

**31 August 2009**

**Connors, Robert J. "The Rise of Technical Writing Instruction in America." *Journal of Technical Writing and Communication*. 12.4 (1982): 329-52.**

Connors summarized the development of technical communication programs by historiographically documenting the development of college curriculums through their proto-technical communication stages in the late nineteenth century to their zenith in the late 1970's and early 1980's (when the article was written).

His primary method of analysis, as noted by R. Gerald Nelms in the introduction, is the documentation and analysis of textbooks that dealt with technical communication; he pairs this analysis with a history-centered narrative description of social positions on writing in relation to technological education (both within the academy—specifically English and Engineering departments—and in society in general) and the major historical and technological milestones in the United States that catapulted technical communication to a significant academic field. His investigation into the shifting methods of instruction and the relative position of technical communication within the academic community is driven primarily from analysis of primary source documents (textbooks, studies, reports, etc.) and supported by some written commentary from period figures pertinent to his method of inquiry (conference attendees, authors of journal articles, etc.). The narrative style he adopts projects a bildungsroman narrative onto the field, one that culminates in the acceptance of technical communication by English departments after an early period of obscurity and a middle period of contempt.

Since this article is a detailed summary of the major developments in the field for more than a century, this article targets newcomers to technical education; however, since it also chronicles the major shifts in ways of thinking about technical communication, I feel the prospective audience could be broadened to include academics within the field as well as those outside the field. For those readers outside of the field, this piece can either generate or challenge their conceptions about technical communication and its role in the academy and society.

**Rutter, Russell. "History, Rhetoric, and Humanism: Toward a More comprehensive Definition of Technical Communication." *Journal of Technical Writing and Communication*. 21.2 (1991): 133-53.**

Rutter argues against placing all of the emphasis in the education of technical communicators on writing proficiency, asserting that technical communication is rhetorical in nature. He therefore argues for a reexamination of the field and how its participants are educated, and he arrives at the conclusion that more attention needs to be paid to the technical communicator as a person, orator, and rhetorician.

To construct the framework for his argument, Rutter puts forward three distinct time periods in which he draws conclusions that support his treatment of technical communication and education. From the classical time period, he gleans that rhetoricians need to be concerned with content first, and delivery second. From the Renaissance, he

provides examples that stress the importance of focusing on the long-term benefits for a student that learns lessons in the classroom quickly and painlessly as opposed to learning them through experience. Finally, from the Victorian era, he infers both that there is no independent learning pursuit associated with “applied science” (via Thomas Huxley) and that a “liberal education” is the foundation for the construction of a person who can appreciate all topics and most effectively address them in real life (via John Henry Newman) (24).

Much of the remainder of his article focuses on topics which provide an outline for the earliest development of technical communication and how that development shaped perspectives of style, composition, and content in current technical communications discourses. By outlining early attempts of the Royal Society to dispense with flourish and empty language in communicating methodology and experimental results, Rutter outlines a line of thought that persists (by his own admission) to this day, which he terms the “disinfectant of pragmatism” (31). To support his assertion that technical communicators are more than just transmitters of information and to supply evidence for the broad education of technical communicators, he includes a section on the workplace and common situations that technical writers encounter whose solutions may lie outside of the curriculum of some programs.

His conclusion matches his historical examples and calls for “a strong liberal studies base” in the education of technical communicators. Since his primary goal is to influence content within tech comm. programs of study, I assert that his primary audience is educators. His inclusion of a multidisciplinary approach and remarks in the introduction to the article also suggest that he is targeting individuals with a likeminded approach or individuals new to tech comm. from other, related fields.

**Durack, Katherine T. “Gender, Technology, and the History of Technical Communication.” *Technical Communication Quarterly*. 6.3 (1997): 249-60.**

Durack contends that conventional histories misrepresent or fail to account for women’s participation in the fields of technology and technical communication due to cultural impediments and biases that hide or minimize women’s historical contributions or discount certain technologies and work activities associated with women. Additionally, she calls into question the validity of excluding the written products of women concerning unpaid work from the study of technical communication.

Durack draws support from a wide array of feminist scholars through the progression of her argument, and she contends ultimately that the classification system that separates paid labor in the public sphere from unpaid labor in the private sphere is gendered and arbitrary; she essentially pushes for equal recognition for both types of labor. To support her assertion, she draws on examples where women’s contributions to the development of technologies were marginalized, and demonstrates how certain professions are forced into gendered domains based on the activities (e.g. women work with machines, but don’t fix them when they break) (39). She also questions the definitions of what constitutes technology (e.g. a sewing machine) and what constitutes a technical document (e.g. a cookbook).

She provides insightful examples that elucidate how society perceives activities as gendered based on the locale in which they occur. She gives examples of how a breakdown of the division between industry and technology use occurring in the public (male) domain and the private (female) domain challenges the conceptions of the feminine contribution to and utilization of technology.

The specific target of this article would seem to be educators, students, and historians of technical communication. An article like this could be seen to challenge more traditional narratives that focus on the history of technical communication as developing only in the primarily male dominated fields of industry and higher education.

