

## **A Foucauldian Perspective of the Relationship between Communication and Information**

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*Contemporary metatheoretical discussions in the disciplines associated with the terms "communication" and "information" have been dominated by the impact of intellectual diversity on their relative disciplinary identities. These discussions have characterized communication and information as fields which are intellectually fragmented and which have had considerable impact on the project to establish each as distinct and coherent scholarly fields. A recent addition to this metatheoretical discourse is the proposition that the fields of communication and information can be related in terms of their concepts, methodologies, techniques, and institutions to form new areas of scholarship and knowledge. The present essay takes as its focus the discourse of the relationship and the conditions which make possible its appearance as a significant and legitimate theme in the metatheoretical discourse of communication and information. The analysis adopts the philosophical perspective developed by Michel Foucault and outlines the structure of a potential Foucauldian account of the communication-information relationship in which the relationship is described in terms of its status and role as an element in a prevailing discursive system.*

Contemporary metatheoretical discussions in the disciplines associated with the terms "communication" and "information" have been dominated by the impact of intellectual diversity on their respective disciplinary

identities. These discussions have characterized communication and information as fields that are intellectually fragmented and which have had considerable impact on the project to establish each as distinct and coherent scholarly fields (e.g., Berger, 1991; Budd and Ruben, 1979; Dervin, Grossberg, O'Keefe, and Wartella, 1989a, 1989b; Dervin and Nilan, 1986; "Ferment in the Field," 1983; Littlejohn, 1989; Machlup, 1983; Machlup and Mansfield, 1983). A recent addition to this metatheoretical discourse is the proposition that the fields of communication and information can be related in terms of their concepts, methodologies, techniques, and institutions to form new areas of scholarship and knowledge (e.g., Borgman and Schement, 1990; Pemberton and Prentice, 1990; Ruben, 1985a, 1985b, 1988, 1990, 1992; Ruben and Lievrouw, 1990). This claim is represented by the following statement by Borgman and Schement (1990):

[the] evidence indicates the possibility of a trend toward convergence of subject matter and institutional structures. If this trend proves accurate, convergent evolution [of communication and information studies] might reflect a paradigmatic overlap of the two fields. It might also mean that communication scholars and information scientists stand at a rare, but exciting, intersection between the two fields, posing an opportunity for realignment, cross-fertilization, and richer theory. (P. 43)

In this essay, it is proposed that the "communication-information relationship," and its place in this metatheoretical discourse, can be viewed in three ways. The first is the concept of the communication-information relationship from the perspective of the participants whose speech and texts comprise the metatheoretical discourse. This participant-perspective is explicitly concerned with the issues that the relationship entails, the nature of the disciplines that comprise the relationship, and the plans of practical action that can be built on its theoretical foundation. The communication-information relationship is deployed as a representation of the actuality or possibility of such ideas, theoretical linkages, or research programs.

A second perspective is to view the communication-information relationship as a product of particular practices and institutions and to address the nature of the practices through which the relationship can come to be expressed as a valid domain of scholarly inquiry. For example, the emergence of the communication-information relationship in the metatheoretical discourse of certain scholarly communities could be indicative of a transcending mechanism of a "paradigm shift" in which the understanding of communication of information may be changing relative to these communities. The emergence can be described and explained in terms of the

convergence of two communities and their respective world views. Such a perspective is grounded in the philosophical consideration of science and social science, exemplified by the paradigm thesis of Kuhn (1962, 1970). The philosophy of science perspective is interested less in the products of scientific communities than in the processes by which such products are produced. In Kuhn's account, these processes can be located in the structure of the scientific communities themselves and how they come to constitute scientific knowledge through periods of normal and revolutionary science. Traditionally, the discourse of the participant and the discourse of the philosopher have been constituted as separate, each with its own domain of knowledge. The participant is engaged in the task of defining the theoretical nature of the relationship while the philosopher engages in the task of describing the practices in which the participant is engaged through which such knowledge is produced and accepted.

