

UNDERSTANDING TECHNOLOGY MORE
CRITICALLY AS A MANIFESTATION OF
HUMAN VALUES IN TECHNOLOGIZED
RHETORICAL SUBDISCIPLINES

By

DENNY B. KRAMER

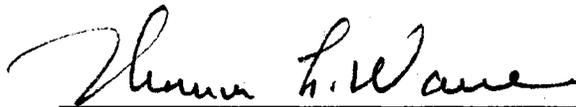
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Baylor University
Waco, Texas
1993

Master of Arts
Baylor University
Waco, Texas
1996

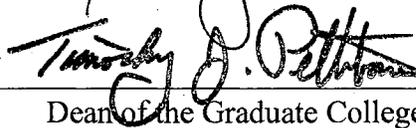
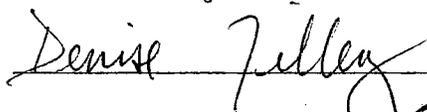
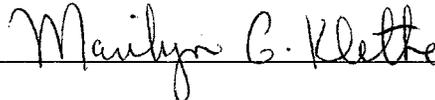
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Thesis Adviser



Dean of the Graduate College

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NOMENCLATURE

Pragmatism	Philosophy that invites us to test, to revise according to current conditions, and to evaluate consequences. The main tenets of pragmatism include a belief in human evolution, in democratic processes, in problem-solving, and in the improvement of society through education.
English department	The traditional administrative unit which includes literature, creative writing, and composition studies.
Technologized rhetorical subdisciplines (technical communication, computers and writing)	“Technologized” because of each subdiscipline’s connection to technology, and “technologized rhetorical subdisciplines” provides a term linking technical communication and computers and writing according to their respective willingness to see <i>technology</i> and <i>rhetoric</i> “together.” Both are marked by an interesting and complicated relationship to the “humanistic” and the “technological,” respectively, and the continued implicit and explicit recognition of the “two cultures” Snow described nearly fifty years ago.
Rhetoric	Classical rhetoric as found in Aristotle treated all the elements of the rhetorical situation: interlocutor, audience, reality, and language. This version of rhetoric insisted that all are inevitably involved in the rhetorical act and so must be considered in pedagogy.
Technology	Technological discoveries have vastly accelerated new modes of communication worldwide. In addition to the benefits of telephone, fax, radio, TV, and satellite transmission, computer technology has radically transformed all aspects of socioeconomic life. Few offices or homes in the developed world is untouched by the information revolution. The Internet and the World Wide Web have made possible instant communication almost everywhere on the globe.

CHAPTER 1

Introduction

Both technical communication and computers and writing scholars have, since the inception of each discipline, held technology in a central position when working to define the discipline; indeed, both disciplines are largely organized around various technologies. Because of that focus, scholars in both disciplines have found themselves at odds with colleagues in other disciplines in the academy—especially disciplines like traditional literary studies and rhetorical studies. At issue is the question of how a discipline that features technology can be considered humanistic. The quintessential discussion of this seeming conflict appears in C.P. Snow’s *Two Cultures*. As he notes there, the “cultures” of science and technology and the arts and humanities, respectively, read the world in two separate ways, two separate languages that seem to be equally inaccessible to each other. One important result of this mutual effort to obfuscate is the disinterested stance each culture often takes with regard to the other. Indeed, the relationship between the two can be characterized in several ways, ranging from hostile to fearful, from skeptical and suspicious to begrudgingly tolerant, and from indifferent to antagonistic.

When technology’s contribution to the humanistic definition fails to be taken in to account, the resultant discussion can only be detrimental to technical communication and computers and writing. Embracing technology, as a humanistic element, or “aspect” to use Dombrowski’s term (*Humanistic Aspects* 1), in and of itself is crucial to developing technologized rhetorical disciplines because doing so allows us to understand technology more critically as a manifestation of human values. Doing so allows theorists and

practitioners alike to move beyond other more peripheral humanistic arguments that strained to show either how technology and the humanistic could “get along” (see Helen Schwartz’s “The Confessions of Professor Strangelove” and Ellen Nold’s “Fear and Trembling”—early works in computers and writing) or how other humanistic elements “show up” in the discipline (like Dombrowski). Patrick Moore’s epistemological argument for instrumental discourse, along with the three different editions of the *Humanist Manifesto*, give scholars in technical communication and computers and writing occasion to locate *centrally* technology and the “instrumental” rationality that motivates it, not peripherally, in humanistic arguments (“Instrumental Discourse”).

Several technical communication scholars have been concerned with the tendency to use technical communication to control and dominate people (e.g., Miller, Dobrin, Rutter) and, partly as a result of this concern, have questioned the ethics of technical communication. To combat these tendencies, they have suggested ways to humanize technical communication and broaden its foundation to accommodate it to philosophy, literature, history, and the liberal arts in general. In some situations, however, technical communicators must use instrumental language to control people for it to be effective, ethical, and humane. When the purposes of technical communication are instrumental, students in degree programs should spend less time on literature and focus more on human factors analysis, cognitive psychology project management, computing technologies, and economics.

Miller is the earliest of the critics who have been concerned about the humanism of technical communication. She wants to see "technical writing as a more humanistic and less coercive endeavor" (611). She has written about how technical communication

"aims at being an efficient way of coercing minds to submit to reality" (610). Coercion, of course, is a strongly pejorative word. But, according to Moore, in an important way, Miller misstates the purpose of technical communication. Technical communication aims to allow the mind to oppose the coercions of reality, not "to submit to reality." Reality arrays many powers against people, and we must find ways to govern, guide, and control those powers ("Instrumental" 107). For example, the external world coerces us: The elements blow against us, freeze us, overheat us, and drown us; earthquakes destroy our homes; insects and reptiles sting and poison us; bacteria and viruses inflict pain or death on us; To resist these pressures, people have developed instrumental uses of discourse: Engineers write specifications for the designs of heating or air-conditioning units, which are manufactured according to certain procedures by factory workers and made usable to lay people through operating instructions; legislators and regulators issue laws and regulations that dictate that houses in certain zones be built to resist earthquakes; parents order their children to stay away from certain insects and reptiles; governments issue warnings not to drink contaminated water or use syringes that others have already used.

Our bodies also coerce us: They want to be fed, watered, maintained within a certain temperature range, and relieved from pain. To satisfy these needs, we have developed instrumental uses of discourse: Engineers, government health regulators, technicians, and factory workers specify, develop, and mass produce food products with precise cooking instructions for end users; and chemists, government regulators, technicians, and factory workers specify, develop, and mass produce pharmaceutical products with precise dosage instructions.

And society coerces us: Because some individuals in societies trample on the rights of others, we have instrumental communications such as laws, regulations, customs, and policies. If citizens want to benefit from the security and social cohesiveness that a nation provides, they must submit to instrumental communications: obeying the laws of the land; filling out application forms for social security, Medicaid, and food stamps; filling out Internal Revenue Service forms to pay taxes or get refunds; and writing checks to pay taxes and bills. All these—and many other kinds of communications—are instrumental uses of language, and all can be said to be coercive. Yet, all are important to minimize human pain and suffering, save lives, and help us live happier, more productive lives. Practitioners of constructive instrumental discourse acknowledge and even embrace the inevitability of controlling people so long as the controls are used to promote higher (i.e., ethical or unselfish) values. For these reasons, technical communication and instrumental discourse can be very humane.

Dobrin is also concerned with how technical communication can limit and dominate people. He fears that some prescriptions about using technical language "limit the vitality of the language used, thereby limiting the creativity of the writer and forcing us to establish in the writing human relationships which are mistaken and false" ("What's Technical" 239). He fears technology and its "logic of domination" (245) and hopes that the "future will give us writing which is more responsible, more creative, more fulfilling" (248). And Dobrin fears that "a technologized language is a language that does not matter very much" ("Is Technical" 250). He concludes,

My objection to these sentences that avoid mentioning I is that writing them makes language matter less; it encourages the flattening of language which is one of these effects of technologization. My grounds for this objection are

purely moral. If you accept my argument, you are against these usages because you don't think language should be taken over by technology. ... Thus if you accept my argument, there is a moral responsibility given to you. It is to make sure that language matters. ("Is Technical" 251)

Some of the earlier discussion has tried to show that standardized language does matter.

Instrumental aims of discourse can help, as Sen has said, to consolidate the "social, economic and technological attainments at any point of time so as to release creative energy for the search of higher and better values and systems" (390). To that end, standardized uses of language and instrumental aims of discourse do limit the semantic range of words and limit the creativity of writers when describing actions and functions. But they do so for humanistic reasons: to diminish pain, to increase the quality of life, and to save lives. As to Dobrin's concern about domination, technical communication that tries to govern, guide, control, and help people execute physical activities will always be open to such charges. In some situations—for example, passing laws to prevent the violation of a person's civil rights, telling someone how to operate mechanical equipment safely, ordering an abusive spouse to cease and desist violent activity, telling a user how to operate a word-processing program—being "imperialistic," to use Heidegger's derogatory word (qtd. in Dobrin, "Is Technical" 243), is socially and personally advantageous. Language is often "flattened" in technical communication, but for highly moral reasons. And, lastly, for Rutter, the solution to the problems discussed by Miller and Dobrin is a broader definition of technical communication.

According to Rutter, to understand the dynamic nature of science and technology and to discover that the supposed gods of objectivity and pragmatism are just the illegitimate offspring of expediency and misunderstanding is to realize that technical communication is rhetorical above all else ("History" 143). Rutter wants to found

technical communication on "a more humane, more comprehensive, and more historically oriented definition" of technical communication. That definition for Rutter is "liberal education" (149). But ignoring the many instrumental uses of language or swallowing them up, a totalizing definition of rhetoric or liberal education cuts students off from important uses of language, uses in which they will be enmeshed all the days of their lives. In their efforts to broaden the definition of technical communication to include everything under the sun—rhetorical literature, philosophy, social science—some critics deprive students of the sharp, pragmatic tools that they will need to work with others (and sometimes control others) so that they can improve personal, organizational, and cultural conditions in the workplace.

During the late 1970s and extending into the 1980s and 1990s, many technical communication scholars have tried to rehabilitate technical communication by redefining it as rhetoric to make it seem more ethical and to make it fit better within the humanities (Ardner Cheshire, David Dobrin, John Harris, James Zappen). By defining technical communication as rhetoric or literature, these scholars have tried to elevate and dignify technical communication for literature professors, and they have tried to naturalize it for the many traditionally (i.e., classically) educated discourse analysts in English and rhetoric departments. Such technical communication scholars, I will argue, have wandered off in the wrong direction. They have missed the humanism embedded in the standardized language and procedures of technological artifacts and language. That humanism does not focus on using artistic or rhetorical discourse to articulate the important spiritual values that bind social groups together. Instead, that humanism tries to save lives, minimize pain, minimize the socially destructive actions of dysfunctional

people, provide the laws and procedures that keep social groups working more or less harmoniously together, apply material resources economically to solve problems, and improve the quality of our physical lives.

This humanism can be best learned and put into effect by understanding the instrumental uses of discourse, that is, the nonrhetorical purposes of language that complement rhetorical and literary uses of language. Understanding instrumental uses of language is vitally important today because mechanical, electronic, and chemical technologies affect our lives daily, as do legal and regulatory applications of language. Too many institutions can be destroyed, and too many people can get hurt or die if teachers, scholars, and universities continue to ignore the instrumental aims of discourse. Too many rhetoric professors forget that people must use language to get things done—to execute physical tasks within narrow financial, temporal, and other constraints. Few people have the time, the need, or the inclination to be persuaded about many activities in their lives. In many situations, people need closure—not more interpretations, more analysis, or more discussion. In many situations, such closure is perfectly humane.

My argument is that we need to look at both technical communication and computers and writing, two contemporary manifestations of rhetorical study, and to focus on the ways in which they describe their humanistic character or profile. Technical communication and computers and writing research, both rhetorically-based and pragmatic, discuss technology and instrumental rationality. If technical communication and computers and writing scholars can persuasively rearticulate what they do (countering the traditional argument that people use to reduce technical communication or any other field or discipline to “mere” practice instead of a theorized, contingent,

postmodern epistemological line of inquiry and theoretically-sound practice) linking the two disciplines pragmatically to humanistic inquiry, we might improve relations among some skeptical members within English departments and thus help poise English departments where programs in technical communication and computers and writing reside play a vital, vibrant role, not only in the academy as it continues to grow and change, but also in the culture that encompasses it.

Robert Johnson and Jay David Bolter, among others, trace efforts by scholars in both technical communication and computers and writing to sketch descriptions of the humanistic nature of their respective fields of inquiry, a process that has been a necessary part of both defining the boundaries of each discipline. Interestingly, efforts to articulate a humanistic character, what Paul M. Dombrowski calls the “humanistic aspects” of these technologized rhetorical subdisciplines, have often relied on conservative, techno-skeptical notions of the humanistic that align well with academic humanities ideology but oftentimes resist alternative humanistic frameworks that recognize technology as central, rather than opposed, to humanistic goals and action. More inclusive philosophies of humanism like those defined in the three twentieth-century publications of the *Humanist Manifesto* can help scholars recast a more pragmatic interpretation of the humanistic that rehabilitates technology by countering traditional arguments, usually polemical in nature, which situate technology against the values advanced in the academic humanities.

My rationale for combining technical communication and computers and writing in this dissertation is not only to help technical communication and computers and writing develop a more authentic description of their humanistic character and disciplinary definition, but also to extend the reach and vitality of English departments

where programs in technical communication and computers and writing are located, as cultural demands for a more sophisticated and holistic view of technology increase.

If we do not pay more attention to standardization and to instrumental uses of language, especially *communication* in competitive technological institutions, then more people will perish in disasters such as those in Bhopal, in Chernobyl, and with the space shuttle Challenger; more people will die from badly applied medical, electronic, and chemical technologies; and more people will find the rapidly expanding and vitally important data processing market beyond comprehension and thus beyond use. Ignoring instrumental uses of discourse, in short, could significantly damage our society and diminish its power to cope with the difficult problems in its many physical, social, and economic environments.

For too long, instrumental uses of discourse have been generalized out of existence as rhetoric or, worse yet, as creative or imaginative writing. Or instrumental uses have been laid on the Procrustean bed of rhetoric, and what does not fit—computer/human interfaces, tables of contents, instructions, icons, scientific visualization, schedules, forms, specifications, invoices, blueprints, schematic diagrams, tables, geographical maps, laws, contracts, regulations, birth certificates, paychecks, bills of lading, catalogs, directories, indexes, tickets, rate lists, textbooks, standards, and so on—has been cut out of the conversation in academia. During recent decades, academia has embraced the similarities and differences between the genders and between races and ethnic groups. As a result, academia has made a larger and better place for women and all races, and it has become more democratic and useful to our culture as a whole. In the same way, and for the same reasons, we should help democratize discourse analysis by

giving instrumental non-rhetorical uses of communication a larger and better place in academia.

As discussed above, we have to get well beyond the “coexist” tendency (“technology and the humanities can peaceably get along”) in these arguments. Simply “coexisting” is a problem which must be solved so that students in technical communication and computers and writing understand that technology and the humanities are not mutually exclusive. To the contrary, students in degree programs will be better prepared to handle workplace writing because of their appreciation for and their understanding of the integration of technology and the humanities. The *Manifestos*, for one, provide a possible way to rearticulate the relationship between technology and the humanities, and the operating assumption in the *Manifestos* is that the two are one: technology is imbued with the value structure set forth in humanist philosophy. Reconsidering technology’s role in technological rhetorical disciplines, English departments, and the humanities more broadly defined provide scholars and practitioners with new ways of approaching theory and pedagogy. Moreover, adopting this perspective can help better situate English departments and the academic humanities for continued influence in the twenty-first century academy and society.

Technical communication and computers and writing have the opportunity to embrace and encourage discussion about the role of technology. This inquiry could provide us valuable insight into various technologies’ effects on our daily lives, and it could also reduce or eliminate the traditional English departments’ status of being the Not Technological Field of Study—the place where those who harbored deep ideological misgivings about the military or computers or big business came to seek solace free and

clear from such concerns. Technical communication and computers and writing can build on cultural studies and critical theory by moving from polemic and/or neutrality toward technology to an embrace with an eye toward actually conditioning technology development and use.

To take a pragmatic stance, we must ask what the consequences might be should we seek to perpetuate this polemical perspective. We are left with one of *three* options: either ignore technology and have no voice in its milieu, attack it at every turn (which very few if any are likely to do), or recognize its role and embrace it in the humanities. Neither of the first two choices seems to result in positive consequence; the first promises us no voice in technological debate and thus no influence whatsoever. The second is perhaps more dangerous still in that it guarantees marginalization in technology debate: the humanists are branded Luddites and so categorically opposed to technology and the technological imperative that their perspectives are for all intent and purpose ignored. And this, to me, would happen at great expense. In Chapters 4 and 5, I discuss these options in more detail and discuss specific works.

Pragmatism invites us to test, to revise according to current conditions, and to evaluate consequences. And, in order to better understand pragmatism, I discuss the works of William James, John Dewey, and Richard Rorty in this dissertation (Chapter 3). At one point, our narrative of truth-in-text worked, and it still does in a sense. But we have to be sensitive to our audience's needs and interests. And what we are seeing now, more than ever, is the intersection, the blurring of the two cultures such that it seems almost nonsensical to describe the dynamic as blurring or intersection; rather, it seems that there is no difference. Thus, a view of technical communication and computers and

writing (and, perhaps, as a result some English departments) that sees the humanistic in the way that the *Manifestos* do seems useful here; we need to see technology as within our purview and recognize the significant influence we might have on shaping the way technology is thought of and used in society. We have always been drawn, I think, to the possible influence we might have on students—exposing them to great ideas, etc. We cannot ignore this when it comes to technology, which is never any more or any less than an embodiment of values. Thus, the problem that I am investigating is how academic humanities ideology oftentimes resists alternative humanistic frameworks that recognize technology as *central*, rather than opposed, to humanistic goals and action. I argue that more inclusive philosophies of humanism like those defined in the three twentieth-century publications of the *Humanist Manifesto* can help scholars recast a more pragmatic interpretation of the humanistic that rehabilitates technology in the humanities and English departments by countering traditional arguments, usually polemical in nature, which situate technology against the values advanced in English departments. I believe this could help technical communication and computers and writing develop a more authentic description of their humanistic character and disciplinary definition; in addition, it holds promise for extending the reach and vitality of English departments broadly defined as cultural demands for a more sophisticated and holistic view of technology increase.

How this dissertation is organized

In Chapter 2, I will first survey humanist theory in hopes of establishing a more robust understanding of how some scholars and works have framed humanism's scope of concern. Then, I will evaluate some of the literature in both technical communication

and computers and writing that gives shape to these disciplines' image of self and articulates how they see themselves in relation to the humanistic. Most important for this study is recognition that arguments for a humanistic character in both technical communication and computers and writing are reluctant to foreground technology, in part because recognition of the humanities' tendency to exclude practice (with the exception of rhetoric) and to celebrate ideology and culture. My argument that more inclusive philosophies of humanism like those defined in the three twentieth-century publications of the *Humanist Manifesto* can help scholars recast a more pragmatic interpretation of the humanistic that rehabilitates technology in English departments' eyes by countering traditional arguments, which situate technology against the values generally advanced in the academic humanities. Doing so not only helps technical communication and computers and writing develop a more authentic description of their humanistic character and disciplinary definition but also holds promise for extending the reach and vitality of English departments broadly defined as cultural demands for a more sophisticated and holistic view of technology increase. My argument will then flow from these assertions and attempt to re-see much of this debate through a pragmatist lens, emphasizing the work of William James, John Dewey, and Richard Rorty, before drawing some conclusions about technical communication and computers and writing as humanistic disciplines and speculating on some of the implications of this view.

As the humanities' viability becomes increasingly measured by their sustainability in a technologized market economy, technical communication and computers and writing become more and more important in both the preservation and expansion of English departments disciplinary and professional identity. These

technologized rhetorical subdisciplines become curricular vehicles by and through which humanist ideology is made and manifest and, more importantly, become the site where the critique of ideology—embodied in technology—takes place. The pragmatic nature of theoretically and practically sophisticated electronic communication disciplines can contribute significantly by helping to balance and widen the scope of traditional English departments to advance a more sophisticated view of technology, one that seeks to articulate a humanities/technology relationship more focused on union than division. In other words, if English departments continue to believe that humanist thought contributes something to the social fabric of our culture and country, then technical communication and computers and writing, rooted in an expanded notion of the “humanistic,” are needed to help expand understanding and condition a viable and pragmatic relationship between technology and ideology in contemporary English departments that recognize technology as a manifestation of human values and resists the polemical dismissal of technology from the humanities paradigm.

In Chapter 3, I will outline some of the tenets of humanist philosophy, largely through the writings of Corliss Lamont and three twentieth-century publications: the *Humanist Manifesto* (1933), the *Humanist Manifesto II* (1973), and the *Humanist Manifesto 2000: A Call for Planetary Humanism*. I do this to provide a constellation of ideas and themes named “humanist” by their authors that fashion a different, more holistic relationship between the humanist and technology than what those in the humanities (and sciences, for that matter) are used to seeing. I argue that describing the “humanistic aspects” of technical communication has been an ongoing project for scholars in the field, on the one hand to define the discipline and on the second hand to

try to maintain a relationship (or maintain credibility) with English departments. Because of technical communication's historic allegiance with science and engineering, the culture of technology in C.P. Snow's cultural model, accomplishing the two projects above has not always been easy. Indeed, explicit attempts to define the humanistic elements of technical communication have often centered on those aspects more readily identifiable as such in an English department setting, such as the rhetorical, epistemological, and ideological dimensions of the field.

In Chapters 4 and 5, I will turn my attention to the ways that the technologized rhetorical subdisciplines of English, technical communication and computers and writing, define what they do in light of the cultural split between science and technology and the arts and humanities described by C. P. Snow. Specifically, I will examine how scholars in each field have wrestled with what Paul Dombrowski terms the "humanistic aspects" of their respective subdisciplines. The complications of defining a humanistic character against a traditional academic humanities mother discipline become palpable in this examination and description. Affiliations with the technological "other," foundational to the identity of each technologized rhetorical subdiscipline, make the problem one of both definition and politics. I will sketch a way of reading texts that make explicit arguments for the "humanistic" nature or character of both technical communication and computers and writing. I will also suggest that the role of technology has been understated in these arguments, in spite of the importance of technology in the definition of these two disciplines. Although it is clear that technology is central to the identity of each field, it is also, perhaps, the most complicated characteristic to accommodate when it comes to making a case for the humanistic nature of either. This complication is, in many ways, a

function of context: programs in technical communication and computers and writing are likely to be housed within English departments.