**Miller, Carolyn R. "A Humanistic Rationale for Technical Writing." College English 40.6 (1979): 610-17.**

Arguing that technical writing courses have a humanistic value and that they are not just "skills" courses, Miller contends that technical writing has a logical basis in rhetoric and that the positivist view of scientific reporting has biased how technical writing is perceived and taught.

Miller asserts that positivism in science has led to a misconception that language can be (and should be) only used to convey physical observations in science, and that the goal of a science writer is to avoid any bias. By extrapolation, she applies this concept to technical writing and then proceeds to disprove positivist notions by pointing out their own failure to develop a clear reporting language and the inherent contradictions that science writing places on itself.

A particularly useful metaphor is that of the "windowpane theory of language" (49). She states that persuasive writing cannot obfuscate meaning when the goal of a scientific writer is to persuade others through the effective demonstration of his or her research. She argues that the goal of any communicator is to transmit information to a community, and that technical writing should seek the assent of a community rather than subdue the community through presentation of undisputable facts; the way to win assent is through rhetorical means.

Since this article is exclusively framed around her own assertion that technical writing has humanistic value, and that a rhetorical approach to teaching is the basis of this value, I estimate that her audience is primarily technical communication instructors. Her outline of the problems and approaches to humanizing technical writing (especially her point concerning an undue emphasis on forcing content into predetermined forms as opposed to the promotion of invention in writing) is highly pertinent to those in the teaching field.

**Driskill, Linda. "Understanding the Writing Context in Organizations." Writing in the Business Professions. Ed. Myra Kogen. 125-145. Urbana: NCTE, 1989.**

Driskill argues that current models of business communication neglect to account for the context in which a communication act or document is executed. In order to account for

context, educators must instruct students to look beyond genre and audience and consider factors such as social circumstances and corporate culture so that they can anticipate how the context in which their writing is produced and received; this consideration reduces the possibility of lost time, effort, and money from wasteful communications practices in the workplace.

The fundamental basis for Driskill's argument is that context gives meaning beyond the words on the page or the idea communicated: no communication happens in any organization or between any organizations that is not influenced by context. She categorizes the meaning that context provides into two groups: external and internal. To demonstrate external environmental context, she provides a case study of a securities trading firm that fails to consider external regulatory bodies' reaction to the implications of their advertising campaign. To demonstrate internal environmental context, she first attributes pressures on communication to "corporate culture," where personal preferences and structural or cultural attitudes and practices affect how individuals within an organizational body communicate with one another. She goes on to analyze the Challenger space shuttle accident and points to an evaluation method where expectations on the contractor to deliver evidence that they did not have forced the contractor to abandon their original misgivings about a defective part after pressure was applied to either produce evidence that met the evaluation criteria, or possibly lose business from NASA in the future.

The inability of each party to adjust to the context of the specific situation or group they were communicating with led to otherwise effective communication strategies in another context being implemented (to each parties' detriment) in the incorrect context. Driskill offers her analysis of these case studies to educators and, at the conclusion of her article, asks them consider including instruction that forces students consider elements of context and rhetorical strategy (beyond just considering audience) in their curriculum.

**Rude, Carolyn D. "The Report for Decision Making: Genre and Inquiry." *Journal of Business and Technical Communication*. 9.2 (1995): 107-205.**

As the title suggests, Rude teases out the nature of different genres that deal with exploring options and making decisions and also examines how inquiry is accomplished (or isn't) within those genres. Two critical arguments she makes in this piece are that genres themselves do not serve as heuristics for developing criteria for evaluation of decisions, and that human and social criteria are often excluded as a product of bias toward quantifiable criteria.

To demonstrate her claims, Rude methodically categorizes and defines types of problems (theoretical, empirical, and practical) and which problem types are related to which types of inquiry (e.g. dialogical, cause and effect, and subjective prediction). She then evaluates which types of inquiry are effective at solving each type of problem. She concludes by examining a heuristic that will account for social criteria, and she proposes a more rhetorical approach to problem solving that relies less on quantitative values (since, according to her, these can only demonstrate the problem and not predict the ultimate

outcome of a solution) and more on reasoning according to an Aristotelian model.

In order to define the problem, she conducts a survey which reveals the lack of social criteria (or, in some cases, any criteria) in evaluative frameworks taught by tech comm textbooks and exposes the bias toward quantitative comparison in extant criteria. Her solution is to create a heuristic that allows students to invent their own, case specific criteria. For each problem type, she offers methods of inquiry and discusses complications and benefits of each. In order to persuade the audience of her rhetorical strategy for making practical decisions, she points out the shortcomings of all of the other current modes of inquiry.

Although the article repeatedly references students and which genres they are or are not familiar with, I think that the aim of this article is to reconceptualize the way in which this genre is perceived of by instructors and practitioners. The examples and applications are consistently grounded in the real world, and she is adamant that in decision making documents genre exists as a construction that was engendered by a need for repeated efforts in the real world. As such, I would say her audience is both educators and practitioners.