The third perspective is one that referred to in the present essay as the Foucauldian, following the "archaeological" studies of Michel Foucault (see Foucault, 1961/1988, 1963/1975, 1966/1973, 1969/1972a) and will form the focus of this paper. An archaeological analysis dissolves the discursive boundaries within which it *becomes possible* to speak about communication and information as intellectual disciplines and also about the idea of a relationship between the two disciplines. It also makes problematic the separation of the discourses of the participant and the philosopher. The general hypothesis that structures a Foucauldian archaeological account is that a scientific discourse, exemplified here by communication and information, follows rules and regularities that can be described, but the description of those rules does not give priority or privilege to any particular body of texts. These regularities are concerned with systems of possibility for statements of theories rather than that to which these theories refer. It proceeds on the assumption that *what counts* as a theory or evidence for a theory is always part of a system of discourse that is historically located and that *includes*, rather than demarcates, the co-presence of a philosophical discourse.

The heart of the archaeological account is the separation of knowledge from the discursive systems which constitute, or make possible, knowledge. Foucault (1969/1972a) describes this distinction through the deployment of two French words, *connaissance* and *savoir*, which both translate into the English term "knowledge." By *connaissance*, Foucault (1969/1972a) is referring to "a particular corpus of knowledge, a particular discipline—biology or economics, for example" (p. 15). *Connaissance* incorporates the perspective of the participants and the philosophers of science from which communication and information would be considered as an organized body with particular theories and concepts, including that

of the communication-information relationship. *Savoir*, on the other hand, is used by Foucault (1969/1972a) to refer to "the conditions that are necessary in a particular period for this or that type of object to be given to *connaissance*" (p. 15). A discipline such as communication studies (an example of *connaissance*) is always linked with "that which must have been said—or must be said—if a discourse is to exist that complies, if necessary, with experimental or formal criteria of scientificity" (Foucault, 1969/1972a, p. 182). An archaeological account of the "communication-information relationship" would consider the discourse in which the claim to the relationship appears, how the discourse is structured, and why this discourse should be in force at this historical moment and not another. The archaeology makes no reference to that which this discourse refers to and has no explicit interest in whether the symbols or terms deployed are an accurate or inaccurate account of "the state of their field." Of importance is the fact that this discourse has appeared and that it is utilized.

The present essay explicates themes and parameters that an archaeological account of the communication-information relationship would take into consideration. Rather than carrying out a Foucauldian analysis, the objective of this essay is to outline a potential Foucauldian study and describe the insights such a study would provide for the understanding of the role of the communication-information relationship in a metatheoretical discourse of communication and information studies.

#### Discourse, Science, and the Constitution of Scientific Knowledge

This essay is grounded in the proposition that, ultimately, all scholarly activity is held together by systems of discourse, both informal and formal. Discourse is defined very broadly here to include all forms of speech and text that characterize a field, including journals, books, letters, journalism, jokes, first drafts, galley proofs, electronic correspondence, conference presentations, letters to journals, telephone conversations, and face to face conversation. The totality of this discourse constitutes the reality, shape, and substance of a discipline among the individuals who speak about it in this way. The archaeological analysis of the communication-information relationship proceeds on the claim that disciplines are "produced" and "reproduced" in this communicative activity, as are the identities of the "communication and information scholars." The relationship between a discipline and its discourse is ultimately circular; proponents of a discipline produce discourse, but the manner in which the discourse is structured produces the discipline and the conditions of possibility for the emergence of a proponent who can be recognized as such. In other words, from this perspective, there can be no objective or

external reference point from which either proponents or discourses can be referred. Such reference points are always constituted *within* the discursive system.

The same analysis can be applied to scientific discourses and their proponents who produce knowledge claims concerning truths (or potential truths) about the nature of the individual, the world, and the universe. Scientific knowledge is constituted within the boundaries of its discourse and cannot step beyond these (see Rorty, 1989, 1991a, 1991b). Hesse (1981) describes this relationship between truth and discourse as follows:

Science is ideally a linguistic system in which true propositions are in one-to-one relation to facts, including facts that are not directly observed because they involve hidden entities or properties, or past events or far distant events. (P. xi)

Similarly, Aronowitz (1988) describes the discourse of science as follows;

