material for Investigation

<table>
<thead>
<tr>
<th>Mess. No.</th>
<th>Date/Time</th>
<th>From</th>
<th>To</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>027</td>
<td>7/31 16:30</td>
<td>Mike</td>
<td>Ted</td>
<td>We are not adhering to the state law that requires payment w/i [within] 30 days unless proper notification is given of valid delays.</td>
</tr>
<tr>
<td>124</td>
<td>8/6 16:23</td>
<td>Ted</td>
<td>Sheila, Mike</td>
<td>Sheila, I presume you are aware that the state of . . . requires that we pay within thirty days. The [branch] is reporting that we are not adhering to this. Do you have a system in place to keep track of this? Is there any information you need from us? Please let me know? Thnaks! Ted</td>
</tr>
<tr>
<td>138</td>
<td>8/6 17:54</td>
<td>Mike</td>
<td>Ted</td>
<td>Thank you thank you thank you</td>
</tr>
<tr>
<td>143</td>
<td>8/6 20:03</td>
<td>Sheila</td>
<td>Ted, Mike</td>
<td>Ted, yes, we were aware of the 30 day requirement. We look at this everyweek to insure compliance. The only exceptions should be . . . Will give you an aging [accounting report] tomorrow. Sheila</td>
</tr>
<tr>
<td>147</td>
<td>8/6 20:13</td>
<td>Mike</td>
<td>Ted</td>
<td>Ted, something is wrong. I am not saying Sheila is not correct, all [all l] am saying is that you and I are signing a lot of second and third requests as priority processing and Kathy [one of Mike's subordinates] says . . . and Kathy is usually not wrong about this type of thing. Could it be that the problem is that claims are just not getting logged [logged] in upon receipt? In my auditing days . . . we found this to be common when reports showed &quot;all ok&quot;?</td>
</tr>
<tr>
<td>148</td>
<td>8/6 20:21</td>
<td>Mike</td>
<td>Ted</td>
<td>Ted, the more I think about this, the more it bothers me, just look at all of the recent 2nd and 3rd requests and all of the over 60days followups from Kathy. I am going to have Kathy summarise the last 60 days. I will not indicate toKathy the specifics of why I am requesting. This could be a serious company wide problem. Will you check (when you [you receive your aging] with Sheila to see if they have claims in house that do/are not reflected in her aging. Thanks.</td>
</tr>
<tr>
<td>151</td>
<td>8/6 21:16</td>
<td>Ted</td>
<td>Sheila</td>
<td>Sheila, I dont agree [with Mike] that is [claims are being] received but not entered, although it could be, you would know. i tend to think some of these are ap [accounts payable] problems, we will have to look at what they [Mike and Kathy] can send us for examples. the way i look at it we are looking a t a problem that might be there proactively. we will look and see if we can find a problem or at least come to agreement on status, will keep you posted [you posted].</td>
</tr>
</tbody>
</table>

(Note: Ted forwards copies of 147 and 148 when sending 151.)

<table>
<thead>
<tr>
<th>161</th>
<th>8/6 21:49</th>
<th>Sheila</th>
<th>Direct Subordinate</th>
<th>FYI [with previous messages attached]</th>
</tr>
</thead>
</table>

(Note: Sheila forwards copies of 124, 143, 147, 148, and 151 when sending 161.)

| 162      | 8/6 22:20 | Sheila | Ted    | Ted, given the additional explanation. . . . and the fact that I agree, Kathy is seldom wrong. . . . I will see what I can see from this end. I'm sure none of us want another $14,000 interest charge! Sheila |

*Markus states: "The messages have been reproduced with only minor omissions and with actual spelling and typing errors. Proper names have been changed." Square braces, [ ], contain Markus' additions. The other braces, { }, contain additions by the authors of this study. All omissions (" . . .") appear in Markus' own presentation of the messages. Markus offers the following descriptions of Ted, Mike, and Sheila:

Ted Josephs (a pseudonym) was one of eight Regional Vice Presidents (RVP) who reported directly to the CEO of HCP. Ted was responsible for approximately 400 employees in three remote districts located as far as 2,500 miles from Headquarters. In this position, he had the authority and responsibility to understand the organization as a whole. . . Ted was one of the first occupants of the RVP position when it was established three years prior to data collection. According to those I interviewed at HCP, his superiors, peers, and subordinates regard him as an excellent manager (Markus 1994, p. 513).