**Johnson, Robert R. "Audience Involved: Toward a Participatory Model of Writing." *Computers and Composition* 14.3 (1997): 361-376.**

Johnson contends that the audience should be involved in the writing process because it provides valuable insight not only in regards to documentation, but also design of the technological artifact itself.

To support his argument, Johnson constructs a theoretical framework that is principally based on a triangular interaction between inventors, artifacts, and users. He invokes the Aristotelian model of *techne*, claiming that technology is an art and, according to Aristotle, the end product of art is use of the artifact by a user. To demonstrate the benefits of incorporating users into the documentation and design of technical artifacts, he provides two case studies that illustrate his point. The crowing point of his conclusion is that a technical communicator becomes an advocate for the user when a user's input is solicited by the writer.

It's publication in *Computers and Composition* suggest that the article is intended for instructors, but this article could easily be valuable to practitioners. Johnson indicates in his prefatory essay that the idea for this article stemmed from his own frustration as a user, so the real-world application of his ideas seems like a prevalent undercurrent (despite the fact that both case studies are conducted at a university).

**Dorbin, David N. "What's Technical About Technical Writing?" *New Essays in Technical and Scientific Communication: Research, Theory, Practice*. Ed. Paul V. Anderson, et al. 227-250.**

Dorbin seeks to redefine technical writing to more accurately describe the relationship between reader and technology. The definition he asserts is that technical writing accommodates technology to the reader.

To position his definition within the existing framework, Dorbin analyzes existing definitions of technical writing and evaluates them based on the terminology they use. A large point of contention for Dorbin is that several definitions do not sufficiently define their terms. He has a problem with the term “objectivity” and the linkages made between technical writing and science; in his view, technical writing does not exist to seek a broad truth, but is inextricably linked to context. Meaning is made in technical writing within these contexts through interpretation.

A large portion of his piece is spent defining and distinguishing between the universalist and the monadist views of language, ultimately advocating the monadist for his definition. Dorbin argues that universalists view language as a transmission tool which relies on a belief that a universal language (free of noise or imperfections) can be implemented as a delivery system for objective knowledge. The monadist view links language and knowledge together as inseparable entities.

His most effective and clear arguments center on the concept of alterity within language and the necessity of technical writing as a part of technology. The use of complicated philosophical referents and his writing style in general, where his points are difficult to connect, tend to make it difficult to extract meaning from his piece. This article seems entirely interested in targeting theorists of technical communication, as no practical reasons are given to adopt the monadist approach (he at one point even questions how concepts like productivity even fit into a monadist definition of technical writing).

**Thralls, Charlotte and Nancy Roundy Blyler. “The Social Perspective and Professional Communication: Diversity and Directions in Research.” *Professional Communication: The Social Perspective*. Ed. Nancy Roundy Blyler and Charlotte Thralls. Newbury Park, CA: Sage, 1993. 3-34.**

Writing a mapping essay, Thralls and Blyler clearly demonstrate their preference for an approach to research that recognizes the linkage between knowledge and language. In order to summarize existing research in this area and predict future research, they isolate three theoretical approaches and analyze them based on four different concepts.

The constructionist approach considers knowledge as a social construction that is achieved through consensus within social groups. Their core tenant is that there is no knowledge apart from consensus. Discourse within the community determines one community from another, establishes a member’s place within the community, and perpetuates professional organizations. The collaborative nature of the constructionists posits writing as participation in a conversation.

The ideologic approach is concerned with power dynamics and how those dynamics are

concealed within self-replicating institutions. Consensus is used to subjugate competing or outside opinions, and discourse is used to demarcate roles within a group or exclude others from entering the group. The main focus of this approach is to point out issues with or expand upon ideas in the constructivist approach. Collaboration is forwarded as a means of exposing hidden power relations and reduce hegemony.

The paralogic hermeneutic approach focuses exclusively on discourse and states that implicit concerns of dynamics or communication barriers are dropped in favor of interpersonal interaction. These interactions build consensus, and form the fundamental basis for all knowledge (knowledge is much more fluid in this approach, since it is entirely determined within the space of interaction). This approach insists that communication is uncodifiable, and hence generalizations about communications are not valid.

Thralls and Blyler's method for presenting these approaches is the survey of extensive amounts of literature. The approaches are compared along the same concepts, which clearly highlights conceptual differences and similarities between them. Since this is a mapping essay that summarizes and organizes research (and, to some extent presents areas of future inquiry) the audience would consist of persons interested in research in the field of social perspectives within technical communication.

**Lay, Mary M. "Feminist Theory and the Redefinition of Technical Communication." *Journal of Business and Technical Communication* 5.4 (1991): 348-70.**

Lay argues for a redefinition of technical communication to account for feminist theory. Her redefinition centers around the idea of dispelling the notion of objectivity as obsolete and replacing it with a spirit of disclosure of the researcher's relationship to the topic studied. She also contend that writing should be collaborative, as solitary writing is almost always a myth.

