

Toward a Taxonomy of an Interdisciplinary Area: The Case of Technical Communication

by
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Abstract: Although an interdisciplinary program derives strength from its ability to gain insights from a variety of disciplines, these same multiple disciplines hinder the development of common terminology necessary for advancing research in the field. Technical communication began as a practitioner-dominated field but recently academic programs have started to add the theoretical and research base. As an interdisciplinary field, technical communication benefits from research in art, cognitive psychology, computer science, education, engineering, English, graphics, and rhetoric. However, the lack of a dominant academic discipline has fragmented the development of a coherent discipline; likewise, lack of clear definitions and common terminology hinders the research and theory development of the field. Building a taxonomy for technical communication will help researchers benefit from the multidisciplinary input into the field. The basis for such a taxonomy begins with a Theoretical Model of Technical Communication, then continues with a Framework for a Taxonomy based on the model.

“TECHNICAL COMMUNICATION” IS A RECENT TERM applied to a long-standing practice: the process of communicating specialized information, knowledge, or procedures to a user—especially to a user who may lack the background of the specialist. The modern field developed over the past fifty years to meet the practical need to document the rapid advances in technology for government and industry. Currently, the academic input to the field is beginning to catch up with the practitioners, providing advanced education and basic research to meet the growing need.

The rather haphazard growth of the field is reflected in the location of academic departments that specialize in technical communication. Program location ranges from placement in Engineering or English to Journalism and even Agriculture. Such diversity has slowed the development of knowledge within the field. Although practitioners have expanded the network of shared information, academic development has not kept pace. Yet the strength of the field lies in the diverse disciplines that contribute significantly toward understanding the communication process. To make the most of this diversity requires three phases: a firm definition of the field, a taxonomy integrating relevant elements, and a cross-reference system to identify equivalent concepts from related fields. This paper first presents a brief discussion of the development of the field, then broadly identifies disciplines that contribute to the development of technical communication. It then outlines the development of a taxonomy, beginning with a brief discussion of definition, then focusing on theoretical considerations in building a taxonomy. Finally, it presents a preliminary model of the field that can become a framework for a taxonomy and for cross-referencing information from other fields.

Development of the Technical Communication Field

The process of “technical communication,” communicating specialized information to users, appears among the earliest writings; but the label itself is a modern phenomenon, tracing its history over the past 50 years. This combination of new terminology, an ancient process, a practitioner-generated field, and especially a rather belated academic focus, has created difficulties for developing a theoretical base for the professional field of technical communication.

Past History of the Concept. While the modern field of technical communication developed to meet a particular need, its history predates the actual use of the term itself. Although he didn’t have such a term to describe himself, Benjamin Franklin was an avid technical writer, communicating his inventions to a rather diverse public. Centuries earlier in England, Chaucer’s *Treatise on the Astrolabe* incorporated principles of technical communication that were rediscovered in the 20th Century. As we look at documents that communicate information from experts to users, we find technical communication in the Roman texts on constructing aqueducts and in Egyptian Scrolls on the building of pyramids (Moran, 1985, p. 26). In fact, the earliest Sumerian cuneiform documents record business transactions, describing procedures for accurate weights and measures (George, 1972, pp 3-4). Although the process that it describes has a history as ancient as writing itself, the term “technical

communication” is a modern designation that stems from the 20th century knowledge explosion.

Recent History of the Field. The modern field of technical communication developed from a need of practitioners; in particular, it grew out of the proliferation of technology that accompanied World War II (Moran & Jourmet, 1985). With advances in mechanics, electronics, and nuclear energy, the federal government required technical experts to document findings, write technical manuals for system users, and prepare descriptions for parts replacement. The earliest writers were thus the scientists and technicians themselves. During the 1950s and 1960s, the accelerating pace of change increased the need for technical documentation. To help prepare these experts for their collateral writing duties, university programs required scientists and engineers to take an advanced course in “Writing for Engineers” or “Technical Writing.” Although these technical experts were required to become writers, they often lacked the proper training and skills in the writing process. The skills needed for knowledge advancement or development are not the same as the skills needed for effective writing, especially writing for a non-expert audience. A growing recognition of this differing range of skills has led to the development of technical communication as a separate professional field.