In his weekly report for the week prior to the message sample, Mike, one of Ted's direct subordinates, reported that HCP appeared not to be in compliance with a state regulation in his jurisdiction. This obviously important issue fell within the organizational purview of HCP's VP of Customer Service (Sheila). Mike's position in the organization was such that he could not approach Sheila directly with his concerns, but had to rely on his superior to do it for him. After reading Mike's weekly report and directing his assistant to file it, Ted sent message #124 to the VP of Customer Service with a copy to Mike (Markus 1994, pp. 516-517).
### Table 3a. The Message Set for Sheila at Time 16:23

<table>
<thead>
<tr>
<th>Mess. No.</th>
<th>Date/Time</th>
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<th>To</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>124</td>
<td>8/6 16:23</td>
<td>Ted</td>
<td>Sheila</td>
<td>Sheila, I presume you are aware that the state of... requires that we</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mike</td>
<td>pay within thirty days. The [branch] is reporting that we are not adhering</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>to this. Do you have a system in place to keep track of this? Is there any</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>information you need from us? Please let me know? Thanks! Ted</td>
</tr>
</tbody>
</table>

### Table 3b. The Message Set for Sheila at Time 21:16

<table>
<thead>
<tr>
<th>Mess. No.</th>
<th>Date/Time</th>
<th>From</th>
<th>To</th>
<th>Text</th>
</tr>
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<tr>
<td>124</td>
<td>8/6 16:23</td>
<td>Ted</td>
<td>Sheila</td>
<td>Sheila, I presume you are aware that the state of... requires that we</td>
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<td></td>
<td>Mike</td>
<td>pay within thirty days. The [branch] is reporting that we are not adhering</td>
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<td>information you need from us? Please let me know? Thanks! Ted</td>
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<tr>
<td>143</td>
<td>8/6 20:03</td>
<td>Sheila</td>
<td>Ted,</td>
<td>Ted, yes, we were aware of the 30 day requirement. We look at this</td>
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<td></td>
<td></td>
<td></td>
<td>Mike</td>
<td>everyweek to insure compliance. The only exceptions should be...</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Will give you an aging [accounting report] tomorrow. Sheila</td>
</tr>
<tr>
<td>147</td>
<td>8/6 20:13</td>
<td>Mike</td>
<td>Ted</td>
<td>Ted, something is wrong. I am not saying Sheila is not correct, all [all I]</td>
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<td></td>
<td>am saying is that you and I are signing a lot of second and third requests</td>
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<td>as priority processing and Kathy [one of Mike's subordinates] says...</td>
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<td>and Kathy is usually not wrong about this type of thing. Could it be that</td>
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<td>the problem is that claims are just not getting logged [logged] in upon</td>
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<td></td>
<td></td>
<td></td>
<td>receipt? In my auditing days... we found this to be common when reports</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>showed &quot;all ok&quot;?</td>
</tr>
<tr>
<td>148</td>
<td>8/6 20:21</td>
<td>Mike</td>
<td>Ted</td>
<td>Ted, the more I think about this, the more it bothers me, just look at all of</td>
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<td></td>
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<td></td>
<td>the recent 2nd and 3rd requests and all of the over 60 days followups</td>
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<td>not indicate to Kathy the specifics of why I am requesting. This could be</td>
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<td>a serious company wide problem. Will you check (when your [you] receive</td>
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<td></td>
<td>your aging) with Sheila to see if they have claims in hourse that do/are</td>
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<td>are ap [accounts payable] problems, we will have to look at what they [Mike and Kathy] can send us for examples. the way i look at it we are looking at a problem that might be there proactively. we will look and see if we can find a problem or at least come to agreement on status, will keep you posted [you posted].</td>
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(Note: Ted forwards copies of 147 and 148 when sending 151.)