To set up her argument, she lays out key tenants of feminist ideology that she applies to a feminist critique of "objectivity." She contends that objectivity is merely a construction that has developed within the male dominated scientific community, and that true objectivity lies in disclosure and examination of the researchers position within the study. She points to ethnography as a genre which attempts to accomplish this. Although her reversal of the acquisition of gender traits (having men acquire female traits) in suggesting a plan for collaborative writing seems revolutionary, the explication of the traits themselves seems lacking in terms of support. Overall, her approach is consistent in that it applies feminist theory to existing writing structures (as she interprets them) and suggests a reinterpretation of existing definitions of communication.

Since the research does not employ practical applications, the audience is somewhat invited to try to implement these shifts in ideology within their workplace or research. Without supporting case studies, however, the reader most likely will be one who is

interested in exploring other areas of feminist inquiry in technical communication.

**Johnson-Eilola, Johndan. "Relocating the Value of Work: Technical Communication in a Post-Industrial Age." *Technical Communication Quarterly* 5.3 (1996): 245-70.**

Johnson-Eilola seeks to redefine the role of the technical communicator in the workplace by developing strategies to move a technical writer out of a support role and into a role where they deal with larger issues related communication, not just documentation. She borrows Robert Reich's definition for this role: the symbolic-analytic worker.

To establish her argument, she states that technical communicators are no longer primarily the documenters of industrial products; since the U.S. (she locates her definitions in the U.S. Dept. of Labor) has shifted to an information-based, post-industrial economy, the primary goal of the technical communicator and educators training technical communicators should be to prepare them to not only enter this economy, but strive to move beyond the less involved labor categorizations (routine production and in-person service work). She clearly illustrates the damage caused by relegating support materials to routine production products by illustrating the impact on the worker and user. Her plan for vaulting technical communicators into the symbolic-analytic workforce is aimed at educators: first, utilize the areas for education of symbolic-analytic workers proposed by Reich to recognize the areas of technical communication that fall under this work category; next, implement the five educational goals that she derives to make education in the field of tech comm timely and relevant to the post-industrial economy.

**Katz, Stephen B. "The Ethic of Expediency: Classical Rhetoric, Technology, and the Holocaust." *College English* 54.3 (1992): 255-75.**

Katz frames his argument around a memo from Nazi Germany concerning a more efficient construction for a van that is used in the extermination of Jews during the holocaust. His primary argument is that expediency and technology, while benevolent as concepts, are nightmarish when they become the ends of a society; when humanistic concerns are abandoned in favor of expediency and technology as goals for a society, as happened in the case of the Nazis, society has no moralistic framework with which to evaluate actions outside of those goals.

Katz starts with a rhetorical analysis of the memo that demonstrates that it presents rhetorical strategies that make it an effective document, but that it is moralistically bankrupt. The author of the document has no concern for moral issues, only expediency and the improvement of technology. Katz goes on to justify his analysis of the holocaust by asserting that the placement of morally neutral goals is a gap in the logic of Aristotelian rhetoric, since Aristotle listed expediency as a good that society should try to achieve. Within this gap in logic, Katz takes the argument to the extreme to demonstrate the mentality of Nazi Germany by examining Hitler's rhetorical position.



In his final section, Katz implicates capitalism as a system in which the same moral bankruptcy can occur. As a system concerned with the individual, capitalism sometimes places the individual in subservience to systemic expediency and technological (or in this case, economic) advancement. Katz opens up a wide variety of ethical problems in a final statement which expose the need for a greater emphasis on ethics in the college classroom than currently existed.

**Sullivan, Dale L. "Political-Ethical Implications of Defining Technical Communication as a Practice." *Journal of Advanced Composition* 10.2 (1990): 375-86.**

Sullivan claims that technical writing should be defined as a field that teaches students to deliberate about ends, not just document or deliberate the means to reach those ends; according to him, technical writers need to consider the consequences of actions and not just the expediency or technology involved in taking action.

Sullivan claims that tech writers are traditionally taught genres that are defined by industry as useful and that rhetorical analysis is excluded because it exists outside of those traditional genres (and sometime conflicts with them by forcing deliberation where it is not wanted by industry). He believes that tech writers need to deliberate about action (praxis) by way of "a virtue defined as the ability to reason about ends rather than means (phronesis) (214). This allows writers to go beyond expediency and deliberate about the results of a decision.

The main issue that frames his argument is the notion (proposed by Aristotle) that society defines what is good. Since we live in a technological society, the good that the society determines may be at odds with tech comm scholars concerned with humanistic endeavors. The conflict for educators is summarized by Sullivan in his conclusion: "If we continue to teach the [tech comm] course in traditional ways, we perpetuate a form of discourse that blocks social action; if we refuse to teach the conventions appropriate for industry, we fail to give our students the power they need to enter the dominant culture [and change it from within]" (218).

Sullivan's solution is restructuring tech comm classes to include not just the genres required by industry, but also including discussion of well documented cases where students can study the issue and debate courses of action. This, Sullivan believes, will help students achieve a greater understanding of social action and allow them incorporate deliberation into their experience as technical communicators.