Science is a type of discourse with special languages, rules of investigation, and forms of inquiry that determine the form of a result. Together, these constitute elements of an ideology that is accepted by the scientific community and, to the extent this ideology becomes hegemonic in the larger social context, that is accepted as 'truth.' (P. 148)

In order to be considered as scientific, the knowledge claims of communication and information must be located in the primacy of the knowable. They must be capable of producing knowledge that is a faithful representation of some objective aspect of an external world (see Churchland and Hooker, 1985; Fleck, 1935/1979; Longino, 1990; van Fraassen, 1980). According to this view:

the picture which science gives us of the world is a true one, faithful in its details, and the entities postulated in science really exist: the advances of science are discoveries, not inventions. (Van Fraassen, 1980, pp. 6-7)

To be called a science, the discourse must satisfy at least two conditions (1) it must make possible the "discovery of truths" through the deployment of terms such as objectivity, validity, generalizability, and the claim to the "scientific method" (Rorty, 1991a, 1991b); and (2) it must mask the circular nature of scientific knowledge with respect to the discursive conditions of its possibility. In other words, scientific discourse must perpetrate a distinction between its knowledge and its language. To say that science *produces* knowledge through the deployment of its discourse would be to deny that science can *discover* objective truths. Therefore, the claim to knowledge production must be marginalized.

The equating of knowledge with discourse proposes that scientific knowledge is *constituted*, rather than discovered, and is contingent upon the intersubjective understanding of a *communication* community (see Apel, 1972). Within this framework, discourse operates to constitute knowledge of a world for that community through the ongoing accomplishment of human interaction. Discourse is no longer seen, to use Rorty's (1979) terminology, as a mirror of an autonomous reality. Instead "truth [is] made rather than found" (Rorty, 1989, p. 3). The concept of discourse, as opposed to the concept of method, is the primary mode of explanation in the constitution of scientific knowledge.

Scientific knowledge does not simply accompany or exist alongside the capacity to communicate, but resides *in* that capacity (Apel, 1972; Carey, 1977, 1982; Deetz, 1973, 1977). An understanding of the communication-information relationship, therefore, lies in the explication of the *practice of making knowledge claims*. This requires a description of the *conditions* in which a claim to knowledge is made, and the discursive forms that such claims take. There is no explicit concern with the aspect of reality that the knowledge claim refers *to*. Rather one seeks to describe the communication-information relationship as it is constituted in the communicative act of claiming it to be an object of knowledge, and the discursive conditions in which such an act of claiming takes place.

The emphasis on the role of discourse provides the framework for an important area of debate for communication scholars regarding the relationship of rhetoric and science and their place within the academic tradition of communication studies (see Condit, 1990; Craig, 1990; Cushman, 1990; Nelson, Megill, and McCloskey, 1987; Prelli, 1989, 1990). It offers a framework for raising questions of privilege and power with respect to forms of knowledge that are not easily stated within the received view of scientific knowledge (see Aronowitz, 1988; Deetz, 1982; Deetz and Kersten, 1983; Deetz and Mumby, 1990; Foucault, 1975/1979, 1976/1980; Habermas, 1968/1971; Mumby, 1987, 1988). For example, Levine (1987), in comparing the demarcation of communicative practices categorized as "literature" and "science," argues that "literature and science, whatever else they may be, are modes of discourse, neither of which is privileged except by the conventions of the cultures in which they are embedded" (p. 3). The object of an analysis grounded in the recognition of the primary nature of discursive practice is to account for the nature of these conventions by which the demarcation of the two discourses is carried out and the way in which such conventions become expressed *as* (as opposed to *in*) science and literature. Aronowitz (1988), Hayles (1984), Krippendorff (1990), Paulson (1988), Prelli (1989), and Radford (1989, 1990, 1991) have all adopted similar orientations in their treatment of science. Similarly,

Myers (1990) examined the discursive conditions under which "texts produce scientific knowledge and reproduce the cultural authority of that knowledge" (p. ix). Like Levine (1987), Myers is interested in such questions as the means by which those texts categorized as "scientific" come to take on more "cultural authority" than those texts categorized as "literary criticism," "art," or "philosophy."