In Chapter 6, I will use the *Humanist Manifestos* and other humanist and pragmatist philosophy to argue that technology broadly defined has always been central to disciplinary definition in technical communication and computers and writing. But when discussion has turned to describing what makes them “humanistic” and defining a disciplinary character, the focus of technology has *moved* from its definitional into a peripheral, suspicious space such that technology’s focus does not have the influence it might in discussions. This move—whether implicit or explicit, intentional or unintentional—is to the detriment of both these two technologized rhetorical subdisciplines and, perhaps to English departments, in general. Embracing technology, as a humanist element or “aspect,” to use Paul Dombrowski’s term, in and of itself is crucial to developing technologized rhetorical subdisciplines because doing so can allow scholars and practitioners to understand technology more critically as a manifestation of human values. Moreover, claiming a space for technology in humanistic argument allows theorists and practitioners alike to move beyond arguments that strain to show either how technology and the humanistic could coexist or how traditional humanistic elements appear and condition a technologized rhetorical discipline.

Finally, in summary, in Chapters 2 through 6, I will discuss an important strain of thinking in two technologized rhetorical subdisciplines of English departments, technical communication and computers and writing: the ongoing effort in each field to establish the parameters of humanistic identity. Theorists in both areas have sought to identify the particular characteristics of their respective disciplinary domains that fit into a humanistic

paradigm, and this task has been made difficult because of the ideological heritage of traditional English departments, the typical departmental location for technical communication and computers and writing (Russell 250, 325), as well as self-imposed pressures to conform to those pressures. In the mostly twentieth century environs in which technical communication and computers and writing emerged, English departments have been, first and foremost, the world of Matthew Arnold, the world of literature as a site of truth, not a readily identifiable space for technological interests or affiliations. Indeed, technology and science have traditionally been seen as inhabiting another realm, another culture entirely, as C. P. Snow described in his famous “Two Cultures” lecture. To Snow and to many others, the culture of literature and the humanities and the alternative culture of science and technology spoke mutually incomprehensible languages. It is this view of the humanities as opposed to technology that has made English departments—something of an “arch humanity”—an odd, if not often inhospitable, place for technical communication and computers and writing to mature (Kynell 91). The disjuncture and discomfort is apparent in attempts to sketch humanist educational frameworks that leave little, if any, room for technology study and consideration. Martha Nussbaum’s *Cultivating the Humanities* assumes a link between technology and the vocational, and her vision for the humanities is to develop “world citizens.” Technology, apparently, is not part of this world. Rather, the humanities in this view are an assembly of values yielding a disposition of tolerance, appreciation of diversity, and critical sensibility toward culture and the world.

Yet while this vision of the humanities might be well supported by history and tradition, it does not necessarily recommend itself in contemporary times. In Chapter 3,

for example, I look closely at the three iterations of the *Humanist Manifesto* as a sequence of documents in terms of the present discussion is the manner in which they articulate the role of technology in a humanist philosophy. From the first *Manifesto* (1933), signed by many, including John Dewey, through the most recent (1999) penned by Paul Kurtz, president of the International Academy of Humanism, the message has been clear: human beings invest their values into the creation of technologies to achieve human goals, and it is up to humans to make wise decisions about the development of those technologies and the consequences those technologies bring about. For example, such a perspective has remained consistent in these documents in spite of catastrophic misapplications of technology in the twentieth century, most notably in the Holocaust and World War II. This perspective is largely because the secular humanism outlined in the *Manifestos* recognizes no real alternative to a pragmatic approach to technology and refuses to reduce technology to a punitive meta-narrative of oppressive determinism and capitalism: human beings face challenges that complicate humans' ability to enjoy life and live to their potential—fundamental tenets of humanist philosophy.

Technologies are developed as a manifestation of values and desires. And, contrary to some skeptics, responsible technology development and use is pragmatic and consequence-based, meaning that all technology is constantly under review. This review is the view taken in the *Humanist Manifestos*; while some argue for a view of technology as rigidly deterministic and dehumanizing, the humanist view suggested within these documents holds that human beings are the authors of using technology. These viewpoints are not to say that technology plays no role in shaping human beings' horizon of possibility; however, a pragmatic view of this alternative view of humanism offers

hope that humans might play a role in, rather than be subjected to, the whim of technology.

Lastly, in Chapter 7, I conclude by discussing how both technical communication and computers and writing scholars have both implicitly and explicitly attempted to describe a humanistic character in each field. Specifically, they have argued to (1) be considered *a part of* an academic humanistic “category” of sorts and thus in alignment with the overarching discipline of English—a “status” argument, and (2) define what *constitutes* such a character, to qualify it. The two facets of argument are closely related. In defining the humanistic character of each technologized rhetorical discipline (argument #2), scholars have typically gravitated toward arguments that support argument #1; in other words, in defining a humanistic character, they have usually worked hard to demonstrate similarity to English departments and both its traditional and contemporary humanistic character. For instance, computers and writing has provided a foreground for traditional and contemporary interests, like gender and politics, while technical communication has emphasized elements like ethics and rhetorical epistemology; these “humanistic aspects” fit well with the values and epistemology of English departments in that they are familiar by virtue of their similarity with concerns in postmodern literary and cultural studies—the purview of the contemporary English department. Such a strategy has, I think, improved the disciplinary acceptance of both technical communication and computers and writing as demonstrated by the greater visibility of each subdiscipline at conferences, in journals, and in tenure-line positions. Thus, on some fronts, the conservative humanistic strategy has been successful: scholars

have forged something approximating a share sense of purpose or, at least, a locus of concern that overlaps in places.

But as these technologized rhetorical subdisciplines mature, it is important for scholars in each to expand present humanistic arguments and more visibly include technology, which, in spite of its centrality to each subdiscipline's identity, has oftentimes been marginalized in conversations about humanistic character definition, even as it has obviously continued to define each discipline's concerns. I argue that both technical communication and computers and writing might gain a great deal—and benefit English departments—by more deliberately incorporating technology in its various forms into humanistic definition. Doing so might engage an important disciplinary conversation about technology with implications for the role of English departments and their responsibilities in the twenty-first century. Moreover, while politically problematic, doing so would allow for a more authentic self-representation.

CHAPTER 2

REVISITING THE ROLE OF TECHNOLOGY IN THE ACADEMIC HUMANITIES

“Faith in machinery, is, I said, our besetting danger; often in machinery most absurdly disproportioned to the end which this machinery, if it is to do any good at all, is to serve; but always in machinery, as if it had a value in and for itself.” (46)

---Mathew Arnold in *Culture and Anarchy*

Introduction

In their 1999 article, “Can This Marriage Be Saved: Is An English department a Good Home For Technical Communication,” Mary Sue MacNealy and Leon B. Heaton ask and examine the question of whether or not technical communication programs (degree/certificate-granting programs) belong in traditional English department settings. To get at the question, the authors survey technical writing instructors from around the country, seeking information about, among other things, professional status and satisfaction. And while their survey does many things, such as highlight the diverse body of professionals involved in technical communication instruction and assess the level of satisfaction among those who teach technical communication both in English departments and other academic spaces, it also resurrects the long-standing issue of “fit.” What, for instance, do technical communication and literature have in common? Are the differences significant enough to warrant technical communication’s placement in another academic department, or even its own? According to the Society for Technical Communication’s website, 91% of the 253 programs are housed in English departments.

Or is there enough common ground with traditional English departments interests to warrant continued coexistence for those technical communication programs that find themselves located in such departments?

In the analysis of their survey results, MacNealy and Heaton speculate about possible reasons that over half of their English department-situated respondents (teachers in degree-granting program)] indicated a desire to remain in English departments rather than move elsewhere. While they point to fear of change and a desire to preserve the status quo as possible motivations, MacNealy and Heaton also entertain the possibility that these respondents would prefer to remain in English departments because they “want to maintain the humanistic side of professional writing” (56). An English department would, for many, be a comfortable space given the diversity among the ranks of professional communication instructors, who often come from literature backgrounds. Moreover, being a part of English means being part of a recognizable and longstanding tradition, and I believe that technical communication teachers want and need this recognition in order to enhance their standing and to showcase the important role that technical communicators have in today’s colleges and universities and in the workplace. According to Deborah Bosley, “most technical communication programs have had to fight for recognition within their university, often within their own departments” (32). In addition, many programs exist within humanities (often English) departments that are still dominated by faculty in traditional areas such as literature (Sides 2), who tend to disdain technical communication programs (Bosley 32). In 1994, Charles Sides observed “the two disciplines [technical communication and literature] had grown further apart” (2).

Although I do not provide an extended view of the history of technology as it relates to humanism in this dissertation, it is worth noting that early Italian humanism was “explicitly and bitterly hostile to science as it was understood in the fourteenth century” (Olson 210). Francesco Petrarca who was admired by virtually all later humanists was trained in law. However, he was vastly more concerned with the subjects of the old trivium (especially rhetoric and grammar) than with the subjects of the old quadrivium (Olson 211). For Petrarch, rhetoric and classical literature, rather than classical science, should dominate education. Toward the end of his life he proposed a reform in education that would elevate the “studia humanitatus”—that is, the study of the moral sciences as they were represented in the works of Cicero and Plato—to centrality (Olson 212). Thus, Petrarch provided both the early central thrust and the name for the humanistic movement.

Because technical communicators’ work is so important to the emerging high-technological industrial world, practitioners will often obtain the resources to develop tools before many other professional groups have them. Thus, we have a critical opportunity to help other professionals in other fields adapt in the information age.

Particularly interesting is the way that MacNealy and Heaton continue from there. “Just as vociferous *on the other side* are those, like [Charles] Sides, who claim that technical communication’s future lies with technology” (57, italics mine). Based on Sides’ book, these respondents, many of whom see keeping up with the most recent tools available to professional communicators as paramount in importance, are also reinscribing the long-held tradition of the “two cultures” that British journalist C. P. Snow described in his famous 1959 speech. Based on the results of the survey, technical

communication teachers believe that a choice is to be made: either professional writing programs align with the humanities (usually English in this case) or they align with another department that will give them uninhibited ability to teach technology as the rightful focus of technical communication instruction.

The implication is that English is not traditionally a hospitable place for technological concerns. This, of course, is not shocking given Snow's depiction of "cultural" relations. In addition, according to Russell, some faculty in English "counseled abolition of technical-writing courses (249), and English departments complained that the courses did not teach enough literature and that semantics was a quasi-scientific distraction from the real mission of the humanities (268). To hear those who occupy visibly and obviously (however problematically) "opposite" epistemological perspectives—say, a Miltonist and a chemical engineer—make such claims would not surprise many. But if a Miltonist and a chemical engineer seem to be relatively safe paradigmatic examples of poles on the humanities/science-technology continuum, what about technical communicators?

Technical communication and computers and writing are two examples of what I will call here "technologized rhetorical subdisciplines" of English departments. I draw attention to the "technologized" because of each subdiscipline's connection to technology, and "technologized rhetorical subdisciplines" does provide a term linking technical communication and computers and writing *according to their respective willingness to see technology and rhetoric merged "together."* Both are marked by an interesting and complicated relationship to the "humanistic" and the "technological," respectively, *and* the continued implicit and explicit recognition of the "two cultures"

Snow described nearly fifty years ago makes it difficult to ascertain just what this relationship is. At times, English departments have not wholeheartedly embraced technical communication (Kynell 96), citing their relationships with what are perceived to be non- or anti-humanistic entities, like computers or other technologies, like military installations and power plants. Teachers of technical communication were “looked down on by teachers of literature in established English departments (Kynell 104). According to Carliner “because we [technical communicators] overemphasize the role of tools in our work, we get pegged as tool jockeys rather than communicators—asked only to convert a file from Word to RoboHELP rather than asked to write the text in the file” (273).

While English departments have expressed negative sentiments toward technical communication, so have scientific and technological departments, like engineering and computer science, which see technical communication and computers and writing as *too* humanistic. According to Kynell, engineering faculty “are primarily concerned with teaching science and technology (96). Yet the fact remains that more often than not technical communication and computers and writing find themselves located in English departments or other departments, such as communication studies, that feel more “humanistic” than scientific or technological, which recommends a certain type of ideological and political climate in which these technologized rhetorical subdisciplines are taught and theorized. And in light of this type of climate, one important task for these relatively young emerging subdisciplines of English has been to describe their “humanistic character,” to demonstrate themselves and to more traditionally recognized English departments (literature) disciplines that they belong in a traditional humanities setting like English. And this effort has been important in different ways and to varying

degrees for both computers and writing and technical communication from their respective beginnings. That these efforts continue today indicates what a complicated challenge demonstrating a humanistic character is. The motivation to do so is at least two-fold: scholars in each subdiscipline legitimately locate their respective disciplinary scope in the humanistic realm and humanities tradition, emphasizing the rhetorical concerns and values that drive their sense of each field's respective mission.

What I wish to examine in this dissertation is the way in which a sample of scholars in both technical communication and computers and writing, fields linked by their “technologized rhetorical nature,” have advanced the argument for humanistic “status,” how they have described the humanistic “character” of their respective fields. I do this in response to two different problems, one of them being the complicated nature of the endeavor, which I note above. Technical communication is a humanistic discipline (Rubens 7). And, for example, Carolyn Miller has examined technical communication in terms of humanistic concerns (“Humanistic Rationale”). In addition, Paul Dombrowski devotes an entire chapter to discussing technical communication as a humanistic discipline in *Humanistic Aspects of Technical Communication* (1-13). The second problem I wish to address in this dissertation is this: some sort of resolution of these complications is crucial to the future vitality of each of these subdisciplines and, I suggest later, English departments as well. Deciding “what to do” with technology—vital to disciplinary definition, yet problematic in a humanities context—yields division and confusion that makes it difficult for either technical communication or computers and writing to get comfortable with its role in such a context. MacNealy and Heaton’s remarks suggest as much. Some technical communication teachers see what they are

doing as part of a humanities tradition that includes rhetoric and issues of value and communication, and an English department seems like a good place to pursue such interests. For those who see technical communication as being more pointedly dictated by technological issues and skills, the fit is not so good.

I believe that the literature offering humanistic description in both fields illustrates this division. In Chapter 3, I will frame a view of humanism/the humanistic that recasts this relationship by situating technology differently than it typically is in the academic humanities. According to Russell, Samuel C. Earle (a professor of English at Tufts University) began teaching “perhaps the first recognizable technical writing courses” (32). I will look more closely at how scholars in technical communication and computers and writing often talk around or indirectly about technology when articulating the humanistic character of each field, with potentially deleterious effect to both of these subdisciplines and to traditional English departments. To do this, I must first secure some general definitions for the terms I will be working with here because I will explore humanism in much greater detail in Chapter 3 when I examine the contents of the three iterations of the *Humanist Manifesto* to illustrate a complicating view of technology and the humanistic. But for now, I set forth Corliss Lamont’s notion of humanism as a tentative framework. First, Lamont, the honorary president of the American Humanist Association at the time of his death in 1995, cites the following movements, abstract categories, and schools of thought as contributors to contemporary humanism: Literature and the Arts, Renaissance Humanism, the Philosophy of Materialism, Democracy and Civil Liberties, the Sciences and Scientific Method, the Philosophy of Naturalism, Ethical

Contributions from various religions and philosophies, and the Freethought, Rationalist, and Ethical Culture movements (2).

By 1940, and after two world wars, English educators in particular wanted to address the humanistic, and so the Hammond Report became a powerful tool for incorporating more literature and history into engineering students' studies (Kynell 91). By 1944, when the second Hammond Report was presented, engineering educators actively voiced their displeasure at the emphasis on humanism, but during the postwar academic juggling of programs, "the conception of the humanistic stem won out gradually" (Connors 340). By 1950, technical communication as a service course, flourishing and evolving, did not fit neatly into either the scientific nor humanistic stems (Kynell 96). This is ironic because technical communication, in particular, provided the means to do just what some English and engineering educators wanted the humanistic stem to provide—a means to merge in one individual the best of a technologically based education and the best of a humanistic grounding.

A text published early in the 1950s, *Engineers as Writers*, by Miller and Saidla did not, according to Kynell, fit the mold of any earlier technical writing texts because it was written "for the purpose of motivating engineering students by a study of the structure and style employed in reports by men of eminent engineering stature down through the ages" (107). Miller and Saidla, in effect, produced a book significantly ahead of its time, a book that demonstrated that not only had technical communication existed historically, but that the writings of engineers, architects, and inventors provided that all important link between the technical and the humanistic (Kynell 113). To write about technology presupposed the human link; writing that explained a process or that was to

be used by the general public reached out to a culture in a way that even literature could not. Technical communication, functional writing, acknowledged society by its very existence (Kynell 115).

During the 1940s, the problem for technical communication was its nature as a discipline. According to Kynell, although technical communication emerged in the engineering schools as a means for students to write about growing technology, the evolving parameters of technical communication expanded to include issues such as audience analysis, reader interpretation difficulties, and rhetorical strategies (126). These are not purely technical; these cross over into the rhetorical, the humanistic. By the end of the 1940s, technical communication was neither essentially scientific nor completely humanistic (Boarts 6). Technical communication bridged both and yet was claimed by neither (Kynell 131).

According to Lamont, humanism is based on the simple premise “that the chief end of human life is to work for the happiness of humans upon this earth and within the confines of the Nature that is our home” (3). Moreover, he states, “This philosophy of enjoying, developing, and making available to everyone the abundant material, cultural, and spiritual goods of this natural world is profound in its implications.” While some critics react against humanism’s inherent self (human)-centeredness, Lamont argues for the selflessness of the philosophy as a “joyous service for the greater good of all humanity in this natural world...advocating the methods of reason, science, and democracy” (13). Interestingly, he also contrasts his definition of humanism with “academic humanism,” which Lamont claims has “...all but disappeared from the American scene” (23). Academic Humanism

. . . revived some of the bad features of Renaissance Humanism by setting up a return to the ancient classics as the foundation stone of education and by opposing the Humanities to science. Finally, it turned the obvious need of human self-control in the sphere of ethics into a prissy and puritanical morality of decorum. (23)

Lamont's critique of academic humanism is rooted in the fact that it represents a selective approach to the humanistic, one that celebrates the ideology of the philosophy in many ways, yet washes its hands of the material manifestation of the ideology when that manifestation is technology (spirit v. material), especially when the technology in question suggests possible adverse consequences. I cite Lamont to demonstrate a contrast between his ideas about humanism and other humanists that I discuss below.

In any event, for my purposes here, I will take from Lamont the general sense of humanism and the humanistic as appertaining to the interests of humans—their individual and collective abilities to be safe and to flourish, not only materially, but emotionally and spiritually as well. The second term I wish to define here is “computer technology.” Between the flood of information readily available about the next generation of the processor, the latest in flat screen monitor technology, or the nearly ubiquitous Internet, the personal computer is a technology that many people interact with daily at home and in the workplace. Therefore, I am going to limit my discussion to desktop computers and their accoutrements (hardware: monitor, hard drive, keyboard, mouse; and, software: interfaces, templates, spell checkers, etc.) as a representative of technology generally for two reasons. First, technologies come in many forms, from the very simple to the very complex—from a pencil to the navigation system on an F-16. And second, a technology usually calls attention to itself as such by allowing humans to do something, to achieve a goal in some way.

In *Information Ecologies: Using Technology with Heart* (1998), Bonnie A. Nardi and Vicki L. O'Day attempt to access technology through different “metaphors” people use to understand it: technology as a “tool,” as a “system,” and as a “text” (25-47). It is easy to see each of these metaphors as referencing means to accomplishing objectives—a hammer to pound a nail, a pulley to cool an engine, or a journal to record memories. Indeed, in *Writing Space: The Computer, Hypertext, and the History of Writing*, Jay David Bolter, echoing Walter Ong, discusses language itself as a technology (35).

But I want to define my parameters of computer technology by using something else Bolter notes, also with Ong's help: the “interiorization” of technology. Even though writers and language users cannot engage in such activity without appropriating technologies like language, books, and pens, familiarity with and continued use of these technologies renders them somewhat invisible—users are no longer conscious of them as technologies. They become, however falsely, “natural,” and in becoming so, “acceptable.” Robert Johnson alludes to this phenomenon early in *User-Centered Technology: A Rhetorical Theory for Computers and Other Mundane Artifacts* when he notes the invisibility of certain technologies, such as language, which, in casual thought, many would not categorize as a technology, or other mechanisms that only draw attention to themselves as technologies when seen in a particular historical context, like a horse-drawn plow that fades from technological view when driving by a John Deere dealership in contemporary times (9-10). If Bolter and Ong are correct, this idea of the “interiorization” of technology is already occurring among faculty in English departments (and all disciplines/fields in colleges and universities across the country) where faculty use computers each day for the internet, including email and the world wide web. While

there is much to be said about those technologies that people have interiorized, I would argue that the primary concern in the humanities rests with those technologies that have not been. It is those technologies that remain visible and, in the eyes of many, dangerous. These technologies—warships, cloning, and computers, for example—are my primary concern here, as I focus on the implications of technical communication's and computers and writing's respective efforts to be recognized as humanistic subdisciplines that fit nicely enough in English departments even as they cannot escape the fact that they are fundamentally defined as fields of inquiry by their relationship to various technologies.

Humanism, Rhetoric, Technology: Describing and Positing Intersections

In the humanities, there is an interdisciplinary concern for the ways in which human beings go about the process of being human and acting out humanity, both as individuals and in society with others. In her 1997 text *Cultivating Humanity: A Classical Defense of Reform in Liberal Education*, philosopher Martha Nussbaum comments on the vastness of humanist concern. She defines a “liberal education” (which she identifies as an “ideal”) as “a higher education that is a cultivation of the whole human being for the functions of citizenship and life generally” (9). The constitution of such an ambitious project ranges widely from philosophy to the fine arts, from English to political science. Each of these disciplines organizes around separate but related questions: What is humanity’s place in the world? What is human justice? How do humans express themselves through art? How do human beings communicate, and why? How might humans allocate earthly resources to best facilitate a happy and equitable existence for all?