**Herndl, Carl G. "Teaching Discourse and Reproducing Culture." *College Composition and Communication* 44.3 (1993): 349-363.**

Herndl seeks to examine the nature of resistance to systemic replication as it is taught in the technical communication classroom. In this article, he argues for increasing the level of awareness of student to their position within power structures. He also pushes for additional research to be done on the areas of resistance to power structures.

In his examination of current pedagogical practices, Herndl laments that doing nothing to educate students about power structures will result in students that do not understand the nature of dominant discourses and how they exclude or flatten oppositional discourse within professional fields. While he recognizes the inherent conflict between industrial pressures and pedagogical goals of engaging the topic of power structures, he posits that the very nature of teaching students discourses, by necessity, thrust the teacher into the role of “the production of professional and cultural power” (225). This statement seems to both acknowledge existing scholarship, but at the same time provides a mandate on instructors to recognize their role and start examining and exposing their students to the ideas of dominant discourse, self-replicating power structures, and resistance theory.

To illustrate the fundamentals of resistance theory, Herndl examines [McCarthy](#)’s study of the DSM-III and points to it as a good starting point for analyzing how resistance to dominant discourse is possible. While he calls for more scholarship on this issue, he also proposes introducing students to the analysis of dominant discourse and power structure in the classroom by having them “[articulate] their practical knowledge of academic discourse” (229). Herndl draws support for numerous other Marxist and radical pedagogy scholars in the construction of his article (Friere, among others), which gives this piece the spirit of a mapping article in that it examines critical scholarship on an issue and points out areas where further scholarship is wanted.

**Barton, Ben F. and Marthalee S. Barton. “Ideology and the Map: Toward a Postmodern Visual Design Practice.” *Professional Communication: The Social Perspective*. Ed. Nancy Roundy Blyler and Charlotte Thralls. 49-78.**

Barton and Barton conceive of maps as semiological symbols that are “read” by the user and are created within a specific culture of inclusion and exclusion based on Marxian power dynamics.

To explicate their claim, they provide a set of inclusion and exclusion principles with theoretical underpinnings. Rules on inclusion determine what is on the map or whether the map should exist, and also symbolic representations in the map that have societal or political significance (e.g. where geographically a world map is centered, or how physical geographic dimensions are distorted to favor certain groups). Rules on exclusion determine whether a map is repressed (or never made) and what types of information is excluded (e.g. places where work takes place are not usually on city maps). Barton and Barton propose two ways to eliminate exclusionary or selective practices from mapmaking: the map as a collage (where data and explanatory notes are included or overlaid onto the image) and the map as a palimpsest (where maps include broad ranges of diachronic representations as well as admit when something is not possible to accurately represent, such as contested land).

In terms of visual representation analysis, this article provides a framework for enhancing representations to promote greater inclusiveness of ideas and less hegemonic exclusion of

cultures and peoples (or classes). The article serves as an excellent framework for visual analysis of graphics, and also as a potential starting point for research in related topics.

**Harrison, Teresa M. "Frameworks for the Study of Writing in Organizational Contexts." *Written Communication* 4.1 (1987): 3-23.**

Harrison argues for an examination of the rhetorical context in which writers operate within organizations; she asserts that existing conceptions of context need to be adapted so that students are prepared to write as part of an organization after graduation.

Harrison conceptualizes context in two ways: situational and community. Situation contexts arise from outside factors creating a rhetorical moment that a rhetor responds to, but this type of context fails to allow larger studies of organizational behaviors due to its restricted scope (258-9). Community contexts are based on idea that social knowledge is created through rhetorical activity (259). She presents her conception of organizations as context by classifying two roles that organizations play: systems of knowledge and patterns of symbolic discourse. Organizations as systems of knowledge describe how knowledge systems in organizations are "generated by individuals interacting with each other and their environment," but fails to describe how "what organization members do is related to what and how organization members think" (260; 261). Her model of organizations as patterns of symbolic discourse describes how symbols (especially terminologies) "[bridge] the gap between meaning and action" for newcomers to an organization (261). She concludes by outlining avenues for research in this area, and calling for better education for students, who eventually become writers within an organization. Since socialized members function better in communities and socialization is a long process, Harrison stresses the importance for stressing an "appreciation for the idiosyncratic nature" of organizational writing constraints, asserting that "this kind of appreciation [...] allows writers both to participate within and to stand outside the prevailing systems and structures for assigning meaning within a given context" (264).

**Winsor, Dorothy (1990). *Engineering Writing/Writing Engineering. College Composition and Communication*, 41(1), 58-70.**

Winsor conducts an ethnographic study of the writing practices of an engineer to support her assertion that the "textual shaping of knowledge" can be applied to disciplines like engineering which are typically thought of as practical sciences associated more with the production of a tangible product (342).