The conceptualization of knowledge in terms of its constitution through discursive practice is a significant framework for the analysis of contemporary issues in communication, knowledge, and science, because it provides an intellectual structure and vocabulary to articulate issues beyond the limits of a received view of science. For example, this perspective is able to support the claim that the structure of scientific discourse operates to mask the conditions of its own constitution and to demarcate itself as an autonomous and independent realm of knowledge (see Foucault, 1971/1972b). With discourse made primary in the constitution of scientific knowledge, the examination of the discursive practices by which science is able to suppress this relationship are made available for description.

The Foucauldian account of scientific discourse is not just a different way of conceptualizing the role of discourse *in* science, but of the way in which a scientific discourse produces the role of its discourse. Scientific discourse is conceived as a particular organization of knowledge in which discourse is constituted in a particular way in order to substantiate the claim to discovery. The problematization of discourse in itself distinguishes the Foucauldian perspective from studies that conceptualize discourse about fragmentation and convergence as representative of something that is happening with respect to a real body of scholars. The philosophy of Kuhn (1962, 1970) and the sociological studies of Merton (1973), for example, claim to be descriptive of the work of real scholars and their relative intellectual relationships. Studies on the structures of invisible colleges (Crane, 1972; Granovetter, 1973, Ruben and Weimann, 1979) and the pattern among citations (Griffith, 1989; McCain, 1986; Small, 1986) represent empirical investigations of this "real" structure. The emergence of the "communication-information relationship" is claimed to be a manifestation of real changes in the literatures of these fields, the activities of its members, and the positioning of its groups.

From the Foucauldian perspective, these accounts become an *integral part* of the discursive system to be described. To make the claim that one can describe a paradigm, an invisible college, or a citation pattern, is to simultaneously validate the self-evidence that such structures "exist" to be described and to marginalize the claim that such structures are discursively produced. Similarly, to claim the possibility of a communication-

information relationship reinforces the self-evidence of communication and information as being distinct fields. The discourse of the paradigm and the communication-information relationship constitute each other by virtue of their appearance in the same discursive field and stand in relation to one another; paradigms claim to "describe" the movement and progression of disciplines while disciplines utilize paradigms in the constitution of their identity as fields which can be related. This theme is taken up in the following section.

#### **A Kuhnian Paradox and the Possibility of a Communication-Information Relationship**

The major claim of the present essay is that the metaphors of fragmentation and convergence deployed in the discourse of the participant are structured by the co-presence of the discourse of the philosopher. To be able to talk about fields as "fragmented," "unified," or "converging" requires the intersubjective acceptance that something tangible exists that can be fragmented, unified, or converged. This entity is usually considered in terms of intellectual structures of knowledge and theory, or institutional structures of research practices and methodologies that are validated as a domain of knowledge by the appearance of the philosophical discourse on the nature of science. The appearance of a communication-information relationship is made possible by the co-presence of the philosophical discourse. Without it, there would be nothing to converge or relate. This theme is developed with respect to one particular manifestation of the philosophical discourse, the work of Thomas Kuhn.

The Kuhnian discourse of the paradigm (Kuhn, 1962, 1970) is an integral part of the metatheoretical discourse of communication and information and is actively deployed by them in the production and legitimation of knowledge claims. Kuhn's texts are themselves accounts, conceived within the boundaries of a discursive system in which the claim of the paradigm could come to make sense. Kuhn's account is one particular way of talking about the way in which sciences develop, progress, and transform themselves, and how such processes give rise to particular objects and problems at particular historical points. The key point here, however, is not whether Kuhn's account is an accurate representation of science as it exists as a institutionalized process, but the manner in which it has become part of the way communication and information scholars talk about their activities.