The traditional study of rhetoric assuredly deals with these very questions. Locating itself in the humanist tradition, rhetoric and various strains of rhetorical study find that many of its classical heroes are cross-referenced as prominent formulators and articulators of humanist doctrine. For example, the sophist Protagoras is given credit for the humanist credo, “Man is the measure of all things.” Isocrates is recognized as a significant educator in the humanist tradition, even before “humanism” came to be developed and set forth as a coherent philosophy. Quintilian recommended the *vir bonus*, the “good man speaking well,” an early humanist ideal, and Cicero is widely recognized as central to the humanist cause for his teachings about the importance of knowledge and speech. Later, Renaissance figures like Erasmus and Montaigne emerged at a time when humanism truly flourished, giving voice to a newly emergent, empowered humanity, confident in its stature as pre-eminent on earth, yet still trying to come to terms with just how great it was and might still be.

Because of their tightly interwoven histories, we assume a relationship between rhetoric and humanism, the former the study of humanity’s articulation of self in society, and the latter the study of humanity as central in the universe. Indeed, given the integral part rhetoric has played in education through much of the last 25 centuries, rhetorical study maintains respectability and acceptability in academic humanities circles in spite of its troubled history and the residual effects of Plato’s critique. In fact, the oratorical/rhetorical tradition predates humanism by approximately 2000 years, and rhetoric was more important than philosophy (dialectic) throughout the Middle Ages.

The rhetorical nature of both computers and writing and technical communication would seemingly make for a solid argument for the humanistic status of each. But how

does technology fit with or complicate efforts to describe and argue for a humanistic character in these subdisciplines? Establishing a relationship between rhetoric and humanism can no longer be accomplished (if it ever actually could have been) by looking at oratorical tradition and mapping it to a history of humanism in search of common ground. The complexity of humanism, it seems, will not allow for it, nor will the emergence of new communication technologies or the development of rhetorical subdisciplines, like composition (particularly computer-based composition) and technical communication that complicate further just what the purview of rhetoric might, in fact, be.

Corliss Lamont's view of humanism, heavily informed by Renaissance thinkers' tendency to borrow from the Greeks, is, at its core, a confidence in human ability to control, and flourish on, earth. According to Lamont, "We (humans) have built great cities and civilizations upon every continent; created magnificent art and literature and other cultural forms; and invented the scientific method that leads to the attainment of the truth and to the possibility of continuing progress" (119). Humans have traditionally proven able to meet challenges, to respond to problems and devise solutions, and, importantly, *create and use technology* to ensure continued safety, security, and happiness. Ideologically speaking, it is this confidence and the satisfaction with self and the resources surrounding humanity that become important values in humanism. Through reason and the scientific method, human beings are believed to be capable adversaries for any problem that might arise and jeopardize progress and happiness. According to Lamont, the modern scientific method, "embodies whatever is valid in past methods and adds its own distinguishing characteristic of empirical confirmation through

accurate observation and experiment” (214). And he adds “the process of trial and error, fumbling and success which every person follows to some extent, constitutes scientific method in a rudimentary form” (215). However, the role of technology in humanist philosophy tends to be one of the more controversial points among scholars and critics of humanism and, as noted above, in the academic humanities. For Lamont, technology evolved with the Copernican revolution of the sixteenth century that toppled the earth from its traditional position as the focal point of the cosmos (Lamont 127). Examining different perspectives reveals an inflamed debate over whether or not technology is friend or foe of the humanist. On one hand, Lamont argues that the egocentrism native to the more radical interpretation of the philosophy—the egocentrism that gives rise to technology—instills a confidence and problem-solving approach to the world that yields an almost unlimited field of progress and promise, with impressive historical epochs like the Industrial Age and the current Information Age reigning as examples of humanity’s prowess and ability to manipulate the world and its resources to serve humanity’s ends. For example, according to Lamont, Einstein’s theory of relativity “constitutes a technological advance which strengthens the Humanist position that the universe is fundamentally a great system of matter-energy” (133). Einstein’s discoveries render unacceptable the “old idea of an Absolute Space and an Absolute Time through which the world moves, and show instead that space and time are both derivative from events and that they are, in fact, forms of relationship between events” (Lamont 134). Technology, in this view, can be considered to be an extension of human will.

Others, however, especially in the academic humanities, do not readily admit technology in such a manner. Nussbaum, for example, raises concerns about the

“technical and vocational” while interrogating those colleges and universities that purport to advance humanistic values but undermine them by shifting emphasis toward technology and tools: “Some, while using the words ‘liberal education,’ subordinate the cultivation of the whole person to technical and vocational education. Even where education is ostensibly ‘liberal,’ it may not contain all that a citizen really needs to know” (9). The point is clear. Technology, with a perceived emphasis on “doing” versus “knowing” is not considered on equal footing with other elements of Nussbaum’s humanist paradigm. Or, to state it more charitably, if it is welcome, it is secondary—quite secondary, it seems—to “true” humanist values and content—the *ideological* content of humanism. The “instrumental rationality”¹ that many humanists perceive to be the undergirding philosophy of technology is simply at odds with the academic humanities; one cannot value efficiency and technological progress at the same time and on the same level as human beings and their need to realize their potential (usually defined in spiritual and emotional, not material terms) because of perceived ethical conflicts between the two. As it goes, instrumental rationality, what Steven Katz calls the “ethic of expediency,”² by definition confounds and excludes complex human interests by making efficiency its central priority to the exclusion of human values and rights.

But thinkers like Nussbaum and Matthew Arnold are selective in delineating a legitimate humanities framework and recognizing where humanist ideology exists and operates. Like Arnold’s, Nussbaum’s focus is on the transmission of culture, transference of a specific sensibility: “...all that a citizen really needs to know.” “All” is both content and a disposition toward culture and the world. Technology, a “means,” is not humanist. Unlike Lamont discussed above, technology is, instead, something other

than humanist, and the perceived “coldness” of it and the theory behind it (instrumental rationality, Cartesian logic/scientific method) suggests an opposition to humanism, rather than even a neutral relationship. If this relationship sounds familiar with rhetoric in mind, it probably should because this type of adversarial relationship shares many characteristics with classical arguments raised by Plato against rhetoric. Rhetoric, to Plato, was a mere “means” to oftentimes questionable ends, a mode of deceit, and certainly not a vehicle used in the ongoing quest for truth. Rhetoric was incapable of leading to the ideology or truth that all should seek. Dialectic and philosophy alone could be used to access truth. Similar claims have been made against technology as a cultivator of false hope and empty promise.

However, the rejection or disdain of technology as something *divorced* from humanism (defined only as ideology) is, importantly, not the only kind of critique available. Another significant line of thought begins with Lamont’s assumption that technology is central to the humanistic. Biologist David Ehrenfeld, for example, connects humanism and technology and blasts humanism for its *hubris*, manifested in technology, which he argues engenders an undesirable shortsightedness and false confidence; in other words, there is a limit to the logic and shelf-life of the belief that all problems can be solved and that humans will always be able to construct a new technology to eradicate problems arising from those technologies already developed.

For our arrogance about what we think we know and what we think we can do has made it impossible for us to accept or deal any longer with the unknowable and the undoable. Once, it was taken for granted that we were neither omniscient nor omnipotent—the old religions, whatever their faults, helped us to accept this imperfect state as a condition of earthly life. The humanist assumptions now keep us from this acceptance, for it would be a denial of them. (98)

Ehrenfeld suggests that the negative consequences of technology, those that are ignored or overlooked in favor of progress, will lead to humanity's undoing. The main thing to note here is that Ehrenfeld criticizes humanism and technology, but rather than separate the two, he criticizes technology on humanist terms, humanist terrain. He recognizes technology, like Lamont, as an outgrowth of humanism, rather than an external enemy or "other."

To summarize, then, traditional humanists (like Nussbaum) oftentimes situate the cultural and ideological content and purpose of humanism in opposition to technology; humanism, in this view, is the cultivation of certain sensibilities and attitudes, with an emphasis on the human spirit, inspiration, and compassion. In humanism, there is a tendency to look inward and outward at once, to recognize the strength and value of the self-as-human while simultaneously observing the limits of that strength in surroundings: the earth and the humans surrounding one contain all available resources and are enough for happiness and prosperity. In the humanities, technology has often been seen as opposed to this narrative of humanism. Indeed, some would argue that technology is the very antithesis of humanism—a threat to humanism and all that it stands for; one is reminded of Jean-Francois Lyotard's discussion of "terror" in *The Postmodern Condition: A Report on Knowledge*.³ Lyotard paints a worst-case scenario where technology and its characteristic emphasis on efficiency overwhelm language and refuse to allow negotiation; technology, in this view opposes the communication dynamic that humanism would purportedly support by disdaining what Jürgen Habermas calls "communicative action."⁴

However, rather than opposing technology and these “traditional” humanist perspectives, Ehrenheld recognizes technology, instead, as an *outgrowth* of humanist *hubris* and ideology. He suggests that humanism is pathological as a worldview in that it encourages a certain arrogance, which is given shape and voice in technology and the myth of progress. Technology, it seems, is the enemy in either view. On one hand, technology would or could *oppose* humanism and the more rhetorical and communicative goals of peaceful interaction that humanists would endeavor to promote. On the other, technology is simply a tool employed by humanists, albeit wrongly, designed to promote efficiency and implement instrumental reasoning at the expense of a careful consideration of consequences. In this view, technology is recognized, although darkly, as the mechanism by and through which humanism is enacted, exerted, and displayed, not the “other” that confounds humanist ideology. The latter line of thinking has important implications for the ways in which those in the “humanities,” those attempting to cultivate humanistic sensibilities in students and in society, present and position themselves toward or against technology.

Humanism, in the postmodern era, has undergone revision, too, yet the humanities maintain bias against technology as standing against its basic ideological assumptions. Technology, however, can be understood as both the process and product of humanism. Following Louis Althusser,⁵ what I wish to suggest is that any consideration of humanism cannot be limited to a discussion of ideology but rather must include the structure that supports and reproduces the ideology. An important part of that structure is technology. This is certainly not a new line of inquiry; however, it is different in that I wish to focus, in particular, on the related interaction between humanism and technical

communication and computers and writing, and each of these subdiscipline's relationship to English departments.

My argument here is that by analyzing how both technical communication and computers and writing describe their humanistic character or profile, we can begin to strengthen these technologized rhetorical subdisciplines in the humanities. One of the theoretically developed central concerns of technical communication and computers and writing is, indeed, the constant and rigorous critique of technology as a tool that, in its workings, helps to enact and construct ideology. Certainly, one need not look far into the scholarly literature to find evidence of such critique of *tools*, such as genre, design, and other technologies, that aim to clarify how technology and technological imperative enact or fail to enact humanist ideology (Katz; Orbell; Dombrowski). According to Steven Katz, in our capitalistic society, economic rationality, facilitated by and dedicated to the development of new technologies is a manifestation of what Jurgen Habermas described (270). Habermas believes that in postindustrial societies technological and political values unite and subjugate the traditional values of those societies with a technological rationality that calculates the worth of everything in terms of its own "technical" aims (271). According to Paul Dombrowski, John Dewey also was deeply concerned about the "aridity, alienation, and loss of sense of community that has resulted from an exclusive concern with science and technology and the impersonality that characterized them" (9). Dombrowski also notes that in philosophy, Heidegger, perhaps the greatest European philosopher of the twentieth century, expressed "grave concern about the privilege accorded science and technology, a concern seconded by later American social pragmatic philosopher Richard Rorty" (10).

However, rather than reject technology (or to think that we ever can or could) or place it in opposition to desirable humanistic ideology, technical communication and computers and writing monitor the contingent intersection between technology and ideology, noting well how technology serves to sustain and or change ideology as it enacts it. However, as I will show, scholars in both fields do not always make this explicit when articulating the humanistic scope of each technologized rhetorical subdiscipline. Technology, it seems, might play a prominent role in defining these disciplines, but it is typically depicted as existing alongside humanistic concerns, not as one in and of itself.

Technical communication and computers and writing take on as central projects philosophical questions previously seen as untenable in the realm of English departments, if not in the humanities writ large. They do this by

- a. Critiquing language and rationality, problematizing the view that instrumental reasoning is not as humanistic as other discourse
- b. Critiquing technology without condemning it
- c. Making their subject matter the very intersection of human interaction with technology and how technology enables, enacts, and changes ideology.

In doing these things, technical communication and computers and writing play an integral role in redefining the role of the humanities as enacted in English departments, which has often looked at technology as “other” and focused on ideology alone and separate from technology. The purview of these contemporary rhetorical disciplines, then, can help English departments and the academy realize a more expansive humanistic

vision that better addresses the intersections between humans and the tools they make and use to communicate and create.

Pragmatism and Techno-rhetoric:

Rediscovering a Humanism of Consequence

Pragmatism offers one theoretical lens through which we might view English departments and their role in the problematic relationship between the “two cultures”—science and technology and the humanities, respectively—that C. P. Snow described in 1959. As a way of thinking, pragmatism offers the potential to show a way out of the internal and external confusions in humanism—the ideology v. technology split, most pointedly. While most in the academy know and understand that pragmatism is a mode of philosophical (or, to skeptics, anti-philosophical) inquiry that enjoyed its vogue in the earlier part of the twentieth century via thinking and writing of John Dewey, William James, Charles Peirce, and others, this understanding often fails to inform the actual use of the term, both in conversation and in writing. In general, pragmatism has been marginalized as a philosophical approach, seen as anti-analytical and theoretically impoverished. For example, in his own considerations of technical communication and humanism, Richard Rutter cites David Dobrin’s critique of teaching technical writing in a university setting, noting that it “...is so narrow and so heavily mortgaged to pragmatism that it lacks cohesiveness and moral purpose” (132). Rutter does not necessarily disagree with Dobrin; he seeks to rehabilitate technical communication on the grounds of humanistic rhetoric and “the oratorical ideal.” Yet he does not acknowledge the overlap between pragmatism and the grounds upon which he argues.

However, there is much value to be found in this “non-philosophy.” Louis Menand cites William James’ 1898 Berkeley lecture, “Philosophical Conceptions and Practical Results,” as the debut of the term “pragmatism,” which James, citing Peirce, defined as such:

To attain perfect clearness in our thoughts of an object...we need only consider what effects of a conceivably practical kind the object may involve—what sensations we are to expect from it, and what reactions we must prepare. Our conception of these effects, then, is for us the whole of our conception of the object, so far as that conception has positive significance at all. (xiii)

James continues:

The ultimate test for us of what a truth means is indeed the conduct it dictates or inspires.... The effective meaning of any philosophic proposition can always be brought down to some particular consequence, in our future practical experience, whether active or passive; the point lying rather in the fact that the experience must be particular, than in the fact that it must be active. (xiii)

Both passages highlight a central tenet in the philosophy: pragmatism’s effort to identify “truth” according to the type of consequences arising in a given situation. Pragmatists reject “theory” in favor of looking at immediate and long-range consequences of action and thought. They attempt to locate “truth” in describing what and how a choice or decision “works” in a particular situation or context, as opposed to relying on encompassing meta-narratives that, in the analytical philosophy tradition, attempt to offer explanations of reality and truth that are abstracted from the material world.

In *Pragmatism*, William James, arguing against any sort of preeminent truth, points instead to the contingent nature of knowledge:

Purely objective truth, truth in whose establishment the function of giving human satisfaction in marrying previous parts of experience with

newer parts played no role whatever, is nowhere to be found. The reason why we call things true is the reason why they are true, for 'to be true' means only to perform this marriage-function. (32-33)

Pragmatism exists in the moment of application, the creation, and the articulation. If we accept this, we must then begin to accept that technology, which in communication operates at that moment of articulation, plays a vital role in the way we construct reality and seek to investigate that dynamic, tasks that any responsible study of language and rhetoric—be they belletristic and ideologically driven or utilitarian and technologically driven. Pragmatism invites a reconsideration of Snow's "two culture" metaphor in light of careful consideration of the consequences such division likely invites: an unhealthy antagonism toward technological interests and a refusal to take responsibility for technology in humanist circles. According to Mike Markel, Dewey "believed that the goal of society should be growth and change, rather than stagnation represented by a willingness to believe what our ancestors believed" (Ethics 84). In addition, Dewey argued that "we live in a world of constant change, a world in which our concepts of right—like our concepts of science—need to be evaluated and, if appropriate, revised (Markel, Ethics, 84). Hence, I contend that we need to rehabilitate pragmatism and demonstrate its relevance in articulating a new role, for technical communication and computer-based writing. Such a perspective can help us begin to make headway into understanding what a vital role technology can play in at once sustaining the humanistic impulse and critiquing it at the site of its performance. Moreover, we can begin to see what kind of space they might fill, and what kind of consequences they might help bring forth in a twenty-first century that faces economic and political threats never before encountered.

Redefining the Role of Technology in the “Humanistic”

While the primary emphasis of this study is examining the ways in which the technologized rhetorical subdisciplines of English, technical communication and computers and writing, define their humanistic character. When one considers humanism as a dominant ideological framework shaping literature departments, it becomes important to recognize the way it is being defined and not being defined. This issue becomes more important because contemporary changes in the form of expanding disciplinary boundaries, driven by changing cultural, political, and economic forces. How different from one another can subdisciplines be before they are no longer able to share the same overarching disciplinary definition? As it stands, the shaky set of shared assumptions about humanism between and among subdisciplines—for example, between literature and technical communication—makes the very issue of humanistic identity a high priority in any discussion of English departments’ future. MacNealy and Heaton’s article mentioned above highlights the palpable tension that comes from such uncertainty. While tentatively suggesting that this “marriage” can, in fact, be saved, MacNealy and Heaton are far from certain in their tone, and many of the respondents to their surveys on this very subject argue persuasively for a permanent split between technical communication and English departments because of irreconcilable differences in philosophy. To “save the marriage”

It may take some serious negotiation, some education of colleagues, even some changes within ourselves so that we see ourselves not just as those who prepare students for success in the work world, but as those engaged in an ancient and honorable discipline; the study of rhetoric. Such changes could include less emphasis on the word “technical” which many in the humanities associate with machines, and more emphasis on the word “professional” which calls to mind distinguished professions such as law and medicine. (59)

Particularly interesting here is the perceived value of aligning more closely with rhetoric, which, in spite of its ostensibly more constructive or productive *telos*, gets lumped in with the ideological side of the humanist bifurcation between ideology and technology, seemingly because of its purchase on “classical” status, a vital humanist trait. According to the authors, technical communication might need to rename itself in order to unload the negative emotional baggage associated with technology and the mechanical. While there might be some political advantage to such a move, doing so may not address a problem of clarifying and deepening a definition of humanism that can make English departments more viable. That definition must include not only the traditional product—a cultural ideology—but technology, as well, with recognition that technology exists only as the embodiment of an ideology and is a material incarnation of human values and desires.

If technical communication and computers and writing scholars can rearticulate what they do in a persuasive pragmatist vein (not the traditional one that people use to reduce technical communication or any other field or discipline to “mere” practice but instead a theorized, contingent, postmodern epistemological line of inquiry and theoretically-sound practice) that links pragmatically to humanistic inquiry, we might improve relations and thus help poise English departments to play a vital, vibrant role, not only in the academy as it continues to grow and change, but also in the culture that encompasses it. A part of this rearticulation is renewed attention to use, to tools, to *means* and their appropriation. Literature, as a humanistic space in the academy, has traditionally advanced a view of humanism-as-ideology, and this can be broadly

construed as the general advancement of themes and beliefs that characterize Western existence. In recent years, literature and cultural studies have done well to self-critique and begin coming to terms with some of the problems with any attempt, conscious or unconscious, to advance any sort of coherent ideological agenda on the scale of grand narrative attempting to describe and prescribe a life for any and all human beings. These concerns have come about with the rise of postmodern theory, and, more importantly, an increasing awareness of a postmodern and postcolonial world in which the Western populace no longer looks the same or acts the same. A coherent humanist ideology, thus, has some limitations, but while this might be so, it is difficult to say that removing technology from humanistic purview is not equally limiting. Technical communication and computers and writing offer the possibility of recasting English departments, at least partially, in a new light. This calls for renewed attention to technology, not as opposed to the humanist ideology and all things human, but instead as a vital arm of humanism that enacts and gives shape to ideology.

In Chapter 3, then, I will first survey humanist theory in hopes of establishing a more robust understanding of how some scholars and works have framed humanism's scope of concern. Then, I will evaluate some of the literature in both technical communication and computers and writing that gives shape to these disciplines' image of self and articulates how they see themselves in relation to the humanistic. Most important for this study is recognition that arguments for a humanistic character in both technical communication and computers and writing are reluctant to foreground technology, in part because of recognition of the humanities' selective tendency to exclude practice and celebrate ideology and culture. I will then argue from these

assertions and attempt to evaluate much of this debate through a pragmatist lens, emphasizing the work of William James, John Dewey, and Richard Rorty, before drawing some conclusions about technical communication and computers and writing as humanistic disciplines and speculating on some of the implications of this view.

As the humanities' viability becomes increasingly measured by their sustainability in a technologized market economy, technical communication and computers and writing become more and more important in both the preservation and expansion of English departments' disciplinary and professional identity. These technologized rhetorical subdisciplines become curricular vehicles by and through which humanist ideology is made manifest and, more importantly, become the site where critique of ideology—embodied in technology—takes place. The pragmatic nature of theoretically and practically sophisticated electronic communication disciplines can contribute significantly by helping to balance and widen the scope of traditional English departments if they collaborate to advance a more sophisticated view of technology, one that seeks to articulate a humanities/technology relationship more focused on union than division. In other words, if English departments continue to believe that humanist thought contributes something to the social fabric of our culture and country, then technical communication and computers and writing, rooted in an expanded notion of the “humanistic,” are needed to help expand understanding and condition a viable and pragmatic relationship between technology and ideology in contemporary English departments that recognize technology as a manifestation of human values and resists the polemical dismissal of technology from the humanities paradigm.

¹ In *Moral Consciousness and Communicative Action*, Habermas distinguishes between what he terms “communicative rationality” and ubiquitous “instrumental rationality.” Instrumental rationality is the rationality of efficiency and domination and informs communicative practices that dominate and exclude the public’s voice in matters of policy, usually to its detriment. Ideally, communicative interaction yields a social consensus, but the result is a general lack of representation.

² Katz’s “ethic of expediency” is born of his reading of Aristotle’s rhetorical theory, which Katz contends prioritizes expediency at the expense of other important ethical considerations. Rhetoric, in this view, emphasizes the rhetor’s motive to the exclusion of the audience’s rights and interests and, thus, militates against the “communicative action” Habermas seeks.

³ Lyotard’s sense of “terror” is the result of a modernist metanarrative excluding or overriding the interests of citizens whose interests are communicated in the form of “little narratives,” which, due to their smaller audience and lack of shared context, run the risk of being dominated.