Firstly, Winsor dispels the notion that writing is absent or marginal to the construction of knowledge in engineering. She points out that physical realities are transcribed into recorded measurements (a process defined by Latour and Woolgar as "inscription") and that measurements are accepted as written elements that are interpreted by other engineers (343). She examines how engineers use writing by examining the practices of an ethnographic subject. Winsor makes clear the distinction between the product discussed and the written materials which document the specifications and performances of the product, an automotive engine in her ethnographic case study; her

conclusion: "knowledge of the engine and knowledge of the documents about the engine were identical" (346). She also contends that documents form an integral part in professional identification, as well as justification for quasi-logical decisions ex post facto. To her, the writing-discourse relationship is reciprocal: engineers create the discourse which in turn creates engineers. She concludes by recognizing the limitations of her research and justifying how her ethnographic case study could have larger applications (and enhanced ethos) within the broader context of the engineering field. She also acknowledges that writing, as a source of power, has a demystifying effect when studying practitioners in technical communication.

**Allen, N., Atkinson, D., Morgan, M., Moore, T., & Snow, C. (1987). What Experienced Collaborators Say About Collaborative Writing. *Journal of Business and Technical Communication*, 1(2), 70-90.**

Allen et al. attempt to fill a gap in existing research on group collaborative writing by conducting a qualitative study of several people who have participated in collaborative writing and identifying and segmenting the process so that its particular facets can be more closely examined.

After identifying that most information about group collaborative writing comes from unrelated studies, Allen et al. describe the construction of their study: a between-subjects structured interview focusing questions on demographics and successful group composition experiences. They reveal the three types of groups involved in collaboration and discuss how the group dynamics function to create a "better" text than solitary individuals could achieve. Key to their findings is the topic of conflict, which most group members describe as necessary to the production of a quality text. The authors distinguish what they call "shared-document collaboration" from other tasks where more than one participant is involved in forming a document, but the multiple participants do not necessarily collaborate. They conclude by addressing their small sample size (which they make reference to often) and outline questions for future researchers, highlighting the need for investigation into failed group collaboration efforts.

**Paradis, James (1991). Text and Action. In *Textual Dynamics of the Professions: Historical and Contemporary Studies of Writing in Professional Communities*, 256-278. Madison, WI: U of Wisconsin P.**

In a study of two legal cases concerning operating instructions for commercial grade studguns, Paradis analyzes the role that written discourse plays in shaping human interaction with artifacts. Paradis argues that effective instructions incorporate specific textual elements to create a "teleological" view of reality that enables operators to utilize technology in reasonable ways.

Paradis begins by pointing out the need for "specialists [...] who can anticipate [operational] problems and who can apply rhetorical strategies to [achieve] operational coherence and simplicity" (368). Serious problems occur when operators discard instructions in favor of a "public stock of imagery" when operating artifacts that require a

complex system of actions to avoid peril (371). Equally dangerous is when written artifacts fail to perform their role in emphasizing the consequence of incorrect use, and even worse, when they lack specific operational detail, forcing the operator to resort to guesswork (376). Paradis' specific analyses of the operational manuals provide further suggestions for correctly applying emphasis on safety instructions. His conclusions point out the "tension" inherent in the need for instruction manuals "to be algorithmic and the legal obligation [of instruction manuals] to be reasonable" (378). Although potentially inaccessibly worded, this article serves to question established guidelines for the minimum information required to operate a complex artifact while also patterning the use of rhetorical analysis of written workplace discourse in this area.

**Howard, Tharon W. "Who 'Owns' Electronic Texts?" *Electronic Literacies in the Workplace: Technologies of Writing*. Ed. Patricial Sullivan and Jennie Dautermann. 177-198. Urbana, IL: NCTE and Computers and Composition, 1996.**

Tharon explores several scenarios that illustrate how our contemporary conceptions of copyright law (both personal and legal) impacted the application of period copyright law on digital texts.

After introducing the scenarios, Tharon gives a brief history of copyright law from its inception in sixteenth century England through its inclusion in the constitution up to the point at which the article was written in 1996. His takeaway point, which he repeats several times, is that authors do not have an inherent right to texts: copyrights are a permission granted by the government. He proposes that current copyright laws are the result of a tripartite model of intellectual property ownership theories that contest the following: "authors have a 'natural right' to the fruits of their intellectual labors," the public has a right to "absolute truths" since they "cannot be the property of any one individual," and "all knowledge is socially constructed" meaning that "a text is a product of the community the writer inhabits" (400). Among his other observations is that fair use of copyrighted material is not an exception to the law, but a product of copyright laws being established by the government to protect "the public's best interests" (402). In his case studies, he addresses both practitioners and academics by presenting a broad array of period copyright conundrums. Tharon concludes by urging members of the technical communication field to obtain a basic understanding of copyright law to understand how to proceed in situations similar to his scenarios.

**Bernhardt, Stephen A. "The Shape of Text to Come: The Texture of Print on Screens." *College Composition and Communication* 44.2 (1993): 151-175.**

Bernhardt truly explores (as there was little existing material on the subject) the implications of the evolving text-based and desktop publishing applications at the time the article was written. In his article, he gives a detailed description of "nine dimensions of variation" that he feels "screen-based texts" better "exploit" than paper texts (410).