As one particular way of speaking about science, Kuhn's account has found a central place in the metatheoretical discourses of the social sciences. Holland (1990), for example, notes,



[Kuhn's] assertions as to the importance of revolutionary paradigm change in the natural sciences were taken up avidly by sociologists and psychologists, ever struggling to achieve scientific respectability while grappling with the elusive and changing subject matter of human behavior, experience, and interactions. (P. 23)

If the implicit acceptance of Kuhn's model of science as a *description* of the structure of the communication-information relationship is bracketed, then Kuhn's text can be considered in its status *as an account*; a set of knowledge claims made possible by a particular discursive practice. The paradigm thesis is one account that has appeared among others, such as the falsification model of Popper (1934/1959), the research program account of Lakatos (1970, 1978), or the pragmatic approach of Rorty (1979, 1989, 1987/1991a, 1988/1991b). The Kuhnian thesis cannot and does not make the claim to be the only account of science. In the present essay, the truth or accuracy of Kuhn's account is not in question. Of interest is the *role* that Kuhn's discourse has in the discourse of communication and information studies. How is the discourse of paradigm used? Why is it given privilege in the metatheoretical discourse of communication and information studies? What does it enable? How does it structure and make possible certain aspects of the metatheoretical discourse of communication and information scholars?

The key to understanding the deployment of the Kuhnian account is the concept of the paradigm. A paradigm is deployed as the heart of that which defines a scientific community, the acceptance of which allows the talk of its fragmentation and convergence. Kuhn (1970) claims that "a paradigm is what the members of a scientific community share, *and*, conversely, a scientific community consists of men who share a paradigm" (p. 176). Shared in this view is a common body of knowledge, ideas, theories, concepts, and vocabularies that are acquired through an individual member participating in various institutionalized activities. For Kuhn, the community structure of a science is defined in terms of the similar educations and professional initiations of its members and their absorption of the same literatures through these activities. In a very important sense, the boundaries of the standard literature of a discipline mark the limits of a scientific subject matter. They mark the limit of that which is shared by members of that community.

In the Kuhnian account, intellectual communities are conceptualized as existing at different levels. At the most global level is the recognition that an individual is part of the community of all natural or social scientists. Below this comes membership in more specialized communities of scientific practice, such as the study of physics, chemistry, and astronomy. Membership in communities at this level is marked by the individual's

subject of highest degree, their membership in professional societies, and the journals they subscribe to and read. Within these communities, sub-communities can further be identified within general disciplines; groups of people who specialize in particular branches of the subject. Below this, groups can be identified that work on specific problems and are highly specialized. These groups form the fundamental units that Kuhn's (1970) account takes as the producers and validators of scientific knowledge. Kuhn claims that, typically, these communities consist of perhaps one hundred members, occasionally significantly fewer. The ablest scientists may belong to several of such groups. The claim that such core knowledge producing groups can be isolated through attendance at special conferences, the distribution of draft manuscripts or galley proofs, and formal and informal communication networks, such as those discovered in correspondence and in the linkages among citations, has provided the foundation of the claim that such groups can be discovered and their nature described (see Crane 1972; Small, 1986; Ruben and Weimann, 1979).

From the Kuhnian perspective, the nature of scientific knowledge claims can be understood only through reference to the groups that produce them, and thus is ultimately a sociological account. The activities of actual groups are crucial to describing the nature of the knowledge claims they make. Kuhn (1970) gives the following questions as the basis for a consideration of scientific progress:

How does one elect and how is one elected to membership in a particular community, scientific or not? What is the process and what are the stages of socialization of a group? What does the group collectively see as its goals; what deviations, individual or collective, will it tolerate; and how does it control the impermissible aberration? A fuller understanding of science will depend on answers to other sorts of questions as well, but there is no area in which more work is so badly needed. Scientific knowledge, like language, is intrinsically the common property of a group or else nothing at all. To understand it we shall need to know special characteristics of the groups that create and use it. (Pp. 209-10).

The Kuhnian perspective of science is ultimately the description of sociological boundaries; of the way in which individuals join and operate within groups that produce scientific knowledge. Language and discourse play a central role in the establishment and identification of recognizable communities. Language is a key identifying characteristic of the community, along with its knowledge. As Kuhn (1977) claims,

One thing that binds the members of any scientific community together and simultaneously differentiates them from members of other apparently similar groups is their possession of a common language or special dialect. . . . in

learning such a language, as they must to participate in their community's work, new members acquire a set of cognitive commitments that are not, in principle, fully analyzable within that language itself. (P. xxii)

From the Kuhnian perspective, to understand the language of communication and information, the question of "what community is being referred to?" becomes important. Since language is considered the property of the group, the understanding of the language requires the analysis of the norms and practices of the group which produces and uses it. From this perspective, it would be important to know who are the communication and information scholars who talk about communication and information. What are their names? What do they write about? What is their background? What is the nature of the knowledge base they draw upon? What are the educations, professional institutions, and communication networks, formal and informal, that define them? What do you have to know in order to be considered part of the community? What are the institutions in which this object makes sense? The list of concerns is long, but necessary if one is to analyze the knowledge claims of a particular group of scientists.