Sheila sends her own message 161 to her direct subordinate (so that the message set grows to 124-143-147-148-151-161). In copying 124, forwarding it, and appending two other messages to it, Sheila is appropriating 124 to suit her own purposes and hence, in this way, can even be described as joining Ted as its co-author. Therefore, we can interpret that, for Sheila, 124 in 124-143-147-148-151-161 reflects her most recently enacted meaning that, first, there is definitely a serious problem requiring more-than-routine attention and, second, this is a serious problem for which she accepts responsibility (as evidenced by her delegation of it to her direct subordinate). Also confirming this interpretation is that, at time 22:20, Sheila sends a new message to Ted (162) in which her statement, "I will see what I can see from this end," is an explicit sign to us (the authors and readers of this study) that Sheila is indeed aware of a problem for which she realizes she is responsible.
Drawing on the empirical material that pertains to how Sheila's enactment of her meaning for 124 emerged and continued to emerge as additional messages joined it over time, we may proceed to identify how Sheila's reaction to Ted's written discourse illustrates the CST definition of communication richness. First, observe that, at time 16:23, Sheila initially had no reason to question what Ted was saying in 124. In other words, in what CST would call Sheila's communicative action of trying to achieve mutual understanding (i.e., developing an understanding of what Ted meant in 124), there was no factor prompting Sheila to examine what CST would call 124's validity claims.

However, at time 21:16, the validity claims of 124 are, in Sheila's eyes, called into question. Whereas initially (at time 16:23) it appeared to Sheila that Ted was making a simple information request about whether HCP has a particular tracking system ('the [branch] is reporting that we are not adhering to this. Do you have a system in place to keep track of this?'), Sheila experienced a breakdown in her initial understanding of 124 when, at time 21:16, she received messages 147, 148, and 151. An understanding of 124 as a simple information request about whether HCP has a particular tracking system could not explain (again, from Sheila's perspective) Ted's behaviors at time 21:16, such as (1) why Ted initiates renewed dialogue with her even after she had already
given a full answer (143: "Ted, yes, we were aware of the 30 day requirement. We look at this every week to insure compliance.") to what seemed to be a simple information request (124: "Do you have a system in place to keep track of this?") or (2) especially, why Ted persists in his dialogue with her on this matter by his forwarding copies of 147 and 148 to her—messages that a seemingly unrelated third party (Mike) had composed and sent privately to Ted. In other words, these two behaviors by Ted, which were no less observable to Sheila than they are to us, served to bring about a breakdown in the meaning that Sheila had initially enacted for 124. As explained earlier, a breakdown in understanding can call into question, in the case of communicative action, a message's validity claims pertaining to any or all of the following: completeness, truthfulness, clarity, and contextuality. In the instance of 124, Ted's two behaviors call into question the validity claims of completeness, clarity, and contextuality.

By raising the possibility that there was more to 124 than just a routine information request from Ted about whether HCP has a particular tracking system, the breakdown called into question the completeness of what Ted was saying in 124 (i.e., what more did he have to say on this topic?). By raising the possibility that this was not a straightforward statement from Ted asking for information (i.e., what CST would call a communicative action by Ted), but a diplomatically phrased statement from Ted for Sheila to act on a serious problem falling under her responsibility (i.e., what CST would call a strategic action by Ted), the breakdown called into question the clarity of what Ted was saying in 124 (i.e., what was the topic in the first place?).