⁴ See 1 above. “Communicative action” serves as the preferred opposite to the instrumental action or rationality that Habermas and others critique. Communicative action is born of communicative rationality, which seeks consensus and validates the multivocality of public discourse.

⁵ I refer here to Althusser’s “Ideology and Ideological State Apparatuses” and his depiction of “ideological state apparatuses” and “repressive state apparatuses.” These structures organize citizens’ thinking and define the field of possibilities for action.

CHAPTER 3

HUMANISM AND TECHNOLOGY: FINDING A ROLE FOR TECHNOLOGY IN AN IDEOLOGY

Introduction

As C. P. Snow notes in “The Two Cultures,” the “cultures” of science and technology and the arts and humanities, respectively, read the world in two separate ways, two separate languages that seem to be equally inaccessible to each other. Indeed, the relationship between the two can be characterized in several ways, ranging from hostile to fearful, from skeptical and suspicious to begrudgingly tolerant, and from indifferent to antagonistic. According to Stephen Littlejohn, “intense study of communication began after World War I, as increasing technology and literacy made communication a topic of concern” (4). In addition, communication was given “impetus by the popular twentieth-century philosophies of *pragmatism*, which stimulated a desire to improve society through widespread social change” (Littlejohn 4). This point is worth noting in light of my discussion about pragmatism in Chapter 2 above. In Chapters 4 and 5, I will turn my attention to the ways that the technologized rhetorical subdisciplines of English, technical communication and computers and writing, define what they do in light of this cultural split in order to show the potential benefits of technology if used responsibly. Specifically, I will examine how scholars in each field have wrestled with what Paul Dombrowski terms the “humanistic aspects” of their respective subdisciplines. The complications of defining a humanistic character against a traditional academic

humanities mother discipline become palpable in this examination and description. Affiliations with the technological “other,” foundational to the identity of each technologized rhetorical subdiscipline, make the problem one of both definition and politics.

Although I have found no direct evidence that C. P. Snow had read the *Manifestos* when he crafted his two societies statements, Olson’s *Science Deified and Science Defied* points out that alternatives to Snow’s analysis of the problem of integrating the scientific specialty into modern society were presented in a complex tradition of social criticism symbolized by Herbert Marcuse’s *One Dimensional Man* (1964) and Jacques Ellul’s *The Technological Society* (1964). Although Ellul and Marcuse diverge on some issues, both begin with fundamentally humanistic biases. According to Marcuse, “humanists offer the only refuge, the only vital space for autonomy and opposition, the only barrier to a scientific and technological totalitarianism” (Olson 4). These viewpoints espoused by Ellul and Marcuse are worth noting because humanists’ viewpoints about technology evolve, as shown in the discussions below.

Next, in order to trace the history of humanism with an eye to establishing the link between it and technical communication and computers and writing, I analyze and discuss some of the tenets of humanist philosophy, largely through the writings of Corliss Lamont and three twentieth-century publications: the *Humanist Manifesto I* (1933), the *Humanist Manifesto II* (1973), and the *Humanist Manifesto 2000: A Call For Planetary Humanism*. I analyze Lamont’s work and the three *Manifestos* to provide a constellation of ideas and themes named “humanist” by their authors that fashion a different, more holistic relationship between the humanist and technology than what those in the

humanities (and sciences, for that matter) are used to seeing. This analysis of the “humanist” contributes to my thesis of helping technical communication and computers and writing develop an extended description of their humanistic character and disciplinary definition. Lamont has long been associated with humanism, authoring the first edition of *The Philosophy of Humanism* in 1949. Lamont’s *The Philosophy of Humanism*, provides a solid background that quickly synthesizes key strains of humanist history and philosophy. The *Humanist Manifestos*, then, provide an excellent historical chain of thinking that spans much of the twentieth century and allows one to trace technology’s role in a series of three relatively skeletal documents that, in their brevity, force only the most significant points to the surface, which makes technology’s evolving role in each description particularly interesting and relevant here because it contributes to my thesis of helping technical communication and computers and writing develop an extended description of their humanistic character and disciplinary definition. To that end, I will briefly summarize the content of each document, emphasizing respective dispositions toward technology, before closing with a brief consideration of and comparison with the academic humanities’ disposition. What I hope to show here is the selectiveness of the academic humanities’ appropriation of the humanistic and the possibility for a broader consideration of the relationship between the humanities and technology—a point that is central to my argument that technology should be positively integrated into humanistic definitions of technical communication and computers and writing. Moreover, I wish to describe a humanistic disposition that offers technical communication and computers and writing—and English departments more broadly defined—an alternative to a disposition that has far too often been polemical, not

constructive. Consequently, this contributes to my argument that efforts to articulate a humanistic character, what Paul M. Dombrowski calls the “humanistic aspects” of technical communication and computers and writing, have often relied on conservative, techno-skeptical notions of the humanistic that align well with academic humanities ideology. These academic ideologies oftentimes resist alternative humanistic frameworks that recognize technology as central, rather than opposed, to humanistic goals and action. However, more inclusive philosophies of humanism like those defined in the three twentieth-century publications of the *Humanist Manifesto* can help scholars recast a more pragmatic interpretation of the humanistic that rehabilitates technology by countering traditional arguments, usually polemical in nature, which situate technology against the values advanced in the academic humanities.

As noted earlier, scholars in the writing disciplines, especially those emphasizing the role of technology in textual production, have found reason to claim humanistic status, as evidenced by texts like Louise Wetherbee Phelps’ *Composition as a Human Science* (1988) and Paul M. Dombrowski’s *Humanistic Aspects of Technical Communication* (1994). The implication here is that the narrative of humanism and the narrative(s) of computer-based composition and technical communication are interwoven in some important way. Why? What is it about this realm of humanism or the humanistic that causes scholars to seek and value it? Are fields of study like composition, particularly computers and writing, and technical communication really humanistic? Or is there simply something about such a characterization that resonates with theorists and practitioners; in other words, if our own characterization as “humanistic” disciplines or as a part of the “humanities” is problematic at best, is there

still something so valuable about being identified as such—institutional status, intellectual value, mythological identification—that arguments for inclusion are not only worthwhile but necessary? Can we ever tell when the signifier—“humanism” as a word and as a concept—is so elusive? What is humanism? What does it mean to be a humanist, a part of the humanities? A consideration of these questions seems necessary if we are to draw inferences about how technology-based writing disciplines fit or change the humanist paradigm.

Defining Territory: A Clarification of Terms

Humanism, of course, is miserably problematic in that it has been and continues to be employed and deployed in any and all rhetorical situations for any and all causes. “Humanism,” in a tautological sense, suggests anything “human” or relating to “humanity.” Yet such a definition is decidedly unsatisfactory in that it says nothing that can help us wield the term in productive ways. Indeed, it seems that it can be said that humanism and humanistic fingerprints are everywhere and on everything in that it is not difficult to name “humanist” anything done, said, studied, created, observed, painted, named, played, loved, hated, feared, or written by human beings. A similar feeling of general definitional dissatisfaction comes about when one considers the derivatives of the word “humanism,” specifically, “humane,” “humanistic,” “humanitarian,” and “humanities.” The first two look and feel like adjective forms of this particular, ill-defined “-ism.” To be “humane,” “humanistic,” or even “humanitarian” seems to suggest in our culture that one has taken on or is appreciative of the characteristics or qualities in many ways, ranging from an appreciation of human creation and art to more dramatic and

fundamental promotion of basic human rights, as in alleviating suffering or advocating for social justice for an underrepresented and wronged group of people. The “humanities,” on the other hand, are not an adjective, and they are not a philosophical standpoint. Rather, they might be defined as an educational framework that supports the previous list of “human” derivatives.

Yet the relationship between the humanities as such a framework and humanism itself—not to mention the “humanistic,” the “humane,” and the “humanitarian”—remains somewhat unclear in that the content and even the *telos* of the humanities remains elusive. In *The Humanities and Humanistic Education*, James L. Jarrett attempts to disentangle these terms, terms that are used almost interchangeably in various contexts, but he acknowledges the complicated nature of the task. He questions the tautological nature of the endeavor but expresses some hope in finding satisfactory difference and definition: “Does it make any more than emptily rhetorical sense,” he asks, “to say that cultivation of the humanities makes for one’s becoming more human? The answer must be Yes” (113). From there, Jarrett briefly outlines a view of humanity that goes beyond simple physiology and the stark Hobbesian depiction of humans in an animalistic, pre-political realm. Considering the role of aesthetics and creativity in defining humanity, Jarrett cites Walter Pater’s view of philosophy for the human, which Jarrett imports into his own discussion of the humanities. Pater notes that philosophy’s service to the human spirit “is to rouse, to startle it into sharp and eager observation” (114). In this view, then, the state or condition of being human goes beyond basic biology and extends into the realm of culture and cultivation. Education and socialization—surroundings—play a role in prodding humans to reach a potential, to become “more human.” In Jarrett’s own

words, the quote below expresses his sense of how a humanities-based education fits into such a scheme:

If, as some philosophers from the time of the Greeks onward seem to be believed, the only distinctive and important human quality is rationality, then one can cultivate his humanness as much or better through the sciences and mathematics. But it is as much a part of being human to be sensitive in feelings and to respond to humor as to be rational. And this is precisely what is so characteristic of human humanistic products, that they draw on a large range of human potentiality of response: with them before us, we are stimulated emotionally and sensuously; we laugh, cry feel reverent and irreverent, erotic and pious, profound and playful—all distinctively human responses. So, if being “more human” is to mean something like the cultivation of a larger spectrum of capacities unique to humanity, then the humanities can legitimately be praised for their contribution to our humanness. (114)

As you can see from the Jarrett’s quote above, *humanism* is an “ethical, scientific, and philosophical outlook that expresses a renewed confidence in the power of human beings to solve their own problems and conquer uncharted frontiers” (Kurtz 7). Kurtz believes that humanism has much to offer humanity in regard to the problems of the twenty-first century. “We need fresh thinking if we are to cope with the global society that is now emerging, and fresh thinking is the hallmark of humanism” (Kurtz 8).

In the relatively short disciplinary histories of technical communication and computers and writing, this difficult-to-define “larger spectrum of capacities” has been a lightning rod issue in gauging the acceptability and validity of each rhetorical subdiscipline. Where does technology fit, if at all?

In reference to the history of technology, the notion of “progress” had not been an effective one before the sixteenth century (Taylor 210). According to Taylor, “men of earlier times did not look on the future good of the human race in general as the end they sought to attain” (215). However, when the discoveries of Bacon, Galileo, Descartes and

others, were seen to be something useful which no previous age had possessed, “there came into being the notion that *man was progressing*” [Taylor’s italics] (218). And this progress obviously led to more technological innovations that encouraged debate about the blessings and curses of technology and the ramifications for humankind. In the twentieth century, technology, according to several authors discussed below (Lyotard, Habermas, Lamont), is a manifestation of human values, an ideologically-laden artifact born of human need. The ways in which humans most effectively respond to those needs in the form of tools and mechanisms would seemingly find a place within the parameters the best humanity has to offer. Yet this relationship has never been clear—technology has so often been marginalized and defined, somewhat ironically, outside of humanity and thus, outside of the humanities, usually on ideological grounds. According to Jean-Francois Lyotard, technology becomes a potential site of “terror,” for example, because of the “instrumental rationality” that both he and Jürgen Habermas, among others, see as its ideological core.¹ By definition, instrumental rationality is concerned solely with means and ends; specifically instrumental rationality honors the most efficient means (in this instance tools/technologies) to an end. And, as we have seen with cloning, the human genome project, and some directions in artificial intelligence, when the means become more and more capable, the ends, too, are pushed back into a realm of possibility not previously imagined.

What I wish to do here, then, is frame selected-descriptions, both classical and contemporary, of humanism as both a worldview and a site of practice in an effort to contextualize some of the questions raised above. Again, I analyze the work of Corliss Lamont, the late honorary president of the American Humanist Association and author of

The Philosophy of Humanism, first published in 1949. The classical account supplied here is admittedly brief and underdeveloped, in part because the philosophy of humanism is so vast and comprehensive that it is impossible to do it justice as part of a separate but related project; indeed, one could devote innumerable volumes to discussing the origins and iterations of humanist philosophy.² Another reason the more traditional, classical treatment is brief here is that I wish to emphasize American humanism as it has evolved and been described by notable American humanists of the twentieth century in the form of three primary documents: *Humanist Manifesto I*, *Humanist Manifesto II*, and the *Humanist Manifesto 2000*. In doing so, I hope to shed light, more specifically, on what humanism means in America, the primary site of development for the technologized rhetorical subdisciplines (discussed in subsequent chapters) and how it has developed and extended its locus of concern beyond American borders and interests over the course of the seventy years since the first Manifesto was published in 1933. Finally, I hope to begin the process of locating links between and among *pragmatism*, a distinctly American philosophy maturing alongside this documented history of humanism. By doing so, I believe that more inclusive philosophies of humanism like those defined in the three twentieth-century publications of the *Humanist Manifesto* can help scholars recast a more *pragmatic* interpretation of the humanistic that rehabilitates technology by countering traditional arguments, usually polemical in nature, which situate technology against the values advanced in the academic humanities. This final point will be taken up in more detail in Chapter 6.

Humanism and the Emergence of Man

Corliss Lamont begins his discussion of the philosophical and historical origins of humanism by making this categorical claim: “For Humanism the central concern is always the happiness of people in this existence, not in some fanciful never-never land beyond the grave; a happiness worthwhile as an end in itself and not subordinate to or dependent on a Supreme Deity, an invisible King, ruling over the earth and the infinite cosmos” (33). Lamont recognizes humanism’s eclecticism, but sees as foundational the earthly quest for happiness divorced from any sense of fate or faith in supernatural forces as a baseline compatibility between humanism and the philosophies from which it draws. Tracing Western philosophical heritage (Lamont supplies an underdeveloped nod to eastern religions, too) back to ancient Greece, Lamont makes some interesting distinctions, especially from a rhetorical standpoint. Lamont recognizes Protagoras as the “first notable Humanist” reliably historicized and is credited for being the first in Greek culture to question the existence of the gods and suggest, famously, “man is the measure of all things” (34).

In addition, naturalism, the belief that all human beings, the earth, and the universe are part of one organic unity, stands as a crucial principle of humanism, and this stance denies dualistic theories of human nature held by Plato, Descartes, and others. Lamont characterizes Aristotle as such a naturalist, one who, with others, helped to advance the subsequent rise of the scientific method and naturalism. By using “god” in an abstract rather than personal manner and recognizing the fusion of the soul and body in assessing human psychology, Aristotle helped advance a view of the world that

prioritized the earth and the human subject's interaction with it. Subsequent thinkers like Spinoza, Darwin, and Dewey continued this line of thinking. Naturalism, along with materialism, catalyzed the Enlightenment and its thinkers' fascination with the world and its material resources and processes (36-42).

Interestingly, Lamont makes humanist connections to various strands of Christian, Buddhist, and other religions in spite of the anti-religious stance humanism claims. Such relationships are primarily comprised of religious-based social stances and recommended patterns for living that encourage fellowship and harmony between and among human beings. Lamont notes that many religions have moved closer and closer to alignment with humanism, citing Unitarianism as one prime example, as they have developed and expanded their respective senses of social responsibility and obligation. In other words, a shift toward humanism and humanitarianism has taken place in many organized religions, Christianity included, and now takes up as much or more space as does concern with immortality (61).

From a cultural perspective, Lamont sketches the Renaissance-driven portrait of humanism with which most students and scholars are familiar. First, however, he locates humanist cultural history in ancient Greece, the Greece that Renaissance humanists would later look back upon to find the intellectual and creative nourishment needed to catalyze what amounted to nothing less than a paradigm shift—away from theism and toward humanism. One significant Greek attitude informing humanism was an overall sense of obligation and allegiance to the polis. However, generally speaking, it was not politically wise in Athens to repudiate more traditional views of the gods and possible afterlife, and this concern and the necessary ambivalence it fostered can then be

recognized in Greek humanist writings of the time, as well as in the works of Cicero in the subsequent period of Roman dominance.

The ideas of these classical thinkers and their newfound value later helped to catalyze the emergence of a Renaissance worldview steadfastly situated against the theocentrism and accompanying self-denial of the Middle Ages. The humanism of this time was, according to Lamont, a revolt against the other-worldly nature of medieval Christian dogma and embrace of the possibilities for humans in this world, and this attitude and the consequent celebration of human life and challenge to the limits of earthly existence are chronicled and lauded in the works of writers and artists of this period (69-73). Thinkers like Erasmus, Montaigne, and Bacon used their writings to reconfigure the *telos* of humanity, directing focus away from supernatural in favor of celebrating the unique qualities of humanity and the possibilities available to humans on earth. Lamont emphasizes, too, the critical humanist contributions of Italian painters like Michelangelo, Raphael, and Rubens. According to Lamont, Shakespeare himself indicated little interest in or support of religious supernaturalism. And Lamont adds that Shakespeare's mind was on men and women living out their diverse lives in diverse types of society; Shakespeare dwelt upon the human foreground without much attention to the cosmic background (70). Lamont believes that in Hamlet Shakespeare gives one of the most memorable of Humanist perorations: "What a piece of work is a man! how noble in reason! how infinite in faculty! in form and moving how express and admirable! in action how like an angel! in apprehension how like a god! the beauty of the world, the paragon of animals!" (71). Artistic works of the time, then, celebrate the beauty and frailty of humanity, recognizing a potential spectrum of temporal possibility previously not

recognized, while demonstrating an enduring sense of man's ability to fail; free will, of course, ensures such possibilities. Religion, of course, remained a potent force in Renaissance Europe, but one need look no further than the Reformation to see that while Christian religiosity was hardly supplanted by humanist thinking, it was drastically reconfigured as humans began to recognize an important self-authorized role in their spiritual fate. The humanism of the Renaissance reminds us of humankind's potential for technological progress. And it is the human potential that is emphasized in the *Humanist Manifesto 2000* and that I argue in this dissertation will enable teachers in technical communicators and computers and writing to develop a more authentic description of their humanistic character and disciplinary definition.

Beyond the cast of the Renaissance, humanistic irruptions can be traced throughout history, and Lamont delves into some of the more influential European thinkers, especially French, British, German, and American philosophers, authors, and social critics (such as Voltaire, Rousseau, Arnold, Hardy, Goethe, Emerson, Whitman, etc.) whose ideas subsequently helped to shape over time the humanist worldview informing many of the policies, events, and responses of the twentieth and now the twenty-first century. This tradition contextualized an American Revolution, Constitution, and ideology that, while relying heavily on Christian myth for founding principles, was and continues to be largely authorized by the humanism born of classical Greek and Roman thought and flourishing in the European Renaissance and beyond.

American Humanism: Humanist Manifestos

and the Manifestation of Humanity

Indeed, in spite of some of the more ostensibly religious motives behind the revolution and ensuing development of the country, America's founding principles can be described as humanistic. On a national and historical level, one need look no further than Thomas Paine's *Common Sense* or the writings of Thomas Jefferson to find examples of this humanistic emphasis and ardent concern for humanity's inalienable rights and potential. More recently, in the twentieth century, John Dewey is frequently cited as one of America's most notable humanists, but even his democratic humanist educational initiatives find roots in the efforts of Horace Mann in the early to mid-nineteenth century, as well as those of others.

The apparent irony of religion and humanism coexisting in the inception of our democracy is illustrative of the ways in which humanism, particularly as viewed by humanists themselves, has evolved in America as part of a larger socio-cultural landscape. A close reading of three significant iterations of humanist doctrine—the *Humanist Manifesto I* (1933), the *Humanist Manifesto II* (1973), (both copyrighted by the American Humanist Association) and the *Humanist Manifesto 2000* (copyrighted by the International Academy of Humanism)—indicates a repositioning of humanism in relation to religion; indeed, religion as an opposing force served as a primary motivator for the first manifesto. The progressively reduced direct treatment of religion in subsequent manifestos reflects the general secularization of American society.

What I would like to do here is enumerate some of the key themes in each of the three versions of the *Manifesto* in order to situate the relationship between those themes and technology. This relationship will then be compared to that generally fostered in the academic humanities and help illustrate the complex situation in which technical communication and computers and writing scholars find themselves when articulating a humanistic character for their respective fields of inquiry.

Humanistic Manifesto I (1933)

The first *Manifesto* begins by asserting the dawn of a new era, a modern time calling for new ways of thinking:

The time is past for mere revision of traditional attitudes. Science and economic change have disrupted the old beliefs. Religions the world over are under the necessity of coming to terms with new conditions created by a vastly increased knowledge and experience. In every field of human activity, the vital movement is now in the direction of a candid and explicit humanism. (7)

Humanism here is depicted as an inevitable outgrowth of the very human political, social, economic, and cultural conditions in America in the early stages of the twentieth century. On the heels of the country's emergence as a world power in World War I and the booming 1920s, before American involvement in World War II and after the onset of the *Great Depression*, American humanists were poised to declare an independence from religion and a dependence on one another.

While an oppositional stance toward religion is but one important component of most philosophies of humanism, it is paramount in this first *Manifesto*. Other themes, such as social justice, economics, and epistemology—themes which mature and develop in subsequent *Manifestos*—are named here but filtered through and justified by religion

or, in this case, the absence of religion in the traditional sense of the word. Distancing the human condition from theism is the objective that motivates and characterizes the short document. The authors assert that given the change in social and cultural conditions—the emergence of industrialism and development of science—belief in supernatural power as the organizing force behind religion is no longer possible. Indeed, there is too much proof to the contrary.

The authors of *Humanist Manifesto I* concern themselves first with religion, supplanting deism with humanism. This central move spawns other ideological statements that begin to build toward a coherent statement of what humanism might mean as a worldview and how it might translate into a social program uniting all human beings in a shared sense of mutual need and appreciation, hinting at what we have come to know as “humanitarian” concerns. Humanism, in this account, requires revision of capitalism and an acute social sensitivity to the needs and desires of others. The role of technology in all this is, for the most part, only hinted at, such as in the above quote in which humanism designs to support “. . . the creative in man and to encourage achievements that add to the satisfactions of life.” Thus, for my purposes, the key element in this first Manifesto is to establish a context for the *Manifestos*. This first *Manifesto*, it should be noted, is quite short—only about four pages in length. *Humanist Manifesto II*, while only twelve pages in length, begins to flesh out the significance of some of these initial statements and turns attention away from religion and toward social concerns, suggesting the realization of humanist epistemology through technological means, while assuming a more secular society.