These questions are important from a Kuhnian perspective since the existence of different communities implies the existence of different languages. Since a different language is an important differentiating characteristic of one group, then the ideas and language of one group will be different from another. For example, Kuhn (1977) claims that

proponents of different theories (or different paradigms, in the broader sense of the term) speak different languages—languages expressing different cognitive commitments, suitable for different worlds. Their abilities to grasp each other's viewpoints are therefore inevitably limited by the imperfections of the processes of translation and of reference determination. (Pp. xxii-iii)

The understanding of the knowledge claims of communication and information from this perspective requires a hermeneutic operation. To understand the discourse of a particular scientific community requires that one understands the community, accepts the paradigms of that community, and thinks of a problem such as the communication-information relationship in a manner consistent with the language of that community. One cannot think about the problems of a particular scientific community using a frame of reference acquired from another community, even if this community were considered philosophers or historians. This is Kuhn's principle of incommensurability (Kuhn, 1970, p. 198). To understand the knowledge of a particular community involves using the same language and paradigms to get at what they "really meant" in their own terms.

Being able to identify the community and its boundaries is fundamental in understanding the way in which that community "thinks" about its objects of knowledge. The project is similar to the task of the anthropologist entering a new culture and attempting to make sense of it. Machlup and Mansfield (1983) explicitly adopt the culture metaphor in their discussion of the fragmentation of the information discipline:

We go into areas whose inhabitants speak foreign tongues (with many words sounding like words in our own language but having very different meanings); we try to find some guides to help us learn the meanings of these strange sounds; and we try to make sense of what we see and hear, yet we probably misunderstand much and are bewildered by even much more. (P. 5)

In many respects a complete reading of Kuhn's thesis leads to the conclusion that the paradigm would not be an appropriate *description* or *representation* of the practices of scholars in communication and information. This is a claim that proponents of the communication-information relationship must either ignore or systematically suppress. For example, Kuhn's account explicitly deals with progress of the mature natural sciences, such as physics, chemistry, and astronomy. The same account makes explicit serious reservations about the ability of the paradigm concept to account for the nature of the social sciences, such as communication and information.

The Kuhnian account of scientific knowledge is dependent on the notion of crisis. A concept of crisis implies a prior unanimity of the intellectual community that experiences one. Anomalies, by definition, can only exist with respect to firmly established expectations. Experiments create crises when they repeatedly go wrong for a community for whom everything has been going right. In the mature physical sciences, things generally mostly go right. This is represented by the term "normal science" in which there is agreement on fundamental concepts, tools, and problems. Without such consensus, there is no basis for problem solving. Disagreement about fundamentals is reserved for situations of crisis. It is difficult to see if a consensus of anything like a similar strength exists for the social sciences, especially in communication and information (see Ruben, 1985b). Because there is no base that they can take for granted, communication and information are still characterized by fundamental disagreements about the definition of their fields, paradigm achievements, and problems. The nature of these definitions forms the core of the metatheoretical discourse that makes possible the emergence of the communication-information relationship. There are two poles to this discourse. The first is constituted by the discourse of those participants who consider that such a definition cannot be found. For example, Dance and Larson (1976) remark that

the variety of events that have been termed communication is so complex and so broad, so lacking in unifying elements, that it causes a great deal of difficulty for anyone who is interested in defining the term 'communication' for the purpose of examination and explication. (P. 21)

Bochner (1985) contends that the presence of such diversity is choking the progress of the field of communication:

Interpersonal communication is a vague, fragmented, and loosely defined subject that intersects all the behavioral, social, and cultural sciences. There are no rigorous definitions that limit the scope of the field, no texts that comprehensively state its foundations, and little agreement among practitioners about which frameworks or methods offer the most promise for unifying the field. (P. 27)

Delia (1987) asserts that "a significant feature of communication research has been its fragmentation as a topical concern across virtually all the disciplines and fields of the social sciences and humanities" (p. 20). Thayer (1979) agrees that "there exists no single scientific discipline having an exhaustive interest in communication as a systematic body of knowledge" (p. 8).