Through raising the latter possibility (that 124 could be a strategic action by Ted, rather than a communicative action by Ted), the breakdown also served to change or better establish the organizational context or the contextuality of what Ted was saying in 124 (i.e., did Ted send 124 in the same way that anyone else with an information request at HCP would have, or did Ted send 124 using his formal organizational standing as a regional vice president and, therefore, as someone to be answered to?). Finally, Sheila succeeded in resolving or redeeming the validity claims of completeness, validity, and contextuality. Consider the action that Sheila initiates: "I will see what I can see from this end" (162). This action reflects Sheila's completion of her understanding of 124, by acknowledging that, rather than only asking about whether HCP has a particular tracking system, 124 was also asking her about what action she would be taking to correct a particular problem. This action also reflects Sheila's clarification of her understanding of 124, by realizing that Ted's topic in 124 was not so much about a tracking system at HCP as it was about Ted's concern for her to carry out her responsibilities. Last, this action also reflects Sheila's contextualization of her understanding of 124, by acknowledging that 124's sender was not just any HCP employee making an information request, but a regional vice president that she needed to answer to and for whom she had to adjust her behavior. For Sheila, it is this new context that raises for her the possibility of a new meaning for 124 as a strategic action, rather than a communicative action, by Ted.

Far from being a passive receptacle for a fixed-form message that is transported through a conduit to her, Sheila was an intelligent actor able to interpret the received text so as to complete, clarify, and contextualize this communicative act. On the one hand, IRT would lead to the (incorrect) conclusion that no communication richness occurs in this instance. First, IRT's conduit metaphor would explain that Sheila's understanding of 124 can be nothing more than what Ted had ostensibly, intentionally, and publicly expressed through his words in 124. Second, because IRT conceptualizes richness as a direct function of the quantity of social cues (such as facial expressions, body language, and tone of voice) in the process of communication, IRT would predict that the total absence of such cues in Ted's e-mail to Sheila would lead to little or no communication richness. On the other hand, this study's CST definition of communication richness allows us to explain, instead, that Sheila can learn and reflect when confronting a breakdown in her understanding of 124 and
then, by assessing 124 against certain validity claims, further develop and redeem her understanding—hence leading to the (correct) conclusion that communication richness does occur. Furthermore, this richness manifests itself not only in the form of the ordinary outcome in which Sheila achieves a mutual understanding with other organizational actors, such as Ted, but also in the form of the critical outcome in which Sheila's learning and reflection (i.e., her examining and redeeming of validity claims) emancipate her from distorted communications (which were distorted in terms of completeness, clarity, and contextuality).

Note that the above illustration of this study's definition of communication richness focuses on just one social action type: communicative action. In ongoing, day-to-day organizational life, communication richness can also arise in cases involving CST's other social action types: instrumental action, strategic action, and discursive action. Three speculations are briefly mentioned. First, for an instance of instrumental action, one might develop an interpretation in which Mike, by sending 147 and 148 to Ted, was treating Sheila as an object (note that Mike himself never directly addresses Sheila in this message set), where this object was to be manipulated (which Mike accomplished through Ted). Second, for an instance of strategic action, one might develop an interpretation in which Ted, in appending 147 and 148 (the messages Mike sent privately to Ted) to 151 (Ted's own message to Sheila), was treating Sheila as an intelligent actor whom he sought to manipulate so that she would comply with his ulterior motive (which was to have Sheila begin investigating and correcting her own operations). Third, for an instance of discursive action, one might develop an interpretation in which Mike, by saying "Ted, something is wrong..." in 147 and "Ted, the more I think about this..." in 148, is revealing that he realizes that Ted (and Sheila) might not have yet achieved a mutual understanding with him on the significance of what he himself earlier meant, in 027, regarding the matter of the state law that requires payment within 30 days; this realization accounts for his communicative acts of sending 147 and 148, so as to help restore agreement on the significance of this matter. To move these three examples from mere speculation to full documentation, a researcher would need to document, for each of the three cases, not only any validity claims that the actors themselves actually call into question, but also any subsequent cycles of critical reflection in which an actor tests the claims and emancipates herself from those instances of distorted communications that her testing detects. In general, as organizational actors shift naturally from one social action type to another, they seamlessly interact in a web of social activity that, to them, is daily organizational life and, as such, routinely presents opportunities for communication richness to occur.