Humanist Manifesto II (1973)

The second *Manifesto*, like the first, is a fascinating study as a historical document. The social chorus of the late 1960s and early 1970s can be heard throughout, suggesting new spaces where a humanistic perspective might benefit people. Perhaps the most compelling element of the document is its tone—at once apologetic, yet confident; despondent, yet hopeful. Published in 1973, the social, cultural, political, and economic face of the country had undergone dramatic changes. Since the previous *Manifesto* in 1933, the United States had undergone World War II and introduced the power of the atomic bomb to the world, in addition to fighting in Korea and Vietnam. America had put a man on the moon and had seen the invention of television change the cultural landscape. The country was embroiled in debate over abortion and trying to come to terms with race and ethnicity, having seen not only its president but also the country's foremost civil right leader buried in the previous decade.

In light of this, the mood of the second *Manifesto* is a bit more somber, a bit more guarded. The document's text hints at a new perspective on humanism itself—faith, still, but some concern that these very principles, used wrongly, could have grave consequences of humanity. *Technology* gets a careful inspection. There is a sense of urgency in the need to regroup and refocus the theoretical lens and, more importantly, the pragmatic orientation of humanism in order to help a struggling populace get on with the remaining and constant humanist objective: flourishing and reaching human potential.

While the first *Manifesto* was organized in the form of a somewhat randomly sequenced assembly of relatively terse “affirmations,” the second takes on a form more closely resembling an essay or report, complete with its own categorical headings. As

noted above, the mood in *Humanist Manifesto II* is decidedly different. Whereas the purpose of *Humanist Manifesto I* is both to deconstruct passionately traditional religious formations and sketch a crude version of a humanist worldview with equal verve, the second document, while retaining enthusiasm and hope for humanism and reiterating theological disdain, carries its cultural and historical baggage with it, not only in a more cautious tone, but also in its complexity. The events shaping American culture from the time of the first *Manifesto* (1933) to the second (1973) clearly indicate that humanism has been challenged, be it through pathological appeals to “shared humanity” on the part of the Nazis, resistance to and identification of traits deemed “inhuman” in races other than white in American streets and schools, or the realization that a weapon created and deployed by human hands at the end of World War II was responsible for destruction previously unimaginable. This incomplete tapestry of events lends a sense of humility to the second manifesto while simultaneously galvanizing the forces and supporters of humanism by suggesting that in 1973, perhaps more than ever, humanism’s role or potential role could be identified very specifically and in very specific socio-cultural and socio-political contexts. The views expressed about *technology* in *Manifesto II* are more positive than those discussed in *Manifesto I*. According to *Manifesto II*, “Technology is a vital key to human progress and development” (22). Hence, even with the advances in weaponry seen in World War II, technology is seen as vital.

The preface to the second *Manifesto*, then, suggests this mood, noting, importantly, the ironic use of forces traditionally deemed friendly by humanists in the period of time since the first *Manifesto*: “Science has sometimes brought evil as well as good. Recent decades have shown that inhuman wars can be made in the name of peace”

(13). Yet, shortly thereafter, Kurtz clearly states that hope remains and that this positive outlook is possible without looking beyond the earth and its inhabitants. In other words, the anti-salvationist sentiment central to the first *Manifesto* is quickly reaffirmed; rather than look to a benevolent, all-powerful deity, the author posits, “Reasonable minds look to other means for survival” (13).

The introduction continues this effort to reestablish humanistic principles and goals in a decidedly secular world space. “World” becomes important in that the second *Manifesto* begins to expand the scope of humanity, suggesting a more inclusive and more pervasive mission for humanists, one that calls forth a sense of responsibility for fellow human beings around the world. Reaffirmed are values for human potential and creativity and the role human beings play in each:

This outlook emphasizes the role human beings can play in their own spheres of action. The decades ahead call for dedicated, clear-minded men and women able to marshal the will, intelligence, and cooperative skills for shaping a desirable future. Humanism can provide the purpose and inspiration that so many seek; it can give personal meaning and significance to human life. (15)

What is important then, is that *Manifesto II* seeks to heal the rift between *technology and science* that appeared in *Manifesto I*. Finally, with regard to the document’s introductory material, it should be noted that the author of the second *Manifesto* acknowledges various strains of humanism operating in the world and, just as importantly, recognizes the signers’ (the 150 people who signed the document) humanist perspectives. The key uniting factors, however, are identified as a.) a rejection of theism and b.) the “positive belief in the possibilities of human progress and to the values central to it.” (15)

Like in the first *Manifesto*, the emphasis is not so much on disdaining and discrediting religion in a summary sense as it is quibbling with what Kurtz cites here as a

central tenet of most religious frameworks: "...those features of traditional religious morality that deny humans a full appreciation of their own potentialities and responsibilities." Traditional religions might be a source of comfort, but they often "encourage dependence rather than independence" and "inhibit humans from helping themselves or experiencing their full potentialities" and "often impede the will to serve others." Again, the emphasis is on problematizing deity-based religion and arguing on behalf of a human-directed religious framework. Salvation cannot be supported by rational thought; therefore, the authors suggest that we do away with dualism and acknowledge humanity's evolutionary past. Humanists, then, defer to the *scientific method* as a means of establishing the rational validity of a religious frame; theism does not hold up to such scrutiny. I believe this section is worth noting in order to attribute the decline of attention to religion in *Manifest II* to the increasing influence of technology.

A final note on religion: from a rhetorical perspective, it is somewhat interesting that religion is the first category taken up after the introduction. This seems to affirm the epistemological primacy of shifting the terrain away from the supernatural to the terrestrial, even though religion, in spite of its structural priority, is not the most heavily emphasized element of humanism in the second *Manifesto*. Therefore, it is worth noting that a decrease in attention to religion means an increased attention to technology/science as the perspective shifts to terrestrial matters.

The ethics category indicates a new formulation/nomination of epistemological tenets of humanism and begins hinting at the social agenda humanism encourages, in addition to prefacing the place of the individual, as well. The discussion of ethics is framed nicely by the opening sentences of the third principle, the first principle under the

“ethics” heading: “We affirm that moral values derive their source from human experience. Ethics is autonomous and situational, needing no theological or ideological sanction” (17). Faith cannot be the source of ethics; instead, from human experience emerges ethical behavior and ethical principles, using reason and intelligence, which “are the most effective instruments that humankind possesses.” While the *scientific method* is hailed as the best way to address human problems, the second manifesto evinces a tempered enthusiasm in the wake of World War II, etc., calling for a scientific method tempered by “humility” and “balanced with compassion and empathy” (17-18). This discussion of ethics is particularly relevant to this dissertation in that not only is technology and the technological sensibility (the scientific method) considered a seminal component of humanism, but it is also tempered by discretion and emotion; thus, progress and response to human problems are facilitated by careful, humane appropriation of technology.

Finally, and most notably, *technology* is at the hub of this progress toward a “world community.” And it is here that Kurtz attacks a view so often ascribed (problematically) to humanists: “We deplore any neo-romantic efforts to condemn indiscriminately all technology and science or to counsel retreat from its further extension and use for the good of humankind.” Research needs to be done. Technology needs to be used to promote humanist interests. Yet technology is not to be left to its own devices; rather, it is to be subject to constant scrutiny: “Technology must, however, *be carefully judged by the consequences of its use*; harmful and destructive changes should be avoided....Technological feasibility does not imply social or cultural desirability” (22, emphasis mine). “Consequences” are of paramount importance, indicating that while

“technology hope” is a significant component of a humanist outlook, conscientious humanists recognize its limitations. Importantly, technology becomes the embodiment of an ideology holding the advancement of human interests as its most cherished tenet. It is not separated from the ideology but is instead central to it.

In sum, what warrants special notice in this discussion of *Humanist Manifesto II* is the development of humanist thinking, tangibly demonstrated by the volume and depth of this second edition. In addition, *technology*'s role in humanism is given greater space; its value as a primary component in the realization of human potential is affirmed. Of the two *Manifestos*, then, we see here the first careful articulation of the relationship between *technology* and humanist ideology—and how technological means can lead to productive, human ends when appropriated with discretion and disastrous outcomes when misused. Indeed, means and ends are difficult to distinguish as the ends are represented as an *embodiment* of the means.

Humanist Manifesto 2000: A Call for a New Planetary Humanism

The third manifesto, *Humanist Manifesto 2000: A Call for a New Planetary Humanism*, also drafted by Paul Kurtz, is easily the longest of the three, spanning nearly sixty pages, and, as the title suggests, it develops the global responsibility theme/ethic first raised in *Humanist Manifesto II* and then reiterated and further developed in *A Declaration of Interdependence*. As Kurtz notes in the Preamble, “While most of the provisions of these earlier Manifestos and Declarations are still viable it is apparent that as the world enters a new millennium a new Manifesto is necessary,” and he proceeds to cite changes in the Soviet Union, the end of the Cold War, the rise of democracy in new places, the new global economy, and the continued acceleration of science and

technology, realized, in part, by and through the “information revolution,” which has linked cultures and economies in ways previously unforeseen (12). The Manifesto’s list of endorsements from thinkers representing thirty-one countries again reflects the move toward more and more expansive consideration of shared humanity as an authentic common denominator among varied nations and cultures.

As with the first two *Manifestos*, I discuss parts of this document; however, taking a cue from Kurtz’s above quote, which recognizes the continuity of the document and the repetition of many provisions, I argue differences in the newest manifesto that distinguish its global sweep from its predecessors in addition to highlighting *technology* changes.

The Preamble makes the aforementioned nod to technological change and advancement, in addition to summarizing some of the cultural conditions shaping the manifesto and those preceding it. The emphasis here is, not surprisingly, on shaping the historical and cultural exigency giving rise to the document; and although the table of contents does not immediately suggest the centrality of opposition to religion in this *Manifesto* as in the others, the Preamble does close by rebuking rekindled fundamentalist religions, which have been revitalized, according to Kurtz, as a response to humanism. New Age spirituality is similarly indicted for encouraging belief in a paranormal power, and, interestingly, postmodernism is taken to task for undermining modernity and humanism and even more interestingly “attacking science and technology” (12).

Section II, “Prospects for a Better Future,” outlines significant human achievements and conditions that encourage hope in the future of humanity (13-23). Highlights include progress in *technology* and *communication*, medicine, public health, transportation, and scientific research, as well as farther-reaching education, equality

initiatives, and economic prosperity. Section III cites the strength of the scientific method as a means of continuing humanity's quest for knowledge and verifiable, terrestrial truths that can help to improve human life on earth (24-26).

The fourth section, "The Benefits of Technology," is necessarily prefaced by a comment made in the *Manifesto*'s preamble. Discussing changes in global communication and information distribution, Kurtz suggests that "...the changes wrought in the world since *Humanist Manifesto II* are as great or greater than those of the industrial revolution two centuries ago or the invention by Gutenberg of moveable type and the printing press" (12). The crucial point of the fourth section, then, is that technology should not be limited in any way. "The economic and social structure of the contemporary world is becoming increasingly dependent upon technological innovation." Kurtz claims that humans must continue to locate technological solutions to human problems, and we need to find ways to make these solutions available to all human beings. Yet while this suggests an attitude of absolutism toward technology, he demands responsibility and discretion with every advance: "Each technological innovation needs to be evaluated in terms of potential risk and potential benefit to society and the environment" (28). Note here the emphasis on consequences; here, emerging humanism, coming to terms with the vastness and power of technology and begins to link more closely to pragmatism and its emphasis on what William James calls "cash value." Humanism, as much as it recognizes the value of *technology*, cannot summarily endorse its use in any and all cases, as the unique contingencies of each case and consequences of use must be considered.

Section VIII, “A New Global Agenda,” emphasizes the need to break down barriers supported by self-interested nationalism in favor of transnational efforts to better the world (49-54). On a global level and with global cooperation, security and an end to violent civil conflict, human development (health, economy, education), social justice, fair and equitable international market and labor management, international law, and the environment all warrant significant and immediate attention by all sharing common humanity. Again, these mandates organize around *the central humanist credo of human potential and providing the support necessary for each individual to meet that potential.*

To sum up, then, the most recent *Manifesto* again locates itself in a historical moment, one where the world has shrunk because of *communication technology*, advances in transportation, and world commercial interests. It extends the previous two documents discussed here by charting with more depth and more specificity the mission of humanists with a far greater emphasis on global advancement of human interests and protections. The “individual” and religion, while glossed, are not given the focused attention they are given in the two previous *Manifestos*.

Humanistic Irony—A Disjointed Worldview

Humanism, as framed by Matthew Arnold, E.D. Hirsch and others, takes shape in the form of an ideology—the advancement of a cultural ideal that designates the “best” a culture has to offer.³ In the vernacular and oftentimes in the academy, as well, humanism has been and can still be read as a general sense of compassion for human beings—the “humanitarian” strain of humanism; following theorists like Lamont, this view holds that we must value and give voice and agency to all humans in the interests of the collective human race. Notably, both interpretations are rooted in the fundamental value of human

beings, the conservative interpretation focusing more, it seems, on elite culture—the “best our culture has to offer”—with the liberal more interested in preserving fundamental human rights that all should share.

In the wake of postmodernism, the contemporary humanities as embodied in English departments seem to retain and celebrate humanism’s liberal social agenda and suspicion toward religion, disdain its epistemology as modernist, and question the technology that humanists throughout the twentieth century and to the present claim to be fundamental to enacting the very elements of the ideological program that remain valued in the American academy.⁴ In other words, a humanities casting a suspicious eye toward technology only then values a portion of the field of humanistic possibility, and it is not so certain that such a stance best fosters the viability of English departments and the humanities in an era when technologies and technological advancement are significant elements of human interaction and day-to-day life. To position or define technology—at once the means of enacting the philosophy and an embodiment of the humanist ideology—as somehow different or other than the humanities—to not embrace it—is to call into question whether the humanities can be linked to humanism at all. The potential result is an English department that lacks a pragmatic voice in contemporary conversations about technology.

In *Cultivating Humanity: A Classical Defense of Reform in Liberal Education*, Martha C. Nussbaum demonstrates a sensibility closely resembling this (see Brantlinger and Noble for other examples). Her text illustrates an attempt not only to map a social and political agenda for a humanities that she would deem decidedly activist, but also to reconcile some of the very troublesome conflicts between postmodernism and modernism

and their implications on social and political action—an effort Lamont and Kurtz would, no doubt, admire greatly. Nussbaum does not devote a large amount of text or time to discussing technology (a humanist “means”) but argues at length in favor of an educational program geared toward advancing multiculturalism and an educational goal of developing students into “world citizens,” within a Socratic framework.

But while Nussbaum’s comments about technology are few, they suggest that in her definition of the humanities and of the humanities as that educational program capable of developing “world citizens,” technology is not necessarily included; indeed, it is something “different” and not the concern of the humanities and its guardians. It seems that technology or skills might be a nuisance or distraction rather than a means or facilitator of humanist ideology, politics, and activism. As quoted in Chapter 1, Nussbaum states that the “noble ideal” of liberal education as

... a higher education that is a cultivation of the whole human being for the functions of citizenship and life generally—has not yet been fully realized in our colleges and universities. Some, while using the words ‘liberal education,’ subordinate the cultivation of the whole person to technical and vocational education. Even where education is ostensibly ‘liberal,’ it may not contain all that a citizen really needs to know. (9)

Here, Nussbaum does not discredit technology and application; rather, she argues for parity or, more honestly, a curricular redistribution of and distinction between technical/skill-based courses and “liberal” education. But while this quote does not exactly indicate an embrace of technology’s role in a liberal arts curriculum, the following indicates an even more hostile stance. Speaking of students at Randolph-Macon College, Nussbaum states:

These students would very likely take few demanding courses in traditional humanities and social science subjects without requirements;

subjects such as business and computer science would occupy most of their attention. The institution is committed to giving these students an education that does not focus on these narrow instrumental goals, but that gives them something that can impart meaning and discipline to their intellectual lives in a general way, making them both richer as individuals and better informed as citizens. (61)

“Instrumental goals” here are clearly defined as something different, if not diametrically opposed to the humanities and humanist ideals. Instrumentally-based considerations, according to Nussbaum, do not qualify as something students can use to “impart meaning and discipline to their intellectual lives in a general way.” Theory and practice are irredeemably split in this brand of humanism that celebrates ideology and politics but casts aspersions on the mechanisms that many humanists, such as those who endorse the *Manifestos* discussed above, define as integral to the humanistic mission. In fairness to Nussbaum, it should conversely be mentioned at this point that the business and technical courses she marginalizes as irrelevant to her humanities curriculum are, one could suspect, more often than not guilty of excluding the other elements of humanistic education that Nussbaum valorizes. So goes the relationship between the “two cultures.” Indeed, as Donald M. Borchert and David Stewart note, the humanist response to technophiles is not one of understanding or shared values: “The retort from humanists is for technologists to come and be instructed by humanists in order to learn why they are hollow, unfulfilled individuals” (i).

Again, though, taking such a stance seems at odds with humanism’s larger scope, its emphasis on human potential and happiness, and the careful, considered use of technology as the primary vehicle by and through which those goals are pragmatically pursued. This disavowal suggests that romanticism or something of its nature—

something that is by definition not technology and, indeed, antagonistic toward it—is at the core of the humanities as they are presently defined. However, I argue that it is impossible to maintain these beliefs if the humanities are to support humanism, not only as they have traditionally been defined, but also how they are presently defined and will be defined in the future. If we are to accept the desirable effects of humanist ideology and politics, we must reconsider the humanities’ stance against the epistemology (instrumental rationality) that is, at least, a part of it and, more importantly, its more technologically-oriented offspring, which humanists working in the tradition of the *Humanist Manifestos* would suggest cannot be separated from the worldview. Without such reconsideration, we are left with humanities of little recognizable value. In *Achieving Our Country: Leftist Thought in Twentieth-Century America*, Richard Rorty, citing John Dewey, makes a distinction between what he calls the “cultural” Left and the “reform” Left, arguing his preference for the latter, who take an active role toward change and improvement not only in the realm of academia but in politics and culture as well, and thus fight against the “spectatorship” that plagues the “cultural” Left, which is characterized by detached theory and ideological critique—what Rorty terms the condition of the contemporary academy (33). Rorty cites Dewey in an effort to show an evolution of thought. For example, at one time Dewey was “deeply concerned about the aridity, alienation, and loss of sense of community that had resulted from an exclusive concern with science and technology and the impersonality that characterized them” (Dombrowski 9). Without reconfiguring technology’s role in the humanities, it seems that the humanities are left with only spectatorship. Technical communication and computers and writing, both closely aligned with technology and technological interests,

offer the possibility of moving the humanities out of this realm of observance and into the realm of action, helping to extend the scope and viability of English departments in the twenty-first century.

In the following chapters, I turn to the technologized rhetorical subdisciplines themselves to see how humanism manifests itself in the fields of technical communication and computers and writing, respectively, noting how scholarly efforts to describe the humanistic nature of these fields often rely on appeals to conservative notions of humanist ideology to the exclusion or marginalization of technological interests, possibly to their detriment. The humanities have been selective, picking and choosing from the palette of humanism but refusing technological embodiments of humanistic values. Reading humanistic testimonials in technical communication and computers and writing in the shadow of the *Humanist Manifestos* provides an opportunity to think carefully about the implications of a humanistic character that does not readily embrace technology.

¹ Derivations of this term appear in several texts that I will refer to at various times in this text. Understanding “instrumental” rationality can be achieved, in part, indirectly by looking to Patrick Moore’s working definition of “instrumental discourse” in “Instrumental Discourse is as Humanistic as Rhetoric.” The emphasis is on achieving an objective and maximizing efficiency. Whereas such a goal is seemingly a given in technological circles, humanists often bridle at the consequences. See, for instance, Habermas’ discussion of “technocratic consciousness” as the hegemony of science and technology overwhelming discourse and his ideal of “communicative action” in society.

² Again, this point cannot be overemphasized. Trying to define “humanism” in a way that would encompass its myriad uses would be extremely difficult and well beyond the purview of this project. What I am trying to do here is situate a working definition of the parameters of contemporary humanist philosophy in order to establish which elements of such a definition are actively appropriated in the humanities, as well as which are not.

³ Hirsch and Arnold are two examples of thinkers who have taken the approach that the humanities are a cultural legacy, a fairly coherent body of ideas that might yield a shared disposition or sensibility in those who have been properly educated in them.

⁴ The “canon wars” and postmodern critique have certainly called into question some of the assumptions of conservative humanism over the past twenty-five years. Such critique has focused on diversity and multicultural difference in languages and literatures, as well as gender identity, to problematize the idea of a “shared humanity.”

CHAPTER 4

TECHNICAL COMMUNICATION AND THE HUMANISTIC: MAPPING HISTORY AND SEEKING TRUTH

Since its inception, technical communication has had a unique relationship with the humanities and the sciences, the “two cultures.” Early technical writing courses were born of engineering programs given life by the Morrill Acts of 1862 and 1877 (Kynell 11), which expanded funding and land appropriations for state colleges and universities devoted to agricultural and mechanical pursuits and put into place an educational framework that would ultimately support the Industrial Revolution and catalyze the American economy in the coming decades (Russell 61). The science and technology-based curriculum that was the hallmark of many of these new institutions clashed with traditional notions of what the university life was to offer. Until then, the university experience was still largely patterned after classical educational models and beliefs, with attention given primarily to the humanities as the best way to educate the student and thus the populace, ensuring an acceptable level of enculturation for the educated in the passing down of the received liberal tradition to each successive generation (Russell 99). The great ideas of Greek and Roman antiquity served as a basis for a sound education for the individual mind and promised to frame the ideas necessary to build and sustain democracy and both cultural and economic prosperity (Russell 130, Kynell 97).

At this point, technical writing was in a unique and complicated position in terms of its own fledgling identity; to which “culture” did it belong? How might it be classified in the new, increasingly departmentalized university? Russell placed the “first English faculty member in the SPEE at 1899” (122), whereas Connors, in his history of technical writing, believes that SPEE had “no members from English departments until after 1905” (331). Non-English faculty contributed to early technical writing (Kynell 31). James Souther, in his “Teaching Technical Writing: A Retrospective Appraisal,” noted that “in 1908, T.A. Rickard (himself an engineer) wrote what was likely the first book on technical writing, *A Guide to Technical Writing*” (4). And Frank Aydelotte, an engineer and author of *English and Engineering* (1923), made no secret of “favoring English as a cultural influence in the engineering curriculum” (Kynell 51). According to Kynell, “nearly all English faculty during the period 1893-1910 were educated in the classics—literature—so that teaching writing was not considered a specialty” (32). On one hand, junior faculty in English typically taught technical communication courses, and this reality, coupled with the literary content that made up many early technical writing courses, made it difficult to classify with science and technology. Yet those junior English faculty members who taught technical writing often did so out of necessity as a probationary assignment early in their careers (Connors 182, Kynell 104). In 1911, English faculty saw “English literature as a means of providing that which was perceived as missing in the engineering student’s curriculum, namely culture” (Kynell 43).