Academic Study of Technical Communication. The academic field of technical communication has developed rather slowly, in contrast to the needs of practicing professionals. As engineering schools sought experts to teach “engineering writing” to their students, they had two sources of expertise: the engineer-writers who “had done technical writing,” or English teachers who had taught freshman composition courses. The engineers could approach such a course from the perspective, “this is what worked for me”; the English teacher could extrapolate principles of writing to a different subject matter; but neither approach could adequately meet the needs of this growing field. Professional associations like the Society of Technical Writers and Publishers (later known as the Society for Technical Communication) developed conferences and training materials to help fill the gap (Smith, 1990, p. xiv). Ultimately academic practitioners, originally trained in other disciplines, began to focus their attention on the specific needs of this new field, writing textbooks and beginning preliminary research. Masters programs first appeared in the 1970s, and now number about 30 nationwide. Currently, a few institutions permit doctoral study in technical communication, although it is usually a secondary focus of a primary discipline, such as “PhD in Rhetoric and Technical Communication.”

As part of the development of graduate programs, research is beginning to take hold among professionals, although many publications in technical communication still reflect the “here’s how I did it” approach of the practitioners. The oldest journal for the field is *Technical Communication*, published by the Society for Technical Communication since the 1950s. It has maintained a practitioner viewpoint, emphasizing “what works” for communicators and how changing technology affects the field. In recent years, the number of regular columns has expanded, giving greater emphasis to research and to printing abstracts of significant studies from other publications. Another practitioner journal, published since the late 1950s, is *IEEE Transactions in Professional Communication*. Geared to engineers turned writers, this journal has leaned toward the practitioner, but has maintained a higher standard for articles (including peer review) and a greater interest in technical communication research. The major academic journal for the field is the *Journal of Technical Writing and Communication*, published since the early 1970s. Rensselaer Polytechnic Institute (Troy, New York) provides the editorial staff for this journal, paralleling this university’s commitment to the field as a whole: Rensselaer has a range of Masters programs emphasizing writing and graphics, and has one of the few doctoral programs for technical communication. Academic programs are thus gradually impacting the field, providing graduate programs and fostering research and theory-building.

Differing Values of Diverse Constituencies

Academic Affiliation. The rather haphazard development of the academic-study of technical communication appears in the current location of academic programs. Since practitioners developed the field, the academic specialty of the practitioners themselves often determined the location of the technical writing departments. The four main programs within Colorado reflect the diversity of program location. At Front Range Community College, technical communication is part of the Speech Communication Department. At Metropolitan State College of Denver, technical communication is in the School of Professional Studies (along with education, technology, and human services). Within universities, Colorado State has a Department of Technical Journalism in its College of Arts, Humanities, and Social Sciences, while the University of Colorado at Denver locates technical communication in the English Department.

Nationwide, placement of programs is even more diverse. At the University of Minnesota, technical communication is located in the School of Agriculture; at Carnegie Mellon, it is part of the Rhetoric Program in the English Department, although the engineering department runs its own required course in technical writing for engineering majors. The Air Force Institute of Technology started its communication program in the School of Engineering, but later moved it to the School of Systems and Logistics. The diverse location of academic departments indicates the practicality and utility of technical communication — colleges can place the program closest to the academic interests of their particular practitioners. But this haphazard development

has hindered technical communication's growth as an academic discipline.

Fragmentation vs. Coherent Field. The lack of academic identity has hindered the theoretical development of the field. For example, "engineering" as a discipline expects to include such specialties as mechanical or electrical engineering; anthropology normally divides into physical and cultural specialties; English has sub-specialties in Medieval or 19th Century Literature. However, no specific academic discipline inherently contains "technical communication." Thus on the national level, this field lacks academic support from a wider academic profession; and on the local level, even schools which develop technical communication programs often lack the wider support of colleagues within the same department, school, or college.

The diversity of academic affiliations reflects the lack of a coherent field for technical communication. Within the largest engineering association (IEEE), one group of writers publishes the *IEEE Transactions in Professional Communication* and conducts a rather modest annual conference. Although it emphasizes writing, the association retains its engineering identity. For example, a recent annual conference was sub-titled "The Engineered Communication." The Modern Language Association recently added a small section for technical communication at its international conference, but it remains a "fringe area" for this professional association; and no article on technical communication has appeared in the *PMLA* (Publications of the Modern Language Association).