In his explication of the features of screen-based texts, Bernhardt pays particular attention to navigation practices within programs. He closely analyzes layout, lauding programs

that have high degrees of navigation and chastising applications that confuse or obscure texts through confusing navigational systems. Bernhardt points out that there is a high degree of metaphor inherent in the design of applications that accommodate the technology to users (422). He fails to speculate on the future of navigation systems and application tools that are not based on conventional understandings or metaphor, but this is understandable as the systems he is describing are rudimentary to operating systems and applications that are currently in use. In his conclusion, he rightly predicts that future encounters with on-screen text will require readers to “develop new sorts of reading skills, ones based around text that is modular, layered, hierarchical, and loosely associative” (426). While much of what Bernhardt discusses about screen-based texts is severely dated, when he does speculate on readers’ interactions with on-screen text he accurately conceptualizes the future of our interaction with texts.

**Selfe, Cynthia L. and Richard J. Selfe, Jr. “The Politics of the Interface: Power and Its Exercise in Electronic Contact Zones.” *College Composition and Communication* 45.4 (1994): 480-504.**

Selfe and Selfe argue that computer interfaces are inherently biased against minority and ESL students, contending that “computer interfaces [...] enact small but continuous gestures of domination and colonialism” (433). Their article not only elaborates on their assertion of the colonialism inherent in current interfaces, but also proposes strategies for recognizing and combating unfair power dynamics in technology.

Selfe and Selfe point out several ideologies in interface construction (e.g. the organization of information into “folders” on a “desktop” with a hierarchical file storage system) that are biased towards capitalist, white, middle-class conceptions of how one should interact with technology (433-4). In terms of language, the authors point out that it is difficult or impossible to find an interface design that is truly oriented to non-English speakers; many systems, though bilingual, still have functions that are rooted in English lexical expressions (435). Selfe and Selfe repeatedly equate the forced use of unfamiliar or hostile interfaces to an act of colonialism, where students’ culture is temporarily marginalized to meet the standards set by the interface. They outline three ways to combat this problem: educating future educators about the politics of interfaces and how to overcome them, having interested academics influence design, and having composition teachers and students participate in a kind of user design project by making real the map metaphor adopted by the authors and having them redraw the “map” of the interface. Selfe and Selfe are clearly interested in exposing educators and designers to the problem of bias in interface design, as they believe making this tacit knowledge explicit is the crucial step in altering established politics.

**Selber, Stuart A. “Beyond Skill Building: Challenges Facing Technical Communication Teachers in the Computer Age.” *Technical Communication Quarterly* 3.4 (1994): 365-90.**

Through a survey, Selber identifies current technical communication courses incorporating computers into their curricula or classroom experience and categorizes the

ways in which these courses approach the use of technology in the discipline. Selber then identifies three challenges facing technical communication educators and, through the explication of these challenges, poses solutions which will address specific issues related to the incorporation of technology into the technical communication classroom.

In the classification section of his article, Selber divides existing courses into those that focus on production (building skills in specific applications of computing technology), computer literacy (“how computer technologies reconstitute, in central ways, notions of reading, writing, text, process, and product”), and the situation of technology in historical, political, and social contexts (how “implementing and using computer technologies are [considered] fundamentally ideological acts”) (456-7). Based on responses to his survey, he contends that most faculty integrate computers into their course in order to prepare students to engage technology post-graduation. Another reason for integrating computing technology into the classroom is to improve students’ writing skills, a reason Selber supports by citing composition research. Selber argues in his final section for the preservation of humanistic concerns over subservience to technological concerns. He also contends that technical communication courses should teach technology in order to make it relevant to the field; likewise, technical communication instructors should be provided with the necessary instruction in order to ensure appropriate and informed integration of technology into technical communication classrooms.

**Bosley, Deborah S. “Cross-Cultural Collaboration: Whose Culture Is It, Anyway?”** *Technical Communication Quarterly* 2.1 (1993): 51-62.

Bosley identifies several cultural differences between “Euro-North American” culture and other world cultures that can hinder group collaboration. She goes on to suggest ways in which educators can mitigate cultural differences and turn potential clashes into learning experiences, as well as promote greater cultural understanding and “productivity” in group exercises.

Although she points out several differences, many of her examples develop around differing cultural expectations for behavior within a group (e.g. valuing intra-group conflict and debate as opposed to achieving consensus) as well as differences in conceptions of what the goal of a group project should be (measurable progress versus collaborative harmony). Oral and written communication strategies differ between cultures, and this sometimes creates conflict due to cultural expectations surrounding the most effective (or even permissible) communication strategies. Solutions that Bosley proposes involve disseminating expectations for group work and communication prior to engaging in a group endeavor. Bosley briefly mentions non-verbal communication, and if I were to suggest an area where she could have developed additional content for this piece, I would recommend that she address this issue since context (as concerning high- and low-context cultures) is central to her discussion of oral communication (471).