Contemporary discussion about technical communication and its relationship to English and the humanities has had at least as much to do with epistemological and ideological conflict within English departments as it has had to do with technical

communication's relationship with other departments (MacNealy and Heaton, Sides). Even today, according to Kynell, technical communication "has a similarly tentative existence in some departments, residing uncomfortably between the literary old guard and the new compositionists" (22). For those technical communication courses that continued to be taught in English departments and for emerging technical communication programs in the same setting, questions of "fit" frequently arise (MacNealy and Heaton, Sides). The expansion of the field and the development of a more robust, albeit disparate, theoretical framework and self-consciousness therein provided a greater sense of identity, but the residue of a vocational reputation continues to raise the "fit" question. In 1939, W. Otto Birk, in his "Organization and Conditions" (1939) provided results of a survey that revealed that "literature and composition were adequate English requirements for engineering students, particularly in liberal arts universities" (cited in Kynell 83). In addition, Birk discovered through the survey that "segregation of technical communication faculty and students impacted promotion from the junior faculty ranks," and when, in fact, "engineering students and English faculty were segregated, the English faculty were overwhelmingly young and inexperienced, virtually stranded at the junior ranks" (Kynell 85). Indeed, many in the English department, no doubt, continue to see the teaching of technical communication as different than the traditional field responsibility and value in literature, or as probationary work in the same vein that Susan Miller describes composition instruction throughout the twentieth century (Kynell 47).¹

If the 1930s hinted at the full development of technical writing as a discipline, trends emerging from the 1940s indicated some realization of the discipline's nature and academic viability. The impact of World War II on American engineering education

created two very different trends—“defense-related writing and the move to a “humanistic-social” strain” (Kynell 89). Advances in technology as manufacturers developed more powerful weapons meant “necessity had mothered thousands of frightful and complex machines, and the need for technical communication had never been greater” (Connors 340). As Russell noted, “technological advances during and after the war created a need for technical writers” (249-50). Clearly World War II contributed a great deal to education; the conflict, in many ways, provided the impetus for change specifically where technical communication was concerned. This was ironic for a variety of reasons, but most especially “because technical communication emerged and evolved, in the years prior to World War II,” in, according to Kynell, “a milieu of conflict—the conflict of English and the Humanities in an engineering curriculum” (91).

More recent humanistic statements have been heavily influenced by the rise of postmodernism and antifoundational approaches to rhetoric, knowledge, and text. As postmodern approaches to language came into vogue in English departments in the late 1970s and into the 1980s, technical communication found its traditional reputation firmly situated outside antifoundational currents. Technical communication was widely regarded as positivist, indebted to science and experimental method, and lacking in the rhetorical and literary richness of other subdisciplines of English. This is not to say that traditional notions of the individual and culture, core tenets of humanism and the humanities, were no longer an important part of humanist philosophy but rather to acknowledge that the traditional site of the humanities—English departments and literature, specifically—was changing, particularly in terms of creating knowledge and how text and ideas came into being, with various critical movements in literature, such as

New Historicism and postcolonialism, serving as apt indicators of new critical lenses used to better access the human experience and human values. The unstable, amorphous nature of language became part of the postmodern humanistic package. Technical communication, purportedly geared toward conveying a fixed reality through language (for example, clearly and specifically describing a mechanical process or explaining a software program to a user), seemed incompatible with the newly appreciated indeterminacies of the antifoundational, language-based humanities. It was up to technical communicators to find a way into this more historical, more cultural, and more social humanist paradigm.

In this chapter, I will take a brief look at the early days of technical communication, relying on Robert Connors' and Teresa Kynell's respective histories to construct a perspective on the "humanistic" elements of technical communication at the turn of the century to provide a backdrop for later discussion of contemporary efforts in the field to explicitly define a humanistic character for technical communication. In doing so, I hope to shed light, first, on the long-standing nature of the question itself. While it has not always been a source of much explicit concern—rarely, if at all, in the workplace—it seems that in the academy, where departmentalization is so fundamental to disciplinary identity, the issue has always been present, especially in contemporary English departments where the growth of technical communication programs—undergraduate minors and majors, as well as graduate—means that question of "fit" are more important than ever. Scarce resources must be divided, and departmental gerrymandering determines with whom those resources will be shared.

In English departments, this means splitting monies between James Joyce and usability labs. Thus, there is an important political stake for technical communication scholars here, which exists alongside an equally important stake in best describing and defining the parameters of what is only now becoming recognized as a discipline, although that classification is itself contestable. All these issues yield questions: What is humanistic about technical communication? And, of equal importance, what is not? And, finally, how does English departments' or the academic humanities' notion of the "humanistic" deepen or constrain attempts to establish the purview of technical communication study in the academy?

Early Engineering and the Need for Humanities

What I wish to do here is look at the origins, both pedagogical and disciplinary, of technical writing at the end of the nineteenth and beginning of the twentieth century, primarily through the historical perspectives provided by Teresa Kynell's 1995 *Writing in a Milieu of Utility: The Move to Technical Communication in American Engineering Programs 1850-1950* (2nd edition) and Robert Connors' 1982 article, "The Rise of Technical Writing Instruction in America." While borrowing from each, I hope to frame their histories in such a way that it is evident that the relationship between technical writing and the humanities/English departments has always been an important part of technical communication's development as a discipline and that the "technical" or technological element of technical communication has been a crucial part of the relationship. Considered in light of the depiction of humanism in Chapter 2, it seems clear that technical writing's (later, technical communication's) connection to both

technology and science and English departments, respectively, places it in a unique dialogue with a broad constellation of often disparate humanist values.

Kynell frames her history of technical communication by first describing the engineering programs that came into existence with the passage of the Morrill Acts of 1862 and 1867, which provided land and financial backing for developing colleges and universities in an effort to meet the growing educational needs of post-Civil War Americans, particularly those of the middle class who aspired to find a position in the emerging industrial economy. Previously, engineering had been seen as a vocational field, one in which an aspiring engineer served as an apprentice in order to gain the professional literacy necessary to establish his (engineers were almost exclusively men) own unique career. With the establishment of university-based engineering programs, though, engineering faculty felt even more acutely the stigma of being considered “vocational.” In the academy, English was naturally recognized by professors of literature and others, engineers included, as a potential source of “humanizing” for students enrolled in engineering programs. Indeed, a central debate between English and engineering faculty in the early years of engineering was how to either (a) smoothly integrate technically oriented engineering courses into an existing liberal arts curriculum or (b) force a dosage of liberal arts coursework into an already filled engineering curriculum. Students needed exposure to great ideas and culture, and English could provide it (Kynell 10, 17-18).

At this early stage in the development of academic engineering programs, the humanizing influence of English had little to do with promoting rhetorical skill in the manner that many contemporary technical communication courses purport to; that type of

instruction would slowly become important as professionals and academics in engineering came to recognize the communicative shortcomings of engineering graduates. Rather, the cultural legacy that engineering students were seen as lacking was literature and humanism as a coherent ideological package to be transmitted or transferred, a package yielding a cultural sensibility in its recipients, and it remained to be seen if the “philistine,” vocation-driven interests of engineering curricula could coexist with traditional humanist interests and classical education that emphasized liberal arts training. John Henry Newman’s lectures, often anthologized and familiar to university students, for example, characterized such a liberal education in opposition to the vocational *telos* of emerging programs in engineering, describing it as the “process of training, by which the intellect, instead of being formed or sacrificed to some particular or accidental purpose, some specific trade or profession, or study of science, is disciplined for its own sake, for the perception of its own proper object, and for its own highest culture...” (qtd. in Kynell 7).

What liberal education and literature could do, then, was condition learners to adopt a certain disposition; by being exposed to certain ideas, students were groomed for success even though they were not, as in the engineering curriculum, taught a specific body of technical skills directly leading to a position in industry. Rather, the liberal arts curriculum, again, promised a certain sensibility, a cultured stance. Kynell notes, too, that composition, a requirement usually retained to supply engineering students with an introduction to basic writing practices, had little to do with this transmission of culture: “English (literature), on the other hand, established itself as something more than a discipline—a means for change in the human psyche. Composition could not hope to

compete” (12). This view of composition provided a glimpse at the skepticism literature faculty would direct toward technical writing courses as well. “Culture” meant an ideological package of ideas; composition dealt with practice—something of a vocation in its own right.

As time went on, though, and engineering became more secure in its professional identity, the desire for “humanist” influence began to hint at a change in its character. While debate continued among English and engineering faculty about the nature of the educated engineer and the amount of cultural education needed for him to work and live in society, the focus shifted more specifically to communication technique—the ability of the young engineer to competently present his ideas in writing and speech; many young engineers could not communicate well (Kynell 17, 20). English, as traditionally understood and defined, however, seemed ill equipped to meet the unique challenges present in this communication situation, and engineering faculty and students lamented the inability of English courses in literature to make substantial improvements in engineering students’ writing (Kynell 20).

Because of its emphasis on advancing general writing skills, composition should have been the logical site for these concerns about communication to be best addressed. But although it was usually the only course exclusively geared toward writing that students would take during their university tenures, composition, too, came under increased attack for its inability to adequately prepare engineering students for the unique communicative rigors of their profession. Robert J. Connors cites J. Martin Telleen’s 1908 explanation of the problems with freshman composition from the engineer’s perspective; it “came too early in students’ careers, it was too general in scope to be very

helpful, it was not practically oriented enough, and there was almost no interdepartmental cooperation between English and engineering faculties” (331). Telleen’s explanation in 1908 parallels the date of Rickard’s textbook, which some have argued is the first technical communication textbook (Moran 35, Kynell 67). Thus began a more concentrated move on the part of concerned English and engineering faculty alike to shape a composition course to the unique needs of the engineering student.

According to Berlin, three types of compositional methods existed in engineering classrooms by 1910. Current-traditional rhetoric, with its emphasis on drills and correctness, continued to dominate, but the East Coast Liberal Culturists, “aristocratic and openly distrustful of democracy” (45) were decrying freshman English instruction “even as they continued to provide to its students in freshman literature courses” (46). A third, transactional model developed by F.N. Scott and his protégés at the University of Michigan, was “formulated as an alternative to current-traditional rhetoric” (47). Not only was there no real consistency in composition education nationwide, but this “growth period,” as Berlin describes it, meant that composition, flourishing in its development as an academic discipline, was constituted in such an open manner—its subject all subjects—that its lack of success, according to Kynell, at engineering colleges is hardly surprising (37).

Engineering faculty had many opinions about what such a course should do. Kynell describes the engineering interest in writing as being urgent but often underdeveloped; in other words, engineers and engineering faculty, oftentimes suspect writers themselves, could recognize the importance of writing but could not so readily characterize what type of writing course would best meet their students’ needs (21-23).²

As might be expected, early calls in textbooks were for correctness. Below are some interesting notes about early technical communication textbooks.

1. Textbooks were at times half rhetoric and half readings, and the readings were a mixture of the classics of both humanism and engineering.
2. Titles often included composition for engineers.
3. Authors shifted rather dramatically in the early 1940s from engineers to English department faculty. At times, authors were from outside the academy.
4. Target audiences were always technology and science students (Warren).

According to Richard Schmelzer, Ray Palmer Baker's 1924 *The Preparation of Technical Reports* was the first textbook in technical communication (52). However, according to Michael Moran, T.A. Rickard wrote what has been argued by some to be the first recognized technical writing textbook in 1908, and his background as an engineer and editor of engineering texts led him to construct a book largely devoted to specific language usage and correctness (35, Kynell 67). As a student literally of Thomas Huxley, Rickard argued that "the engineers' stance ultimately prohibited them from contributing effectively to the general fund of knowledge that would permit humankind to continue up the evolutionary ladder to perfect communion" (Longo 65). By debasing the coin of technical language, Rickard believed that engineers threatened science and the survival of the species" (Longo 66). It should be noted, too, that in spite of concerns with correctness and mechanical usage, a dialogue over the importance of the engineer-in-culture continued (Kynell 24-25). Kynell cites the specific concerns of George Chatburn and J. Martin Telleen late in the first decade of the nineteenth century. Chatburn speculated on the need for the engineer to connect himself with a historical and

sociological context in order to be a more effective communicator and engineer, which Kynell sees as an early indication of deeper concerns about rhetorical depth, exigence, and perspective, elements hinting at some of the “humanistic aspects” that would later inform technical communication’s growing sense of self-awareness. To Kynell, “Technical writing’s gradual emergence may have been due to this relatively simple, but vital, recognition....This connection among people, which communication implicitly promotes, also provided what literature classes were somehow not providing in an engineering curriculum—cultural context” (24-25). Engineering students and faculty recognized the need for a humanistic education that provided writing opportunities that resembled on-the-job writing.

Thus, the pragmatic concerns of engineering students and faculty began to stimulate the move toward an English course that might help practicing engineers engage their craft in a socio-cultural milieu. As Connors notes, however, this move was neither uniform nor harmonious. He cites the philosophical differences between Frank Aydelotte’s 1917 textbook, *English and Engineering*, and Samuel Chandler Earle’s (whom Connors hails as the “Father of Technical Writing Instruction”) *The Theory and Practice of Technical Writing*. While Aydelotte’s text was a compilation of essays, Earle’s used modes of discourse and discussed style and audience, providing useful examples of engineering writing for students (Earle 332-34). With regard to the question of culture, then, Aydelotte’s work suggests the remaining influence of literature on what was becoming technical writing—culture could be “given” to students who could be “humanized” through the reading of literature. Earle’s text, on the other hand, points to

the more pragmatic space that technical writing and communication would slowly come to occupy.³

As Connors' praise might suggest, it was Earle's ideas that slowly began to take hold; Earle recognized the possibilities for English in the engineering curriculum, seeing English and language as tools for the engineer. He spoke out against literature faculty who disdained and dismissed engineering and the cultural insufficiency of this technological discipline. Kynell notes, "Earle very clearly believed that culture was implicit in the engineering discipline" (33). Earle called for a writing course "as broad, and as varied as that given to students in arts," noting that "true culture comes not from turning aside to other interests as higher, but from so conceiving their special work that it will be worthy of a life's devotion" (qtd. in Kynell 33). The humanistic character of technical writing might, then, be something *inherent*, rather than an import from classical humanist studies.

Earle's influence on the Society for the Promotion of Engineering Education's (SPEE) first Committee on English was significant, and his efforts encouraged thought and discussion of more rhetorically sophisticated ideas for the technical writing course. Connors notes that the 1920s saw technical communication gain in self-awareness as a discipline and become more widespread in its implementation at engineering schools around the country (335). According to Russell, for example, "at the University of Michigan, the College of Engineering hired in 1895 an English professor, Abraham Strauss, to teach composition courses for students in the college. By 1908 these courses had evolved into a separate department of English in the College of Engineering, offering courses in literature and history, as well as in report writing (1914) and other genres"

(Russell 122). Engineering departments at other comprehensive universities, such as the University of Washington, created similar departments in the period between the world wars to teach writing and humanities courses that fit the program and perspective of their students (Baker 283). Texts written by S.A. Harbarger, Sam F. Trelease, and Emma S. Yule (1925) focused on technical forms and genres as technical writing came to know and understand the specificity of its mission (Kynell 67). As the SPEE directed more and more attention toward English and writing, communication and cooperation between English departments and engineering programs improved, and remaining gaps in “Engineering English”—still, in many cases, a composition class with little specifically technical focus—were exposed and examined, with moves made to fashion the course into a more robust hybrid of traditional composition focus and technical writing tasks. With the 1930s came a mixture of professional maturity and continued problems; the first technical writing dissertation was written⁴ even as technical writing teachers, while greater in number, existed in a disciplinary limbo—not quite “English” in the traditional sense, yet not engineering, either.

Connors’ depiction of the 1940s highlights the growth of technical writing and the ongoing evolution in the type of humanistic influence engineers and engineering programs wanted from English departments. The first reason the 1940s were so important was World War II, which, in terms of the profession of technical communication, led to unprecedented growth in complexity and sheer numbers. Many more courses in technical communication were offered in an attempt to deal with both the technological nature of the war and postwar attempts to reorganize production for peacetime purposes. More than ever before, technical communicators were needed to

help promote facility with technical products as post-WWII production shifted into a peacetime mode. The postwar boom in technical writing spawned a greater sense of professionalism and disciplinary scholarship, scholarship that had less to do with teaching conditions and more to do with the actual acts and duties of technical communicators (Connors 340-42).

A second significant event shaping the relationship between technical writing and humanistic influence for engineers in the 1940s was the issuing of the Hammond Reports, two separate reports generated by the SPEE-sponsored Committee on the Aims and Scope of Engineering Curricula, headed by H.P. Hammond. Connors and Kynell both characterize these reports as indications that English faculties were displeased with the direction of both technical writing courses and the engineering curriculum they were designed to support. The reports claimed that engineering programs too strongly emphasized the practical; in response to this perceived lack, committee members recommended the development of two parallel “stems” in engineering programs: (1) the scientific-technological and (2) the humanistic-social. The second Hammond Report, issued in 1944, called for 20% of the engineering curriculum to be devoted to “humanistic study” broadly defined, including courses in literature, sociology, economics, and history (Connors 340). Interestingly, these reports demonstrated the persistence of these aged arguments and the notion of the humanities upon which they were based; indeed, it was not practice-oriented technical writing that the Hammond Report recognized as “humanistic.” With the resurrection of the view of “humanistic influence” as a set of identifiable and transferable culture ideas and values, with literature as its preordained vehicle in English departments, technical writing found itself outside of

humanistic definition. Indeed, technical writing was recognized for promoting skills of some value but was generally understood to be bereft of cultural content and, thus, humanistic influence. Kynell cites the Report as something of a missed opportunity:

Technical writing, initially the answer to the engineering English dilemma, provided the means to this end; that educators did not consider the discipline's broader context, its ability to bridge technology and humanism, was somewhat surprising. That educators did not necessarily perceive technical writing's full potential did not preclude it or composition from being taught in engineering schools; in fact, both were taught regularly, but neither fit neatly into the framework laid out in the two Hammond Reports. *Technical writing, now an emerging discipline, should have been the cornerstone of the humanistic stem.* That it was not is only one more irony in its evolution as a discipline. (84, emphasis mine)

Kynell's point here is an excellent one: the composers of the Hammond Report missed an opportunity when they failed to make a case for technical communication as a vital part of the humanities or, in this case, the "humanistic stem." However, Kynell's historical intent and emphasis on coverage refuses her the space and motive to consider more fully this limitation: "humanistic" could be loosely defined, at this time, as an adjective identifying those fields of study that contributed to cultural transfer by exposing students to a body of values and ideas. Literature, for one, fit this description, while the more practical art of technical writing, did not in spite of aforementioned efforts by Samuel Chandler Earle and others to broaden the definition of technical writing to include rhetorical and genre-driven considerations, elements that would later be appreciated and categorized as "humanistic" aspects of technical communication. It would take the late twentieth-century turn in the humanism/technical communication conversation to begin making serious inroads into the potential for technical communication as a humanistic endeavor.

What contemporary technical communicators might see as the legitimate role of the profession and the role of technical communication curricula and programs in contemporary times, then, was in large part denied; engineers needed the humanities and humanistic influence, but not necessarily in the form of technical communication. This is not to say that technical communication courses did not continue to be taught and were not important for their vocational value; engineers still needed to learn to write. It does mean, though, that technical writing was still shaping disciplinary identity and that what Dombrowski terms the “humanistic aspects” of technical communication had yet to be discovered.

Antifoundationalism and the New Humanistic Elements

At the beginning of the twentieth century, the humanities were comprised of a combination of classical ideas that, together, constituted a cultural heritage, a body of ordained truths passed down through the generations in the classical education structure with literature a primary site for the humanistic development of students. But later in the second half of the century, postmodern and poststructural views on language and knowledge significantly reshaped the field of English departments and in doing so expanded the range of “humanistic” as a referent, which changed the possible nature of technical writing’s relationship to English departments, especially literature. Radical antifoundational theories forced reconsideration of the cultural transfer model of humanities instruction and recast the study of language and literature. In rhetoric and composition, attention shifted from the romantic individual-as-author, relying on divine inspiration or highly regimented mental processes, to the writer/author as part of a collaborative community that helped to define truth and meaning within discourse

communities. In literary theory, New Criticism and its exclusive focus on text was challenged by new epistemological considerations, and New Historical, hermeneutical, psychoanalytical, and postcolonial theories of critique broadened the scope of possibilities as writing context came to be seen as important as writing itself. Textual construction was a culturally-conditioned, social phenomenon. Deconstruction, a theory of critique promulgated by several notable critics, including Jacques Derrida, Paul de Mann, Harold Bloom, Jonathan Culler, and J. Hillis Miller took postmodern antifoundationalism to its logical extreme, with deconstructionists holding that no reading of a text was “safe”; any reading could be challenged, and meaning was fleeting and ill-determined, certain to break down due to the indeterminacy of language.

Deconstruction and other postmodern and/or poststructural approaches to literary criticism and appreciation can be seen as part of a broader shift that expanded the purview of English departments to include a more complex epistemology and emphasis on the situated nature of writing and communication. Technical communication scholars drew from changes in English departments and rhetorical epistemologies to develop new arguments for the humanistic nature of technical communication, a move made more important by the increased size and visibility of the discipline and technical communication’s role in the academy. Some scholars developed humanistic arguments by making parallels between technical communication and literature. For instance, Russell Rutter claimed in the mid-1980s that recent scholarship “has shown technical writing to be an imaginative, creative, and thus poetic endeavor” that traditionally-trained teachers might be “ideally prepared to understand” (Rutter, “Poetry, Imagination” 700), while Elizabeth Tebeaux connects contemporary literary theory with technical

communication curricula in a manner that anticipates the organizational scheme Dombrowski uses to describe the “humanistic aspects” of the field.⁵ The sources I focus on here, however, emphasize humanistic character in rhetoric and postmodern approaches to reading and writing. To qualify, the scholars I cite here are some of those who operate, more often than not, from an academy-focused, theoretical perspective and who, importantly, attempt to *explicitly* address the question of what, exactly, is humanistic about technical communication. Moreover, while I will focus on Carolyn Miller’s and Paul Dombrowski’s respective humanistic characterizations, I will also point to notable others who have contributed to the conversation by either challenging suppositions or extending those of Miller and Dombrowski. Revisiting arguments on technical communication and the humanistic allows better access to representative theoretical grounds upon which humanistic practices in the discipline are predicated in contemporary discussions. Finally, doing so can foreground a consideration of the pragmatic consequences of relying on English departments’ definition of the humanistic when technical communication defines its own.