The National Council of Teachers of English (NCTE) includes technical communication in its upper division, College Composition and Communication. The NCTE has published a few resource books for technical communication teachers, and in 1980 established an awards panel to recognize outstanding work in the field; however, it has not supported or published extensive research. The rather small Association of Technical Writing Teachers also publishes resources for teachers, but this association lacks the size and resources of the other professional societies. The Society for Technical Communication (STC) is the dominant professional association, with a membership over 16,000. However, since the STC grew as an association for applied professionals, its publications largely stress immediate practical application or new approaches to current problems. A recent article on rhetoric and technical proposals submitted to the STC's journal *Technical Communication* was rejected on the grounds that it was "not practical enough," yet the same article did not contain nearly enough theory to qualify for an academic journal in rhetoric. This rejection ultimately led the editor to establish a new regular column for the STC's journal, "Theory and the Profession." Despite some recognition and support from the engineering and English disciplines, the academic field of technical communication is not integrated and developments occur haphazardly. Because professors in the field cannot point to a wider academic discipline for national or international support, they have difficulty obtaining resources locally for this "hybrid." This lack of national unity also reduces the likelihood of foundation support for research.

Contributing Disciplines

While the lack of an academic identity has hindered the growth of the field, its diversity of sources has added a richness of input. As a method of communicating information, the field draws on rhetoric and speech communication. Since a dominant mode of presentation is writing, English composition has also contributed, along with graphics, in the design of page layout and visuals. Since users or readers interpret the information, education and cognitive psychology have added to our understanding of the entire communication process. Furthermore, the communication process does not occur in a vacuum, so disciplines such as history, sociology, organizational behavior, and business management also contribute to our understanding of the process. Because computers play an increasing role in writing and graphic design, computer science increasingly adds to our understanding of the field, as does human factors engineering in the design of machines and workstations. Finally, within the field of information processing, technical communication can function like the discipline of library science in making information accessible to users.

Beyond these diverse process components within technical communication, the content areas behind writing also contribute, whether from the science and engineering fields or social science and humanities. The subject matter itself contributes concepts that enhance and expand the field. For example, the use of "inputs" above in describing technical communication shows how even common words describing communication adapt, in this case applying computer programming concepts to the writing process. Similarly, "transmission of ideas" and "matching someone's wavelength" adapt broadcasting concepts to our understanding of communication (and psychologists develop the communication implications of "wavelength" in individual counseling). The field of technical communication thus has an extremely wide range of disciplines contributing to its development: as a field, technical communication reflects the content and process of communicating information, from a given content area, within a social context, using technology, prepared by an individual or team of designers, for multiple end-users.

Toward a Taxonomy for the Field

The diversity of elements contributing to the development of technical communication highlights the need for a taxonomy; but the same diversity makes the development of such a taxonomy rather difficult. To develop a taxonomy first requires an accepted

definition of the field itself. Building on such a definition, the taxonomy would integrate the elements that form the process and content of the field.

Definitions of Technical Communication. To begin with, the field does not yet have an agreed-upon definition. Some would define based on content, indicating that “Technical writing is written communication that deals with engineering and scientific topics” (Emerson, 1987, p. 4). A definition that seems based on electronic circuitry states that “Technical communication is the transmission of information in such a way that it conveys only one meaning” (quoted in Dobrin, 1981, p. 229). In fulfilling this definition, machines transmitting current (+ or –) or computer code (1 or 0) are “communicating”; however, the human use of language is too complex for such a simplistic definition. Various theorists have taken issue with this definition: thus Carolyn Miller’s dismissal of the “windowpane” view of the field, based ultimately on the philosophy of the logical positivists (Dobrin, 1987, p. 234). Despite the significant questioning of the “one meaning” definition in the academic literature, practitioners seem to accept such a view, whether consciously or unconsciously. Drawing from the broadcast area, Ron Blicq defines communication as follows: “Communication is the act of transmitting an idea from one person to another” (1986, p. 1). Drawing out the broadcast image, Blicq continues his discussion: “As long as a person transmits clearly, efficiently, and persuasively, the persons receiving keep their receivers ‘locked on’ to the transmitting frequency (this applies to both written and spoken communications). Such conditions expedite the transfer of information, of communication” (1986, p. 1).