The other pole is constituted through claims that metatheoretical discourse should be concerned with the construction of a unified paradigm—a grand metatheory under which the various subfields can be incorporated. A means to this end in both communication and information is the encouragement and development of a dialogue between disciplines which hold these terms in common. For example, Budd and Ruben (1979) assert that the interdisciplinary nature of communication is a property of its identity as a distinct field, arguing that subjects as diverse as the sociology of knowledge, symbolic interactionism, general semantics, neurophysiology, and general system theory are "essential ingredients for the development of a comprehensive theory of human communication" (p. 4). Gerbner (1983) similarly believes that "The ferment in the field, and the expression and response to it in this symposium, test to the vitality of the discipline and to its ability to tackle the critical tasks ahead" (p. 362).

With respect to the disciplines of information, Machlup and Mansfield (1983) enumerated almost forty fields in which "information" plays a strategic role" (p. 9) and note that "interdisciplinary conflict and controversy are rampant" (p. 14). As with the field of communication, the claim is made that an interdisciplinary dialogue is sorely needed. However, Machlup and Mansfield (1983) contend that few scholars know of the extent of its dissemination and the diversity of the usage of the term information. As such, the term can take on a range of different meanings to those who use it. As Machlup and Mansfield (1983) argue,

Information is not just one thing. It means different things to those who expound its characteristics, properties, elements, techniques, functions, dimensions, and connections. Evidently, there should be *something* that all the things called information have in common, but it surely is not easy to find out whether it is much more than the name. (Pp. 4-5)

These examples from the metatheoretical discourse suggest that there can be no paradigm of communication or information in the Kuhnian sense because the lack of any *fundamental* agreement creates a situation where "either there can be no crises or there can never be anything else" (Kuhn, 1977, p. 222). Thus Rosengren (1989) has claimed that "the social sciences and the humanities [including communication studies] . . . do not have any *paradigms* in the strong sense of the word" (p. 21) and Kuhn (1974) has lamented that

Monitoring conversations, particularly among the book's enthusiasts, I have sometimes found it hard to believe that all parties to the discussion had been engaged with the same volume. Part of the reason for its success is, I regretfully conclude, that it can be too nearly all things to all people. (P. 459)

This analysis reveals a paradox in the metatheoretical discourse of communication and information. The Kuhnian account is a discursive prerequisite to the metatheoretical discussions of communication and information and their claim that their disciplines are fragmented and, possibly, on the point of convergence. However, the Kuhnian thesis is also a poor model for describing the activity of metatheoretical discussion within communication and information. Communication and information simply do not display paradigms in the sense Kuhn deploys the term. There is an inherent contradiction here which foregrounds the claim made by the present essay that *the Kuhnian discourse is deployed in the metatheoretical discourse and is not an external description of it*. The discourse of the participant and the philosopher are not distinct. Their co-presence makes each discourse possible.

When one switches from the self-evidence of the claim that the paradigm is representative of scientific communities to the view that Kuhn's text is an account that is deployed in conjunction with other texts, a different understanding occurs. A Foucauldian analysis of the communication-information relationship would require a description of the *deployment* of Kuhn's text in a discourse that produces a particular kind of knowledge claim about its own identity. For example, the deployment of the Kuhnian paradigm allows talk of disciplines being *organized* along rational criteria according to the paradigm that describes it. Such an organizational scheme is the crux of Burrell and Morgan's (1979) account of research on organi-

zations. Their analysis is based on the acceptance of the claim that the paradigm has "an underlying unity in terms of its basic and often 'taken for granted' assumptions, which separate a group of theorists in a very fundamental way from theorists located in other paradigms" (p. 23). They also claim that "Each set identifies a quite separate social-scientific reality. To be located in a particular paradigm is to view the world in a particular way" (p. 24). Finally, they claim, "For a theorist to switch paradigms calls for a change in metatheoretical assumptions, something which, although manifestly possible, is not often achieved in practice" (pp. 24-25). Paradigm is deployed as the most fundamental level at which objects of knowledge can be organized along metatheoretical criteria and organized into paradigmatic cells.