Miller’s “Humanistic Rationale”

Carolyn Miller’s 1979 *College English* article “A Humanistic Rationale for Technical Communication” is an important and relatively early statement catalyzing contemporary humanist conversation in technical communication.⁶ Miller’s article begins, interestingly, with a brief narrative that hearkens back to previous debates about humanism/the humanities and technical communication. In the narrative, Miller outlines an English department debate sparked by the age-old question of how students might

adequately fulfill humanities requirements in degree programs in their respective colleges.

There were two opinions among those in my department with whom I talked. Those who teach literature believed that students should not satisfy a humanities, or “English,” requirement with a technical writing course. And our department should prevent them from doing so by instituting a literature prerequisite for the technical writing course. Those of us who teach technical writing responded differently. Mostly, we were baffled. Obviously we did not welcome what we considered an irrelevant prerequisite for our course, and we did not like the idea of our course being held hostage for the overstaffed literature courses. But were we willing to argue, indeed, could we argue that technical writing has humanistic value? (610)

To humanists, in this case represented by English faculty trained in literature, those involved in technical writing were taken up with something—but something *other* than the humanistic concerns English departments dealt with. Technical writing, while rooted in a tradition of trying to “humanize” students in engineering, engaged pursuits categorically different than those in literature. The ideological work, the cultural transfer for which the humanities was responsible, could not be adequately carried out in such a course. Only literature could fulfill the requirement.

While these ideological/cultural questions never went away, Miller’s work can be read as helping to shift attention to rhetoric as an important dimension of the humanistic argument in technical communication. Borrowing from the work of Thomas Kuhn in *The Structure of Scientific Revolutions*, as well as that of others, Miller challenges the epistemological assumptions governing the typical depiction of technical writing as a practice and as a discipline. According to Miller, technical writing has been victimized by faulty assumptions of positivism by English and humanities scholars, and technical writing texts had done little to dissuade them, emphasizing current-traditional notions of

writing like clarity and plain style in the tradition of Thomas Sprat and Peter Ramus. Language was to be exact, to serve as a windowpane giving readers a clear, unobstructed view of the object, mechanism, or process that was the focus of the technical description. Clarity was of the utmost importance, lest language obscure reality (614).

Miller argues that this depiction of technical writing comes from its close affiliation with the positivist legacy of science (612). Positivism relies on sensory data as the only true basis for knowledge, and true statements can be empirically validated.

Those seeking truth via empirical experiment are expected to be objective, to remove the human subjectivity from the data gathering process, and to allow the data to speak for itself—to reveal truth rather than to structure it. Such a view minimizes the importance of language, which is identified as subjective. According to Miller, language in this view “is largely a distraction for science; and rhetoric is just irrelevant, because conclusions follow necessarily from the data of observation and the procedure of logic” (612-13).

With rhetoric’s perceived lack of pertinence, “technical and scientific writing become just a series of maneuvers for staying out of the way,” and technical writing is relegated to decidedly secondary status: its only role can be to expose as clearly as possible, through imperfect language, the perfect knowledge derived from scientific experiment. Technical writing’s close relationship to science and positivism, then, leads to four problematic “features” of technical writing pedagogy:

- a. the inability to define the subject of the course
- b. style and form taught with little attention to invention
- c. undue emphasis on tone: “be objective, be unemotional, be impersonal”
- d. lack of sophisticated audience analysis, often reduced to “be clear.” (613-15)

Miller counters these positivistic tendencies by pointing to the large shift in thinking in science where some scientists (such as Kuhn) moved to acknowledge the human role in constructing knowledge and which is, thus, thoroughly rhetorical and communally determined. According to Miller, “Briefly summarized, it [this argument] holds that whatever we know of reality is created by individual action and by communal assent. Reality cannot be separated from our knowledge of it; knowledge cannot be separated from the knower; the knower cannot be separated from a community” (615). With that said, “Certainty is found not in isolated observation of nature or in logical procedure but in the widest agreement with other people. Science is, through and through, a rhetorical endeavor.” In other words, Miller begins to describe the humanistic in terms of a social, rhetorical epistemology. Indeed, she equates the two and argues for technical writing to rearticulate its mission and re-envision itself in terms of these new epistemological assumptions governing science and other fields of knowledge. Technical writing should be more focused on consensus and community, on situating writing in context: “We can thus ground our teaching and our discipline in a communal rationality rather than in contextless logic” (617).

Finally, and perhaps most importantly for the present argument, Miller recognizes the political implications of rethinking technical writing’s humanistic nature, noting that a more rhetorical approach to technical writing might not significantly alter the way courses and the syllabi and assignments in them look, but “...our attitudes might, and so might those of our students and colleagues” (617). Recognizing the nature of technical communications as more complex and antifoundational creates a more recognizable identification with English departments by sharing assumptions with literary theory.

Important, too, is the way in which she reframes “humanistic,” in large part equating it with “rhetorical,” with an emphasis on the social nature of knowledge creation. In other words, Miller’s critique suggests a broadening of how technical communication defines the humanistic and a shift in emphasis from seeing “humanistic” as signifying a certain body of values toward a view of humanistic as pertaining to the complex human effort to construct meaning in a world, through discourse, in a world where meaning is ill-defined, antifoundational. While the definition of “humanistic” retains connection to a values framework, Miller here claims a rhetorical humanistic epistemology, as well.

Dombrowski’s “Humanistic Aspects”

Paul Dombrowski has also contributed significantly to the literature on technical communication’s relationship to humanism, and what Miller names the “rhetorical” nature of technical communication in the wake of the aforementioned epistemological paradigm shift, Dombrowski characterizes as the “postmodern.” In his edited collection *Humanistic Aspects of Technical Communication*, Dombrowski divides the text into a taxonomy of areas that he deems “humanistic,” or in some way representative of the humanistic nature of technical communication, and selects essays indicative of these “aspects.” These areas include social construction, ethics, gender studies, and the rhetoric of science. In his 1995 article, “Post-Modernism as the Resurgence of Humanism in Technical Communication Studies,” Dombrowski considers the same categories but refines his definition of the postmodern to Jurgen Habermas’ characterization of it as “the urge to recognize what historically has been excluded, suppressed, or marginalized” and notes that this “inclusion of the historically excluded” is “perhaps paradoxically, also humanistic” in the way in which it reveals itself in

technical communication (“Post-Modernism” 165). Dombrowski calls for a reconsideration of technical communication by demarcating a broader rhetorical framework for technical communication, one that extends beyond the perceived clarity and certainty promised by science and the experimental method, noting that “many rhetoricians of science, social constructionists, feminist critics of science, and ethicists challenge specifically the notion that ‘facts’ are supposedly absolute and pre-existent, on the grounds that this de-contextualizes facts and tacitly denies the very real social contingencies that create facts” (166). But, following Miller, what is important here is Dombrowski’s change in emphasis; technical communication is humanistic here because it is historical, contextual, and social; in other words, its epistemology is social, and it is such an epistemology that authors the ideology. In other words, he locates the humanistic *in* postmodernity, with “postmodern” a descriptor of how humans come to know and create knowledge in context. Moreover, they are humanistic, not only in their consonance with the rhetorical emphases of classical educational frameworks (the *trivium* and *quadrivium*), but also in that they suggest a view of humanism as “the maximization of human potential, the affirmation of cultural criticism, and the rejection of rigid absolutism” (175). Dombrowski connects this interpretation of humanism to Socrates and, importantly, to Miller’s 1979 article, but it is interesting, too, to note how consonant it is with Paul Kurtz’s depiction of humanist philosophy in the *Humanist Manifesto 2000* detailed in Chapter 3 of this dissertation. More than a set of skills to simply and clearly transfer information, technical communication, a humanistic discipline, is a set of complex communication practices, situated in cultural contexts, that relies on knowledge

of the human condition and human needs to organize human experience such that humans are better able to achieve their goals and, thus, maximize their potential.

In terms of this discussion, though, the most important quality of Dombrowski's work is his recognition of postmodernism's role in characterizing the relationship between technical communication and humanism in contemporary disciplinary discussions. What this means is that he follows Miller's antifoundational lead: language and language-based epistemology becomes the milieu in which technical communication identifies with the humanistic. This is not to say that the ideological side of humanistic mission or purview is no longer important. The "values" component of technical communication remains a part of humanistic conversation as scholars attempt to sketch "right action," only with a postmodern appreciation for the situated nature of such values. Examples abound of scholarly efforts to maintain a value dimension in technical communication, evidenced, for instance, by ongoing discussions of the social role of the technical communicator, particularly those who endorse a service learning approach to technical communication instruction, and, in most cases, invoke certain liberal ideals (duty to community, self, humanity) in their considerations.⁷ But Dombrowski's taxonomy suggests that the ideological is fundamentally rhetorical in nature: language as the arbiter of truth yields indeterminacy in that it is executed by human beings exerting their respective subjectivities on one another, making possible the ideological categories Dombrowski describes.

The study of ethics illustrates this relationship between the ideological and the epistemological and serves as a particularly apt and rich example of the relationship between technical communication and humanism in that traditional studies of ethics

suggest concern with human well being and the existence of various ethical frameworks or lenses by and through which human behavior might be prescribed. After modest previous discussion, the 1990s produced a relative flood of scholarly interest in ethics led by Mike Markel, Sam Dragga, and Dombrowski himself (*Ethics in Technical Communication*).⁸ Others, such as Nancy Blyler, TyAnna Herrington, and Steven Katz have also worked to broaden ethical consideration in the field, focusing on ethical situations and decisions ranging from documentation in the death camps of Nazi Germany to information design in the ATF's post-Branch Davidian conflict reports.⁹ The issues taken up in each of these studies cannot be defined outside of ideology and ideological conflict, but again, it is the antifoundational, rhetorical epistemology undergirding those ideologies that authorize them in different, contingent situations in the first place.

Criticisms of Rhetoric as Humanistic

Yet while humanistic arguments based on rhetoric and social epistemology “feel” closer to home in terms of what most English departments do and how most humanists are trained, this view is not without controversy. Like their adversaries, they root their critique in the nature of language. Perhaps most notable is Patrick Moore’s argument that “rhetoricalness” is not the only quality making technical communication humanistic. Moore asserts that technical communication cannot disdain “instrumental discourse,” (defined loosely as direct, functional discourse, and often associated with technology and science in its emphasis on efficiency) that stands in opposition to central claims in Miller’s early argument. Miller suggests, in the context of her article, that “humanistic” and “rhetorical” are roughly equivalent descriptors; humans, it seems, are language-using

beings and, thus, humanism cannot be defined outside of language as an epistemological force. Instrumental discourse, in this view, is not rhetorical in that it relies on positivist logic not rooted in language or consensus but rather in a discoverable truth.

But Moore argues that the “centerpiece of several essays that define technical communication as rhetoric is an attack on the alleged objectivity of technical communication” (101). While acknowledging the largely rhetorical nature of technical communication and value of such arguments, Moore refuses to exclude what he terms “instrumental discourse,” dismissed by other theorists as part of a positivist epistemology that places efficiency, not ethical rhetorical efficacy, at the fore. Moore disagrees, noting that too much emphasis on rhetoric and related matters “ignore(s) what is socially useful and humane about the instrumental aims of technical communication.” Instrumental discourse theory “complements” rhetorical theory (107), and language comes to be standardized in communities for functional reasons. Moore critiques Miller’s attack on the “coercive nature” of instrumental discourse and instead argues that instrumental discourse fights against the coercion of reality (112). Instrumental discourse limits the “semantic range” of language for what Moore terms “humanistic reasons,” such as “to diminish pain, to increase the quality of life, and to save lives” (113), which sounds similar to humanist objectives outlined by both Lamont in his *The Philosophy of Humanism* and Kurtz in the *Humanist Manifesto*. Moore closes by calling for a reconsideration of instrumental discourse and an effort to locate the “humanism embedded in the standardized language and procedures of technological artifacts and language” (115).

Dombrowski himself has not published commentary on Moore's perspective, but one can assume disjuncture between his sense of the humanistic (as well as Miller's) and Moore's—not that Moore would refuse to acknowledge the rhetorical categories Dombrowski describes but that Dombrowski would likely resist Moore's call for instrumental discourse's inclusion in a range of qualities that can productively be deemed "humanistic" on grounds similar to those used by other scholars.¹⁰ For example, Nancy Blyler and Steven Katz both suggest that instrumental discourse is the instantiation of instrumental rationality, which, in its emphasis on efficiency and profit can lead to the dehumanization of users and stakeholders by sacrificing broader, more considerate rhetorical ethics for expediency.¹¹ While Moore's claims, then, are controversial, they help highlight the presence and potency of continued ideological and epistemological conflict in the humanistic discussion in technical communication. His views will be taken up in more detail in Chapter 6, where I will connect them to the field's implicit—almost unconscious—attitudes toward technology.

It is also interesting, though, to note the absence of technology in the humanistic schema proposed by Dombrowski. Others, like Stuart Selber, Johndan Johnson-Eilola, and Robert Johnson have extended humanistic interpretation to technology.¹² These scholars have each advanced a humanistic interpretation of technology itself that, at least at times, goes beyond "humanizing" (disciplining) technology and instead recognizes the humanity already present in technological constructs, highlighting the rhetorical nature of its construction and the role of human/user input in its construction and use. Such a stance makes them exceptional and comes in attempts to describe technology as much as it does technical communication as a discipline. Dombrowski's characterization of the

“humanistic aspects,” however, suggests the opposite by only foregrounding more conservative or, perhaps more accurately, more *acceptable* humanities-based concerns, those valued in contemporary English departments, with the rhetoric of science being a notable exception, rather than attempting to read humanism into technology. Such a stance aligns well, then, with a view of English departments and its subdisciplines as being part of another “culture,” yet seems at odds with the humanist message outlined in Chapter 3: humanism is, first and foremost, about the advancement of the human condition, and technology is produced by humans as an embodiment of human goals to promote progress and allow humans to flourish. This raises the question of whether technical communication, so long excluded from the discourse of humanism because of its affiliation with technology and science, can legitimately claim humanistic status outside of or in addition to its affiliation with technology and science. With technology being so central to its identity, how can the discipline be defined in such a way that it is both humanistic—which, given the attention it has received, seems important in the field—and representative of the field’s interests, concerns, and expertise?

Conclusion

Many interesting conclusions can be drawn from this view of technical communication’s relationship with humanism and the humanistic. Three, in particular, stand out:

- a. In English departments, technical communicators occupy a very different position in relation to the humanistic than do their peers in other fields falling under the English departments umbrella.
- b. in the postmodern era, “humanistic” is roughly equivalent to “rhetorical” in

technical communication and connotes the existence of competing discourse and the nature of language and knowledge that allows for this contra positivist views of language that rely solely on the transmission model

- c. for contemporary technical communication scholars and programs situated in English departments, there is a value and necessity to being characterized as “humanistic”

What constitutes the “humanistic aspects” or humanistic contributions of technical communication has, in one way or another, been an important topic in the field from its early development to present times. The end of the nineteenth and early part of the twentieth century find technical writing teachers at times being recognized by members of engineering departments as humanistic or capable of bringing humanistic influence to engineering curricula and engineering students in need of “humanizing.” Given the literature-based approach to teaching technical writing in early years, technical writing courses were able to serve such a humanizing purpose with content; humanistic contribution was found in the values and ideas contained in the literature used to teach the course. Moves to change the trajectory of the course to a more rhetorically-based curriculum were met with ambivalence. The Hampton Report of 1940 and 1944, for instance, suggests that, after a time, even engineers were not pleased with the humanistic influence of technical writing courses that had in some cases moved away from earlier emphasis on cultural content in favor of practice and discovering ways to teach writing processes and genres used by technical writers and engineers in their professional lives.

But in the twenty-first century, technical communication scholars wrestle with the question of humanistic character as part of a larger shift in English departments: postmodern theories of language and knowledge creation. In this view, technical communication could be described as humanistic based not so much on the cultural

content (as a coherent ideological package) of the discipline but on the practice of technical communication as a discipline involved in the rhetorical construction of meaning. Harkening back, in some ways, to Samuel Earle's earlier depiction of technical writing as a rhetorical act, the work of Carolyn Miller and others suggested that technical communication could be a "humanistic endeavor" based on its rhetoricity; technical communicators were in the business of constructing meaning, not simply reporting preordained truths discovered by scientists. Others, Dombrowski one of them, read ideology back into the previously seen neutrality of technical communication. In other words, once it was established in the postmodern movement in language and rhetoric studies that meaning was a construct—and technical communicators located themselves within this movement, embracing rhetoric rather than actively or passively defining their work in opposition to it—scholars were able to consider, for the first time, the ideological nature of technical communication, taking on issues like ethics and gender, which had, in large part, been excluded from previous disciplinary conversation.

Finally, looking at the way in which this issue has been treated historically and particularly in contemporary times indicates that there is something important at stake for technical communication scholars, teachers, and programs located in English departments. Examining and describing the "humanistic aspects" of technical communication is more than an effort to understand the field and its interests, values, and purview. Rather, it is also an important move in establishing identification with English departments and has implications for harmony or lack thereof in intradepartmental relationships, understanding across disciplines, and political power. I suggest above that most moves to describe what is humanistic about technical communication have followed

moves made in English departments; earlier in the century, cultural values transfer was the humanistic contribution technical writing courses were asked to make; later, scholars recognized the humanistic in rhetorical complexity—the shift toward an antifoundational view of knowledge and language that informed all of English departments and catalyzed a shift in literature from New Criticism to postmodern and poststructural critical theories even as technical communicators began to see what they did as more than simply transferring information without “getting in the way” of the language.

But unlike in the *Humanist Manifestos* discussed in Chapter 3, technology does not play an explicit role in much humanistic description; in the *Manifestos*, technology is central to humanist philosophy. As noted earlier, some scholars (Selber, Johnson-Eilola, and Johnson) have begun conversation on the humanistic nature of technology, but efforts to sketch a humanistic profile for technical communication as a field have more often relied upon issues of language, ideology, and ethics. The connection between the “instrumental discourse” Moore attempts to rehabilitate and its pursuant rationality does not necessarily align well with the way many in English departments—technical communicators included—define the humanistic. In Chapter 6, I discuss some of the implications of this and consider what it means to technical communication as a discipline to describe technology’s role indirectly or not at all when depicting the humanistic purview of technical communication. But before that, I wish to examine ways in which computers and writing, another “technologized rhetorical subdiscipline” of English, outlines its own humanistic character. Doing so might show interesting overlap and difference that can help scholars build future arguments for the humanistic aspects of both fields.

¹ In *Textual Carnivals: the Politics of Composition* (1991), Miller argues persuasively that composition has suffered from marginalized status in English departments throughout the twentieth century, with this status closely related to the heavily feminine workforce in the field. With women teaching many available composition courses and literature faculty either skeptical or hostile toward composition programs and teachers, composition's growth as a discipline was severely retarded.

² Connors and Russell (1991) disagree on specifics but locate the arrival of the first English faculty member in the Society for the Promotion of Engineering Education (SPEE) sometime between 1899 and 1905.

³For additional information about the history of teaching technical communication, refer to Longo's *Spurious Coin*.

⁴ According to Connors, the first dissertation written in the field of technical writing is Alvin M. Fountain's *A Study of Courses in Technical Writing* (1938).

⁵ See, too, Rutter's "History, Rhetoric, and Humanism: Toward a More Comprehensive Definition of Technical Communication." *Journal of Technical Writing and Communication* 21:2 1991: 133-53.

⁶ While the focus here is on this particular article, Miller's other work has made significant contribution to the debate over humanism and technical communication—see "Genre as Social Action" and "Learning from History: World War II and the Culture of High Technology" as examples.

⁷ Thomas Miller's "Treating Professional Writing as Social Praxis" argues for expanding of our understanding of technical communication from techne to praxis in order to situate instruction in a field of ethical and political responsibility. Gerald Savage's "Redefining the Responsibilities of Teachers and the Social Position of the Technical Communicator" considers similar themes and their pedagogical implications.

⁸ Dragga and Markel have been leading voices in disciplinary consideration of the role of ethics in technical communication. See, for instance, Dragga's "Is This Ethical?: A Survey of Opinion on Principles and Practices of Document Design" and Markel's "A Basic Unit on Ethics for Technical Communicators."

⁹ Herrington's "Ethics and Graphic Design: A Rhetorical Analysis of the Document Design in *The Report of the Bureau of Alcohol, Tobacco, and Firearms Investigation of Vernon Wayne Howell also Known as David Koresh*" examines ATF reports detailing the siege of the Branch Davidian compound outside Waco, Texas, in 1993.

¹⁰ See Melinda Kreth, Carolyn R. Miller, and Janice Redish. "Comments on 'Instrumental Discourse is as Humanistic as Rhetoric.'" *Journal of Business and Technical Communication* 10.4 (1996): 476-90.

¹¹ In "Habermas, Empowerment, and Professional Discourse," Blyler examines a situation in which community voices are shut out of important decision making in the interest of efficiency; government, in this case, acts without listening to the voices of various stakeholder groups. What Habermas terms the "technocratic consciousness" comes to dominate and override "communicative action." In "The Ethic of Expediency: Classical Rhetoric, Technology, and the Holocaust," Steven Katz asserts that Aristotelian rhetoric, despite its complexity and attention to human psychology and audience, foregrounds efficiency as the primary objective of the rhetor.

¹² Certainly, this could be said about any number of arguments developed by these scholars, but I am thinking particularly about Selber and Johnson-Eilola's "Policing Ourselves: Defining the Boundaries of Appropriate Discussion in Online Forums" (1997) and Robert Johnson's *User-Centered Technology: A Rhetorical Theory for Computers and Other Mundane Artifacts* (1998).