A more general definition, proposed over 10 years ago, proposes that “Technical Communication is the process of accommodating technology to the user” (Dobrin, 1981, p. 242). The term “accommodating” permits a wide range of methods, and the focus on user should drive the selection of the most appropriate method. A more recent definition builds on and expands Dobrin’s definition: “Technical Communication is the process of orchestrating linguistic, visual, and auditory codes to accommodate information to the user” (Beck, 1991). This new definition, however, has yet to stand the test of time and academic scrutiny.

Framework for a Taxonomy. Definition is among the first steps in a wider task of building a taxonomy for the field. But definition is part of creating a common terminology so that practitioners and theorists can discuss similar phenomena with a common terminology. Outside of taxonomies in the biological sciences, perhaps the most significant taxonomy is the *Taxonomy of Educational Objectives*, the outgrowth of a project under the direction of Benjamin Bloom (1956). According to Bloom, the main purpose of a taxonomy is to facilitate communication; developing the taxonomy, therefore, consists of “selecting appropriate symbols, giving them precise and usable definitions, and securing the consensus of the group which is to use them” (pp. 10-11). In comparing preliminary taxonomies for organizations, Carper and Snizek ran into a similar communication problem, lack of uniform terminology among authors in organizational theory—in essence, a communication problem (1980, p. 65).

These two representative theorists of taxonomies yield some significant insight that applies to developing a taxonomy for technical communication. The guiding principles of Carper and Snizek are especially illuminating: “Perhaps the most important basic step in conducting any form of scientific inquiry involves the ordering, classification, or other grouping of the objects or phenomena under investigation. The need, then to find a common basis of categorization transcends all disciplinary boundaries” (1980, p. 65). Bloom’s approach to taxonomies incorporated such an approach with a specific focus: “The basic problem of a taxonomy [is] to order phenomena in ways which will reveal some of their essential properties as well as the interrelationships among them” (Bloom 1956, p. 17).

Creating a framework for a taxonomy of technical communication can build on the works of two theorists: Harris in locating the rhetoric of science, and Flower in building interactive theory. In his recent article in *College English*, Harris (1991) distinguishes five approaches to science, all having implications as separate sub-fields. His definitions are as follows:

Sociology of Science	the study of scientific communities—at levels ranging from small cohorts to overall communities—and of their relation to general sociological pressures.
Psychology of Science	the study of the thought processes which lead to the generation and promulgation of scientific ideas, and their relation to general psychological mechanisms.
Rhetoric of Science	the study of the role of discourse in science, particularly in its more clearly suasive functions—galvanizing, resolving, or avoiding disputation.
History of Science	the study of science in the not-terribly-recent past.
Philosophy of Science	the study of the ontological validity of science.

Harris' distinctions come about from trying to clarify Rhetoric of Science as distinct from other studies of science as a way to further classify theoretical and empirical studies dealing with approaches to science. Within this particular subset of rhetoric, Harris is addressing the lack of definitions and attempting to forge some preliminary relationships—Harris' approach to the rhetoric of science provides an approach to theory building for technical communication: (1) for building a taxonomy, the discipline must be placed in context with related fields both as a means of drawing distinctions and as a means of identifying commonality; (2) since technical communication (like its broader field of rhetoric) is a field that underlies or becomes an adjunct to other disciplines, the interrelationship between the informing disciplines becomes even more important.

Even more closely related to the task of building a taxonomy, Linda Flower describes an approach toward developing communication theory through a process called "Constructing an Interactive Theory" (1989, p. 283). Her specific concern is for the interaction between perceptual cues and cultural context for human understanding of printed documents, but her general discussion applies equally to the issues involved in technical communication. According to Flower, building theory involves such interrelated activities as intuition, observation, insight, creative explanation, and tests of the data to determine whether the proposed theory is adequate. However, this process of gaining and testing insight, and correlating the results with other studies, is hindered by the lack of a common terminology to apply to a broad range of study—hindered by the lack of a taxonomy for the field.