Discussion and Conclusions

The motivation for this study was to contribute a new perspective to the discourse and search for a new theory of richness in managerial communication that is mediated by information technology. As IS researchers shift away from information richness theory, we need to develop a successor theory in order to inform the work of IS professionals who design and manage information technology to support managerial communication. This paper does not attempt to complete the entire task of establishing all aspects of a new theory on communicative richness, but takes a step toward the development of such a theory by offering a new definition of communication richness. The paper's definition is based on a CST research perspective, the significance of which was clarified by comparing and contrasting it to earlier definitions of communication richness that emerged from the research perspectives of positivism and interpretivism. The first two sections of the paper presented a critical review of the limitations of IRT and outlined its current standing in the light of the many efforts to test it empirically. The paper also outlined many of the alternatives to IRT that have been suggested. In the third section, the paper discussed the weaknesses of the positivist and interpre-
tive theoretical foundations of current research on communication richness. The fourth section outlined the theoretical perspective of the CST approach and a social action framework for empirical analysis. The fifth section presented an empirical analysis of details about the asynchronous, physically dispersed computer mediated communication among Ted, Mike, and Sheila.

The empirical material analyzed in this study served to highlight the major concepts in this new CST perspective. In the Ted-Mike-Sheila communication, we saw how communication richness emerged in the form of Sheila's emancipation of herself from Ted's distorted communications, which followed her judging of the validity or rightness of what Ted was saying. In contrast, by conceptualizing richness as a function of channel capacity, the positivist IRT perspective would not have predicted richness to occur in the Ted-Sheila-Mike communication (owing to the thinness of the channel capacity of e-mail). Also, by restricting communication richness to Sheila's achieving a mutual understanding of a message from Ted (even when it was distorted communication), the interpretive perspective would have missed the richness arising from Sheila's distancing and emancipation of herself from Ted's distorted communications. Remarkably, neither IS research on communication richness from the positivist nor interpretive perspectives has addressed the validity or rightness of what is being communicated, but this is exactly what the CST perspective considers to be pivotal to communication richness.

Another, related dimension that distinguishes the CST perspective presented here from positivist and interpretive perspectives on communication richness is the emphasis on people, who, as actors in a social or organizational context, themselves "process" data into information. This image stands in contrast to the assumption of most IS research, that the processing of data into information is primarily, if not exclusively, the job of computer hardware and software and that the role of the organizational actor is limited to "user" of both the output and the richness produced by the hardware-software system. The CST perspective is instructive for showing how organizational members are more than just knowing subjects; they are also actors—people who are more than just passive receptacles for data or meanings that are somehow transported or downloaded to them. They act to contextualize a message by placing it within institutional arrangements in which they find themselves: "People act in terms of their own and not the observer's definition of the situation" (Schutz 1964). In general, the CST perspective points us toward a rich, multi-layered, contextualized formulation of communicative interaction in electronic media. When people communicate, they do not send messages as electronically linked senders and receivers. They perform social acts in action situations that are normatively regulated by, and already have meaning within, the organizational context. As organizational actors, they simultaneously enact existing and new relationships with one another as they communicate. This CST approach is phenomenologically sensitive to the shaping and reading of action as meaningful. It does not treat meaning construction as a disembodied or apolitical activity. The CST perspective allows us to investigate how organizational actors formulate and reformulate their communications to achieve specific outcomes in action situations. It also enables us to look closely at the "how" and "what" of communicative practice, in any type of media use situation.

Future CST studies of computer mediated communication can investigate: (1) how organizational actors use electronic media in formulating and engaging in different types of social action; (2) what types of electronic media enable and constrain specific types of action; (3) how power and status relationships are reproduced in electronic media; (4) how the network of negotiated meanings upon which organizational work and interaction depend is constructed and maintained in electronic communication. From a CST perspective, researchers can also investigate how organizational actors read their political environments in skilled ways to reproduce power relationships while satisfying a complex set of goals, values, commitments, and senses of self and others. A CST perspective also
enables researchers to explore whether communications are achievements of mutual understanding or the product of strategic action in which force is overtly or covertly substituted for free and open discourse. Further, researchers can also explore the contingencies of routine, everyday social interactions and assess the ways in which the organizational context and institutional arrangements render sense making and communication problematic and politically vulnerable.

References


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