**Brasseur, Lee E. “Contesting the Objectivist Paradigm: Gender Issues in the Technical and Professional Communication Curriculum.”** *IEEE Transactions on Professional Communication* 36.3 (1993): 114-123.

Brasseur addresses the objectivist position that predominates within technical communication and describes her course on feminist perspectives within the field that functions to expose students to “problems inherent in gendered assumptions about rationality and objectivity” and provides students with “practical experience” in that area through ethnographic studies of workplace environments.

The theoretical underpinning for her course focuses on how the objectivist viewpoint is inherently gender biased, but the author might have mirrored more closely Lay’s (1991) approach to defining objectivist viewpoints as inherently gendered. A core tenet of the course is for students to develop, within an ethnographic study, an epistemology of “situated knowledges” that allows students to recognize and “acknowledge the contradiction and paradox within any situation or viewpoint” (479). The discussions within the course prepare students for an ethnographic study where practical applications of theory can be examined. Brasseur provides examples of her students’ ethnographies that illustrate the gender issues within workplace situations; these examples seem more relevant than the case study examples she cites throughout (e.g. Sauer’s 1993 miner example), especially since this is a pedagogical article outlining a course. Brasseur also provides a complete syllabus and reading list.

#### **Bauer, Matt. “Sound change and laryngeal height.”**

Bauer proposes that laryngeal height might be a possible explanation for the change in /æ/ found in the English language before /k,g/. To test whether laryngeal height is a factor in the production of /æk/, Bauer compares the relative position of the larynx through an examination of hyoid bone shadows in ultrasound images.

Although the linguistic terminology is difficult to comprehend, the methodological setup for the study seems well grounded and the results are displayed in a series of graphics to illustrate the findings. Several different measurements are presented along with a description of the methods, equipment used, and explanation of the reduction in sample size due to error variance. Bauer concludes that the findings match the supposition given by the researcher before the experiment and validate that conclusion.

#### **Otterbacher, Jahna. “‘Helpfulness’ in Online Communities: A Measure of Message Quality.”**

Otterbacher investigates user ratings at Amazon.com to uncover a correlation between quality of reviews and perceived helpfulness. Her results indicate that timeliness and ordinal positioning of the reviews has a strong correlation with her dimensions of perceived helpfulness, and her findings in each of the dimensions offer insights into group behaviors in online communities..

In order to draw a correlation between quality and helpfulness, Otterbacher first develops a metric to evaluate the relative quality of reviews. From there, she gathers a large and diverse sample of reviews and evaluates them based on those metrics. Through statistical



manipulation, Otterbacher evaluates the most pertinent of the metrics in each dimension of helpfulness. For example, an analysis of her first factor (F1: Relevancy) showed that word count and pertinent word choice greatly affect the perceived helpfulness of a review. In her conclusions, Otterbacher notes that her study uniquely identified metadata as a relevant avenue of investigation in terms of perceived helpfulness, which she utilizes to conclude that ordinal position of reviews has a positive correlation to perceived helpfulness. Future contributions outlined by the author include studying online group interaction over a different time span and enhancing the analysis of posts to include other (linguistics) metrics.

### **Stolley, Karl. "Using Microformats: Gateway to the Semantic Web."**

In his tutorial on the use of microformats, Stolley argues that technical communicators should fundamentally shift their understanding of HTML code and prepare their students to construct insightful and utilitarian web pages that fit into the idea of the semantic web.

Stolley provides a key example of usefulness in web design through his example of the hCard. The tags that construct the hCard in XML are easy to add, and provide an added level of functionality. Barriers to XML tags are usability issues (among people with low vision) and knowledge issues among technical communicators (as they are used to using presentational web editing software such as Adobe Dreamweaver). To combat these issues, Stolley suggests further research into accessibility issues and a greater emphasis in technical communication courses on integrating XML and XHTML design (both functional and aesthetic) into the curriculum. The tutorials offer not only examples of how to use XML in efficient ways, but also suggest the greater implications of making students aware of the code aspect of websites over just a relatively cursory education of web design that focuses on presentational elements.

### **Riley, Katherine. "Telling More Than the Truth: Implicature, Speech Acts, and Ethics in Professional Communication."**

Riley asserts that although the primary thinking about implicature is its use in deception, there are other less evident avenues of implicature that can be just as harmful if not mitigated.

First Riley defines implicature as the deletion of one of Grice's maxims of effective communication, which forces the audience to draw an inference based on context and available information. Next she defines speech acts, spoken words that perform a function. After categorizing these acts and how implicature is present in different scenarios, she illustrates by means of five scenarios the ways in which implicature can lead to unexpected and disastrous outcomes. The situations inherent in organizational relationships are primarily to blame, as implicature is a form of deference that lends itself to uneven power dynamics. The ethical considerations inherent in communication where implicature is a factor involve ensuring that relevant information is communicated in a direct way despite any organizational or power considerations that must be taken into account by the speaker/writer.