Need for Common Terminology. Currently some important research in technical communication comes from a few high quality academic-programs, such as the research by Flower and others at Carnegie-Mellon University's Center for Document Design. But the field itself could profit from an extensive existing body of research completed in other related disciplines. Identifying such research is often quite difficult without a taxonomy that (1) defines key concepts and shows their relationships; and (2) lists alternative terminology from the differing fields. For example, technical writers think in terms of audience analysis or the ultimate user of communication products. But other disciplines may examine the same concept under such terms as reader (reading, education, English), learner (education), subject (education, psychology), perceiver (cognitive psychology), or occupant (human factors). Relationships within the communication process may involve such concepts as reading, viewing, interacting, joining, connecting, or coordinating, again depending upon the discipline. Examining the results of the process may come under such concepts as usability, accountability, testing, evaluation, or feedback.

A Model as the Basis for a Taxonomy

Developing a taxonomy for technical communication will clarify the research and theory issues that underlie the field, a clarification that ultimately will enhance professional practice. But building such a taxonomy requires researchers to evaluate a variety of approaches to the field. For example, a taxonomy could focus on a product approach (preparation of types of communication) or on a process approach (what contributes toward the production of a document). It could focus on practitioner-based information or research-based. It could focus on history, tracing innovations brought about by advancing technology. In view of these various approaches, developing a taxonomy for technical communication must first involve identifying and defining relationships among basic concepts, then identifying the cluster of concepts that are parallel from other related fields. With the second step of the taxonomy process, information from the various fields can more easily overlap. The taxonomy built around a cluster of concepts can develop the field in two ways. First, a taxonomy will create an easier access to relevant research by identifying the terminology from those fields within a context useful for technical communication. But secondly, a taxonomy can create an awareness within the other fields concerning how their research can impact technical communication. Without a network of interrelated concepts, researchers may not realize some of the implications of their findings.

The proposed preliminary model for technical communication follows Hesse's classification of theoretical models. The model functions as a logical interpretation of the theory that it describes; but the theoretical model also depends on some system that is epistemologically prior to and independent of the particular phenomena that the model explains (1967, p. 355-6). Such a theoretical model thus builds on a known system to explain an unknown, in this case, the proposed model for technical communication builds on general systems theory combined with the field of rhetoric to explain the interrelated elements within technical communication.

General Approach of the Model. Figure 1: A Theoretical Model of Technical Communication is preliminary rather than definitive, attempting to interrelate the broad categories that relate to the technical communication process. Given preliminary discussion and agreement on this general level, the details involved in each part of the model must be thoroughly explored. At this preliminary step, the model interrelates the elements that form the technical communication process: input from within a complex context, a process with multiple dimensions, and the multiple results of the process. The Model for Technical Communication attempts to identify elements of the communication process and does so building on the following interrelationships:

1. Technical communication is a process, with inputs, throughput, and outputs.
2. Technical communication is a system, with multiple inputs to each stage of the process and feedback throughout the process,
3. Technical communication occurs at three interrelated levels: individual, organizational, and societal.

As with any system, impact at one point can affect the entire system. However, the model indicates those points where various fields of study will have primary impact.

Specific Approaches of the Model. The overall “system” moves left to right with input, process, output, and feedback loops. Input begins with language itself and the particular culture as the general areas of input, with particular laws and norms of the society as the specific input. The process itself depends on communication theory, ranging from mass communication on the societal level to interpersonal communication on the individual level. The mode of communication involves electronic media, print media, and design, profiting from the specific developments in audio and visual systems. Outputs to this system include both cognitive and physical products, where specific artifacts may include models, paradigms, as well as specific products that meet customer needs and contribute to the economic domain of producing goods and services.

Progress through the model occurs at three interrelated and concurrent levels: individual (any person in the communication process), organizational, and societal. To a certain extent, all communication occurs at the individual level, so the individual forms the base of this particular system. Individual dialect, idiolect, and knowledge provide the input to individual communication. The specific process involves thinking and conversation, pre-writing and drafting. The process itself occurs as either writing or speech, including the verbal and non-verbal elements of each. The cognitive output involves changes in comprehension or knowledge, along with specific documents or behavior.

But individuals do not operate in a vacuum. Most often, their work occurs within an organizational framework, the entity that requires the specific product. Within this model, the organization can include a company that directly employs the writer, a company that contracted the specific product, or a publishing house interested in the product. The input thus becomes the specific type of organization and the role that the communicator plays in that organization. The process is tempered by the management style employed in the organization and by the structure of encounters, whether through meetings, training situations, or any other planned encounter. The mode of speaking and writing is tailored to the specific requirements of publication guides and writing or occupational contracts. The specific tasks of the job and deadlines also significantly impact the final product. The final product, however, includes not just the particular goods (book, article, pamphlet) or service (presentation, training session), but also the intangibles such as image that people have of this organization and its resulting position within economic or social pecking orders.