The splitting of knowledge into cells or groups also allows the conditions necessary to express conflict between those cells. Paradigms are not considered equal. At any particular time, some paradigms are considered dominant, and others suppressed. For example, Hall (1989) wishes to "reflect on the current state of relations between the dominant paradigm in communication theory and the critical alternatives that are being offered in opposition to it" (p. 40). In Hall's view, the dominant paradigm of communication research is represented by a positivistic social science tradition. Hall's work, based in critical approaches to communication, is perceived as being an alternative to the dominant paradigm, struggling for recognition. Becker (1989), however, has challenged Hall's assumption of a dominant paradigm based on the tenets of positivism. "I . . . find it interesting that one of those speaking of the 'dominant paradigm' is Stuart Hall, who may himself be the most dominant of influential figures in communication studies today" (p. 126). This particular discourse is a key device in the legitimation of new approaches, both in communication and information. The emergence of critical and interpretive approaches to communication is explicitly characterized as a response to a dominant paradigm based in positivism (Carey, 1977; Deetz, 1973, 1977, 1982; Hawes, 1977). Similarly, Belkin's (1978, 1980) work in information retrieval is a response to a dominant systems paradigm (Dervin and Nilan, 1986; Saracevic, 1975). The rights and wrongs of each position are not of concern here. Of importance is the debate itself, and the means by which it is expressed. The claims of "dominance" and "alternatives to domination" are clearly expressed in a Kuhnian vocabulary, and largely accepted. Holland (1990) makes the general point as follows:

for anybody wishing to challenge authorities and orthodoxies, Kuhn provides the opportunity to identify a ruling paradigm (resonant with radical ideas about a ruling class). They might then go on to declare a new paradigm,

which of course would not be understood by their blinkered predecessors.  
(P. 23)

The Kuhnian discourse can also be deployed to stifle dialogue through the claim to incommensurability. Notturmo (1984) makes this claim with respect to dialogue within the field of psychology:

Today, psychologists of different schools proceed from such opposing perspectives and use methods and techniques that are so different that it often seems impossible for them to communicate with one another. In my view, this situation results less from an essential incommensurability of paradigms than from an almost smug unwillingness on the part of normal research workers to investigate the conceptual foundations of competing schools . . . Kuhn's description of science is sometimes appealed to as a justification for ignorance. (Pp. 288-89)

The communication-information relationship can be viewed as representing a further deployment of this theme with respect to a claim of convergence. Ruben and Schement (1990) explicitly make the claim that

in recent years, researchers have begun to focus attention on the relationship between communication and information. Where formerly each was studied in isolation, now growing numbers of scholars are reformulating the research agenda to integrate both phenomena. (P. 1)

From the Foucauldian perspective, it becomes clear that a philosophy of science (such as Kuhn) does not stand above the discourse produced by communication and information scholars as a detached and objective account. Rather, the appearance and deployment of Kuhn *within* the metatheoretical discourse of communication and information makes possible the appearance of the communication-information relationship. Aronowitz (1988) argues that the Kuhnian account becomes "an adjunct to science's effort to consolidate its position as a discourse that can be distinguished by more than mere differences of its object knowledge" (p. 249). The same argument is employed here to demonstrate that Kuhn's thesis is *used* by the metatheoretical discourse to organize, justify, and demarcate claims to self-identity, conflict, domination, fragmentation, and convergence. The paradigm does not represent an external reference point against which the validity of the communication-information relationship can be described and evaluated. The relationship and the paradigm produce each other; they make sense with respect to each other, and the interplay between these systems of discourse makes possible the claim that the disciplines of communication and information can be related in a systematic manner.



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