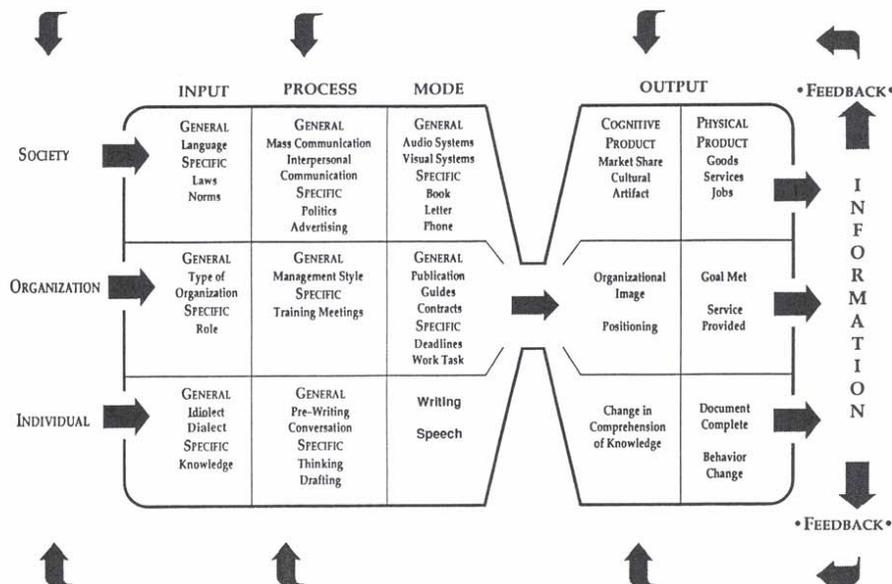


Fig. 1: Theoretical Model for Communication

The societal level involves the wider culture in which this activity takes places. If it occurs within one country, the specific variables are more limited (although even for Americans, different regions of the country represent a different variety of variables). Individuals or organizations that operate in the global environment face a wider range of variables but essentially the same processes. The process occurs with a particular language or languages, within a set of customs or laws, following broadly accepted modes of communication within that society, yielding goods and services that contribute to the Gross National or Global Product. When dealing with communication, most frequently the focus remains on the individual level, with a passing recognition of the organization in which the individual operates. However, the societal level is increasingly significant. For example, court decisions regarding “fair use” or copyright laws affect the process, as do cultural shifts in non-sexist language (e.g., “he” is no longer a generic singular term). The societal development of voice messaging, electronic mail and video conferencing change the available (and expected) modes of transmission of ideas.

On the specific level, therefore, the Theoretical Model proposed in Figure 1 reflects increasing levels of impact on the technical communication process, grounded in an individual communicator, functioning in relationship with a particular organization, under the prevailing laws and norms of the governing society. The Model of Technical Communication reflects each of these levels within the overall communication process.

A Taxonomy Built on the Model. The Theoretical Model for Technical Communication can significantly help researchers identify the critical concepts that communicators deal with in the communication process. It then can become the center of a framework for a taxonomy, where the framework identifies other disciplines that contribute to our understanding of communication. Figure 2: Framework for a Taxonomy of Technical Communication adds the knowledge base along with their associated disciplines around the model. The framework employs the following assumptions:

1. Knowledge gained from differing disciplines affects our understanding of both the stages of the process and the levels of the process.
2. Broad systems viewpoints affect understanding of the entire model.

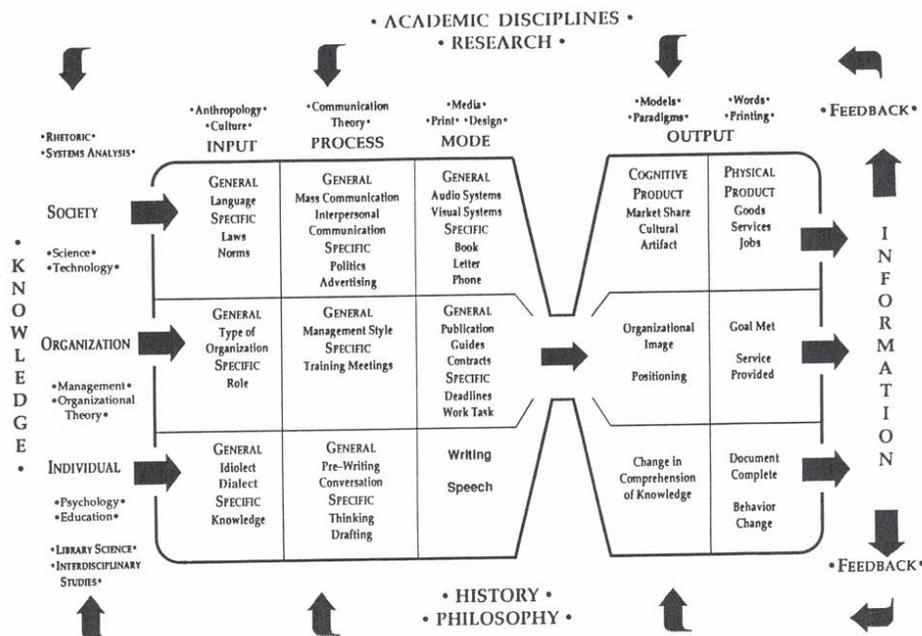


Fig. 2: Framework for a Taxonomy of Technical Communication

The framework assumes technical communication as a subset of rhetoric and communication as a systems’ process, so these two disciplines appear in the top left corner. Within this taxonomic framework, the feedback loop around the top of the model includes relevant disciplines. On the top appear disciplines most relevant to the elements of the process, while the left identifies disciplines relevant to the level of the process. On the bottom of the feedback loop appear two different dimensional views of the process: history, examining how aspects of the process change over time; and philosophy, identifying the unspoken assumptions underlying the process. In addition to rhetoric and systems theory, two other interdisciplinary fields also transcend the specific elements and levels, attempting to understand the synergy of the whole: library science and interdisciplinary studies. Essentially, the taxonomic framework shows where knowledge gained from diverse academic fields can both clarify the

elements of communication and can improve our understanding of the complex interactions within the communication process.

Implications

The term “networking” has become a common buzzword to describe the formal or informal linking of people and ideas. Although much overused, it can perhaps best describe the needed model for technical communication that can serve as a basis for a taxonomy. A network that interrelates concepts within the field, then connects clusters of interrelated concepts from relevant other fields, would indeed become a research and information base for the field. A network describes the process of relating concepts much as building a taxonomy. Developing such a comprehensive framework, defining the initial concepts, and gaining an acceptance of this paradigm or model of the field, will indeed be a tremendous undertaking.

The proposed model gives a preliminary view of interrelationships between disciplines; further development requires that details be spelled out at each level. For example, on the individual level of the communication process, the current field of technical communication examines output documents in terms of “usability” or “user testing.” Although a relatively new and growing area of study for technical communication, it can draw on the concepts of “learning” and “behavioral objectives” that education has used for years. On the organizational level, management of the documentation process can draw on the production management models studied in the field of business management. The discussion at conferences and in the literature concerning the “profession” of technical communication and its compensation can focus on the organizational input level, considering the “role” of the communicator in alternate labels as “information developer” or “information engineer.” The impact of technological advances such as hypertext and interactive-video would occur at the society-mode interaction of the model, adapting the insights of information technology practice and research to the communicator’s role. The model thus becomes the basis of identifying particular stages or levels of the communication process and the likely disciplines that can provide significant insight to enhance our understanding at that level. Subsequent research can then focus on the parallel terminology used by these disciplines that can clarify our understanding of the process. With these terminology links, technical communication as a discipline can profit from existing research that examines the same real-world processes of human behavior under a set of labels specific to that discipline.

Without such a taxonomy, researchers and practitioners are hampered—often knowing that research exists, but failing to uncover the key terminology of the related field. Building a taxonomy would be a significant step for integrating knowledge within this interdisciplinary field. The proposed Theoretical Model of Technical Communication and Framework for a Taxonomy of Technical Communication are initial steps toward identifying the interrelated concepts that will comprise a taxonomy of technical communication.

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