CHAPTER 5

MAKING A CASE FOR HUMANISTIC STATUS: RECONCILING COMPUTERS AND WRITING WITH TRADITION

While the split between science and the humanities can be traced to antiquity, it was Snow's position in "The Two Cultures" (1956) that touched off a considerable, and hotly contested, debate that is still in progress. Today, "technology" remains associated with science and progress; indeed, Jurgen Habermas' notion of "technocratic rationality" suggests that science and technology are grouped together according to a specific epistemological stance that encourages efficiency at the expense of other interests, often important human ones like health and ethical, equitable treatment. Human voices are excluded in the interest of technological advance. Critics like Neil Postman argue that technology has a way of taking over our lives, effectively and disastrously organizing human values and interests solely around and through technological capabilities. In technical communication, Steven Katz, Paul Dombrowski, and others have revealed ways in which the inventions and decision-making born of such "rationality" have adversely affected human beings in the unfolding of some of the greatest tragedies and disasters of the twentieth century (the Holocaust, the Chernobyl disaster). Technology and its pursuant rationality can force human beings to act in ways that humans were not meant to act and to do things before consequences have been adequately considered.

In Chapter 4, I argued that describing the "humanistic aspects" of technical communication has been an ongoing project for scholars in the field, on the one hand to define the discipline but also to try to build upon its relationship with English

departments. Because of technical communication's historic allegiance with science and engineering, the culture of technology in C. P. Snow's cultural model, this has not always been easy. Indeed, explicit attempts to define the humanistic elements of technical communication have often centered on those aspects more readily identifiable as such in an English department setting, such as the rhetorical, epistemological, and ideological dimensions of the field.

Explicit articulations of the humanistic, then, reflect the interpretation of "humanistic" used in literature. While technology is readily acknowledged to be a crucial part of disciplinary identity, Dombrowski and others define the humanistic elements of technical communication as something *other than* the technology. At the very least, technology plays second fiddle to more recognizably humanistic characteristics. And as I will discuss with regard to computers and writing here, this tendency is at least in part a result of the selective humanistic framework of the academic humanities. Technical communication and computers and writing are joint partners in this battle about technology being a humanistic study. Scholars in computers and writing, like technical communication, will benefit from recasting a more pragmatic interpretation of the humanistic that rehabilitates technology by countering traditional arguments, usually polemical in nature, which situate technology against the values advanced in academic humanities. Doing so not only helps technical communication and computers and writing develop a more authentic description of their humanistic character and disciplinary definition, but also holds promise for extending the reach and vitality of English departments broadly defined as cultural demands for a more sophisticated and holistic view of technology increase.

In Chapter 3, I traced, via the evolution of the *Humanist Manifesto*, some of the ways in which “humanism” evolved in America as a philosophical body of ideas and actions, noting that humanism, as defined in those texts, situates technology in the midst of humanist thought, not beyond it or in opposition to it, and recognizes technology as a key to realizing humanist hopes and dreams. This view stands in opposition to the academic humanities, particularly English departments, which define themselves, in many ways, as the antidote to science and technology. As mentioned in Chapter 3, “The retort from humanists is for technologies to come and be instructed by humanists in order to learn why they are hollow, unfulfilled individuals” (Borchert and Stewart i). However, I hope to show that technology does not stand in opposition to the academic humanities.

Like technical communication, computers and writing, although a younger subdiscipline of composition has struggled with the task of defining its humanistic “aspects.”¹ Emerging from composition studies, computer-based composition (later assumed into “computers and writing,” and referred to as such here), like technical communication, faced the considerable challenge of defining its humanistic character to English department peers who often held very different views toward the technology/humanities relationship.

Computers and writing introduced a new element against the emerging postmodern epistemological backdrop in English departments—the personal computer, and later, computer networks. While composition itself was about writing and communication, somewhat defensible in humanist conversations given its links (oftentimes dubious) to rhetoric, computers were often seen as the stuff of scientists and engineers, of numbers and calculations, making a computer-based approach to

composition markedly different and consequently problematic.² Thus, the question of how to find the humanistic element of computer-based composition was raised in a complicated environment; not only did those interested in teaching writing with computers have to convince their literature colleagues that what they did *was* “English” and humanistic, but they also had to convince many of their composition colleagues, as well. And unlike the diverse interpretation of “technology” in the parallel humanistic conversation in technical communication, the humanistic debate in computer-based composition focused on a narrower technological field: the realm of the personal computer and the computer network. In the next section, I would like to discuss some of the seminal texts and scholars connected to computers and writing, and how humanistic arguments have taken shape in computers and writing.

My interest is to identify texts and scholars who pointedly and indirectly address the question of what makes computers and writing “humanistic.” My criteria for selecting the following texts and scholars is based not only on the professional stature and reputation of the scholars, but also on the significance that the text had on shaping the development of computers and writing as a burgeoning subdiscipline. Certainly, the question and possible answers to it are subtly present in much of the composition literature, but the texts and scholars assembled here have been among the more explicit in their treatment of the issue. It is my contention that this has been an important question for the *emerging field* to answer. I hope to show that the struggles to define the humanistic character of computers and writing are similar, in many ways, to those outlined in Chapter 4, yet different in others because of disciplinary history and the

divergent ways in which each of these technologized rhetorical subdisciplines defines “technology,” which I will discuss further in Chapter 6.

Phase I: Fear and Loathing in the English Department

The first phase of the disciplinary effort to articulate computer-based composition’s relationship to humanism is characterized by efforts to overcome the cultural fissure described by C. P. Snow. General skepticism toward computers in English departments made it difficult for those interested in computers and writing to articulate their mission and led to an overall lack of recognition for work in the emerging field (Gerrard, “Computers and Compositionists” 9-12; Sommers, “Political Impediments” 43-44). English faculty holding traditional attitudes toward individual authorship and proscenium classroom models, as well as traditional composing practices and media (the paper shuffle), chafed at using expensive computer hardware and software—decidedly “un-humanist” media to do humanist work—write and develop ideas rooted in traditional values. By virtue of the sociocultural power of the emerging Information Age, the computers and writing movement enjoyed some external validation. But emerging from composition, a subdiscipline itself in English departments, computers and writing found its more immediate academic audience to be skeptical at best, hostile at worst. Early on, computers and writing specialists had to demonstrate to their English department colleagues that the computer, a machine, could support the goals of a humanistic education. In other words, how might computers and writing specialists demonstrate the benefits of using a tool (computer) for composition.

What I would like to do here is analyze several scholarly iterations of this argument and draw attention to some disciplinary texts that more pointedly and/or self-

consciously examine the relationship between humanists and the workings of the computer-based compositionist, using these more clearly defined examples to make some relevant associations with other more subtle articulations of similar themes. The first phase of establishing arguments for computers and writing as a humanistic endeavor continues, as I will discuss later in this section, but can be said to span, in general, the years between 1975 and the early 1990s, with some texts playing a role in both phases of the humanistic debate. In this phase, computers and writing teachers and scholars responded to initial humanist resistance, fleshing out an argument for considering as humanist computer-based approaches to writing instruction. The work done in the first phase sets the stage for a second in which this humanistic element is more carefully articulated and qualified, not to mention changed by the emergence of networks and postmodern, social approaches to knowledge.

Computers and Writing and the Sin of Interruption/Corruption

Although this section purports to spend more time with the decade of the 1980s as the decade in which computers and writing “got its legs” while facing the challenge of the humanists who surrounded and questioned its validity, it is worthwhile to look briefly and generally at Edward P.J. Corbett’s “My Write of Passage: From the Quill Pen to the Personal Computer” in the November 1990 issue of *Computers and Composition*. His text, although, falling on the far side of the decade of the 1980s, retrospectively frames some of the important challenges those in computers and writing faced as they attempted to mount a humanistic argument for their emerging discipline. Corbett’s professional stature and the late phase of this career in which he wrote the piece make his “write of passage” even more impressive as a humanistic character study. Corbett’s “conversion

narrative” is a good-natured and remarkably aware account of his own embrace of computers, made remarkable by the fact that he was on the tail end of a distinguished professional career, with none of his distinction owed to the computer and was “...one of those humanists who was dragged kicking and screaming into the Electronic Age but who is now a grateful and enthusiastic supporter of the computer...” (81). Such identification makes Corbett an interesting boundary-straddler: chronologically, he identifies with traditional humanists of the print era, while disciplinarily, he identifies with some of the computer-oriented compositionists he finds implementing and exploiting the possibilities of a new, relatively unknown medium.

The attitude of indifference or reluctance to accept the computer that Corbett might have easily taken is illustrated in the trepidation of computers and writing advocates themselves. There are several reasons for humanist reluctance, many of which will be further discussed below. But at the core of such misgiving was a sense of uncertainty born of familiarity and comfort with the traditional, text-based literature strain of humanism and the humanities. When we consider, for instance, Matthew Arnold’s exhortation for education to teach those texts and ideas that are representative of humanity’s “best,” it is easy to see why those in literature—the “keepers of culture,” in a sense, would be reluctant to embrace the computer, as it threatened the integrity of an enduring body of texts and ideas that not only enjoyed cultural validation but also supplied those who celebrated them with status and power. Contrast the historical strength and resilience of Plato’s philosophy and Shakespeare’s drama with ever-changing, ever-escalating computer technology. As Lisa Gerrard observes, “No sooner have they (humanists) distinguished RAM from ROM than they hear rumors of a

recursive universe, fractal geometries, and hypertextual consciousness. Anything that changes this fast cannot be serious and certainly will not endure” (6). Elizabeth Sommers notes, “When computer-supported literacy enters the picture, the situation becomes even more complex, often stirring resistance or fear among literature faculty. Again, the cultural clash between humanities and technology is an unmistakable part of the problem” (47). The morphing world of technology offered a seemingly stark and unappealing alternative to those who held dearly to traditional notions of text, culture, and the individual. Moulthrop and Kaplan (1994) observed that “the more [they] experiment with hypertext in literature courses, the deeper [their] conviction grows that this new medium is fundamentally at odds with the aims and purposes of conventional literary education” (236). Indeed, humanists like Corbett in rhetoric and composition and many literature scholars can be seen as either the primary audience or a spectral presence depending on publication and/or forum, for the arguments made by computers and writing teachers and scholars. As a new subdiscipline—one operating in a non-sanctioned media milieu, the burden of proof was squarely on computers and writing specialists to show how their interests “fit” with their colleagues. While sometimes this meant vocal disapproval, it oftentimes was felt in the invisible form of cultural expectations.

While computer-using compositionists were fashioning their own humanistic character (even the most sympathetic and active members of the computers and writing movement were, of course, first trained themselves in the humanist tradition) they were, first, establishing that the computer *could* be part of the humanist program. Hawisher, et al, (1994) identify Ellen W. Nold’s 1975 *College Composition and Communication*

article, "Fear and Trembling: The Humanist Approaches the Computer," as the first article published in the field of composition studies that dealt specifically with the implementation of computer technology in the writing classroom (33). The title of the article suggests the great challenge that those interested in the intersection between writing and computer technology faced: before any discernible discussion of whether a computer-based approach to writing instruction could be humanistic in any robust sense of the word, it had first to be established that *any* relationship between the computer and humanists was possible. In her article, Nold argues against the stifling body of technology stereotypes that she deems to be part of the humanist stance: (1) computers stymie creativity, (2) computers control writers' minds, and (3) computers encourage passivity (269). Writing before networked computers became a part of the disciplinary conversation, Nold challenged humanist fears that computers as a *de facto* deterrent to creativity and invention, reminding her colleagues, "Humanists, don't forget that computer programs can be written in many other modes more suited to humanistic assumptions." Importantly, Nold advances a view of the computer as being the "friend" of the humanist, not the enemy, and discusses ways in which well-written programs can encourage satisfying writing activities rather than simply replicate mind numbing drill and practice exercises.

Just as important as Nold's software argument is her entreaty to wary colleagues to relax and play—to see the computer as accessible and as a possible tool for humanists to employ in the classroom. Indeed, it is fear, not inherent disdain for the technology, that Nold recognizes as the most important obstacle to acceptance: "What is preventing humanists from using the computer for humanitarian purposes is merely their belief that

they cannot use the machine” (272). Nold concludes that the computer is simply a new medium, one that *can* support the pedagogy of a “trembling” humanist.

Nold’s article, then, was an important one in that it foreshadowed some of the important obstacles threatening humanistic recognition for computers and writing in English departments: fear and theoretical opposition to what was generally understood to be an overly mechanized and constrictive instrumental medium that would quell creative urges as it channeled and constrained the individual writer. Those following in Nold’s footsteps worked to further dissuade their real and perceived audience (computers and writing colleagues and resistant humanists in English departments), in some ways expanding her arguments but in many ways simply echoing them. Like Corbett, many of those coming to computers and writing had to experience their own “conversion” experience. Cramer (1984) recalls being “a skeptic at one point” and sympathizes with colleagues’ “fears that keep us from institutionalizing the computer” (3). And, as noted above, these “fears” had much to do with a belief that the computer—in any form—could not support humanistic values, largely because of its radically different “instrumental” epistemological foundation. The computer, it seemed, was little more than a machine designed for calculations and data storage and retrieval, not to support humanities concern for meaning, beauty, truth, and literacy—print literacy (Gerrard 5-7). “Data” were numbers and graphs, not words. The computer was too cold and impersonal, and those who used computers had to have markedly different goals than true humanists who recognized humanity in received culture and text, not in the cryptic binary code of 0’s and 1’s that the computer used. In fact, the computer and its promise of efficiency and

sterile neutrality seemed to contradict fundamentally the richness of humanity and the humanities curriculum that supported it.

Moreover, Gerrard argues that humanists frequently saw computers as antagonistic because of a larger sense of what can be called professional “envy” (6). Aware of the great disparity between their salaries and those of their peers in the sciences, many humanists resisted what seemed like the latest “gimmick” feeding the widespread cultural love affair with science and technological advancement. Defining their values as decidedly different than those in the sciences, humanists were compelled to move even farther away from the computer, which was a threat to humanity, something that might, as Nold suggests, thwart creativity and create an over-reliance on the technology, further eroding humanist-valued writing skills.

Concerns with the computer’s effect on creativity amplified fundamental misgivings about authorship. Most humanists saw creativity as an individual talent or phenomenon, like authorship itself. While postmodern and poststructural views of knowledge and text were beginning to take hold in the 1980s English department, long-held beliefs about the sovereignty of the individual author continued to hold sway, with some humanists reluctant to complicate the romantic/subjective notion that truth—and text—were manifestations of the individual, not multivocal creations born of specific contextual and cultural conditions.³ The debate did not begin with computers. Before computers, English faculty had expressed “reservations and skepticism about the role of typewriters” in the writing classroom (Hawisher 51). The humanities traditionally celebrated the individual, and the computer threatened either to mechanize individual creation or to deflect attention from it in networked settings.

Not only did the computer threaten the integrity of the individual, but it also took academically-trained humanists out of their comfort zones. Electronic media was a source of great confusion for many humanists who had grown accustomed to books, pens, and paper, making the practical transition to the computer a difficult one. For instance, Corbett writes of a colleague who "...was going to continue writing her articles on a yellow legal pad with her trusty Parker fountain pen" until reluctantly agreeing to try the mysterious new medium (83). It was enough to get some faculty to test computers for their own use; getting them to consider using computers in the classroom was something else. Those who did found themselves having to engage in behaviors they had never before engaged. The acquisition of hardware and software, coupled with some administrators' reluctance to accept the possibility of teaching English courses with technology, required faculty to become outspoken political advocates with a renewed investment in department economics. Teaching writing with computers meant being active and outspoken, as funding for labs and materials was rarely granted without a struggle.

Finally, the language and symbols associated with the computer raised questions about its congruence with humanist teachings (Eldred and Fortune, Selfe and Smith). Selfe and Smith noted in 1988: "The unfamiliar and often unpleasant terminology computers use is intimidating to many people, especially to those who place a high value on language" (2). On one hand, the DOS-driven language of early personal computers was off-putting to many, as the language was often violent in tone (Abort? Retry? Fail?), condescending, or impersonal toward "end users." Later, Selfe and Selfe's critique in "The Politics of the Interface: Power and its Exercise in Electronic Contact Zones"

(1994) raised further questions about images and metaphors, like the “desktop” and the “trash can,” that made up the Macintosh interface, connecting them unflatteringly to corporate ideology.

As mentioned above, these samples are largely taken from scholarship of the 1980s and early 1990s. But while computers and writing’s visibility in composition and English departments has increased, lingering questions remain about the “natural” disjuncture between what is rightfully a part of the humanities and what is not. Part of this can be attributed to the ongoing process of technology assimilation. As I discussed in Chapter 2, technologies are identified as such when they remain “visible” to users, and while the computer has come a long way toward full assimilation in the academy, the humanities included, it remains identifiable as a technology in contrast, for instance, with a pen, which most people fail to recognize as such given its invisibility; it has become through thousands of years of use, “natural.” For instance, in an issue of the *Journal of Advanced Composition*, G. Douglas Atkins revisits fundamental humanist arguments based on tradition and the relative “humanity” of old media compared to the impersonality of the computer. Atkins’ article, a bombastic tribute to the pen and more traditional approaches to the physical act of writing using traditional technologies, seems to be a direct attack on the very idea of computers and writing. Again and again, Atkins lauds the tactile experience of writing with a pen, suggesting a close connection between deliberate thinking and the measured writing a writer does on paper with a pen as the writing instrument (a non-technology) of choice. Identifying his central argument as this: “...that with which you work, your tool, your implement, your writing instrument matters,” Atkins proceeds to cite several notable writers in support of his claim that the

pen, in contrast with the computer, provides a tool lending itself to careful, reflective writing (76). Despite his qualifying claim to “have no wish to bash the computer, or any other machine for that matter,” Atkins describes himself as “an ancient (or Ancient) in a world of postmoderns...” who has “...no intention of allowing myself to be ‘connected’—so long as I don’t need to”:

Not only do unnecessary adjectives proliferate, as Fay Weldon says, but the computer breeds prose neither comely nor muscular because too often such prose is not subjected to the lapidary care that pen-writing encourages and seems to insist upon. A good pen is a class act, and with one in hand it’s hard not to engage reciprocally. (81)

While not necessarily representative of twenty-first humanist beliefs in the academy, Atkins’ argument demonstrates the resilience of a highly romanticized humanities-driven narrative that pits the emotional and personal self—with the fully assimilated, fully “natural” pen a mere extension of self—against the perceived sterility and impersonality of technology—in this case, the computer. With all these arguments against computer-based approaches to writing and the considerable weight of the history behind them, early proponents of computers and writing had a tough trail to blaze.

Arguments to Assuage Humanists: Expanding and Reconsidering Claims

Elizabeth Sommers writes, “Because so many humanists are leery of changes in institutional structures, afraid of technology, and uninformed about the significance of computer-based literacy, those scholars working with computers and composition tend to confront obstacles at every turn,” which nicely summarizes the situation articulated above (45). Making a case for the computer’s role in writing was problematized by the culture of English departments, the culture in which techno-curious compositionists found

themselves in the 1980s and, in many places, still do today. Sommers accurately suggests that "...the cultural clash between humanities and technology is an unmistakable part of the problem," and with English departments existing at the epicenter of the academic humanities, this disciplinary site became a logical flashpoint for the debate, the "clash" Sommers identifies, when computer-interested compositionists began to explore the breach.

Movements to incorporate computers in a widespread fashion necessitated changes in composition pedagogy and in the training of composition faculty. More importantly, teaching writing with computers called for facilities that English departments operating in the traditional model of instruction simply did not have—nor did they have a budget readily available to accommodate such change. Struggles ensued. Money and resources were needed, and reluctant colleagues were often the gatekeepers who needed to be persuaded that computers might have something to contribute to writing instruction. Indeed, those in computers in writing had to demonstrate that using computers to teach writing was, in fact, just another way to support humanistic instruction. Finally, they had to show that while the media was different, the goals for computer-based writing were similar to those of their humanist colleagues, even if those goals were constantly evolving and becoming more and more ambitious as media—and teachers—became more and more sophisticated. Humanist goals had to lead the way if computers and writing was to be accepted.

The importance of Cynthia Selfe's contribution to this effort cannot be overstated.⁴ Her steadfast insistence that humanist values guide using computers in the

writing classroom both represented and galvanized the voices of instructors interested in using computers to support and enhance their pedagogies. Selfe argues:

What I would like to ensure...is that our profession sensitize English teachers—especially those individuals who want to specialize in the use or design of virtual environments—to the importance of keeping their priorities squarely in the humanist camp and the necessity of working actively to make sure that the virtual environments they teach in are informed by these priorities (“Preparing” 38).

Selfe leaves no room for doubt about the role of humanist values and their necessary priority over instrumental, technology-favorable beliefs. She exhorts those using computer in the teaching of writing to draw liberally upon the humanist heritage those in English departments are born of, “one that places people, their feelings, their impressions and interpretations of life, the study of human experience and the written expressions about this experience in the center of our attention” (38). To put technology before humanist values (something Kurtz and Lamont would deem impossible—just as putting humanist values ahead of technology would be impossible) would be “abrogating the rights of both teachers and students.” Amplifying the importance of these humanist values, Charles Moran, in the same volume, argues that egalitarian online classrooms “could become forums for our emerging cultural democracy” (21). Statements like these raised the possibility that pedagogy arising from computer-based approaches to teaching writing could be founded upon humanist beliefs that emphasized the primacy of the individual and appreciated the full complexity and dimensionality of human beings and their relationship with society.

Others chimed in. Elizabeth A. Sommers and James L. Collins take up Selfe and Moran’s position: computer programs need to support humanistic goals. First, computers

need to be secondary to the teacher, whose pedagogy dictates the use of computers in the writing course, linking the computer to theory, especially composition theory that prioritized the value of collaboration and interaction between teachers and students (31).⁵ Then, with those mandates already observed, teachers are to choose programs that empower the learner without devolving into drill-and-practice modes that reduce writing to a current-traditional, windowpane looking out on to reality (34).

Still others took a more conservative approach (Schroeder and Boe, van Alkemade), advocating a “minimalist” approach to computer implementation in an even greater effort to foreground humanistic pedagogical values: “We didn’t want, by introducing computers, to lose sight of our central values as teachers of writing, or of the good things that were already happening in our classes” (Skubikowski and Elder 89). The point was that the technology and humanistic values could *coexist* in the same classroom but that the computers would not be used indiscriminately. Technology would not erase humanistic purpose.

However, such views, while persuasive on one hand, did not adequately address an important related argument: they did not generally depict the computer *itself* as humanistic (the views of these thinkers, particularly Moran and Selfe, whose comments cited above are part of their own much larger, much more expansive, bodies of computers and writing scholarship that have played a vital role in “re-seeing” computers *as* humanistic). Snow’s “two cultures” still existed and, unlike the humanistic framework outlined in the *Humanist Manifestos*, computers were presented as a possible *supplement* to humanities goals, a supplement that, if adequately supervised and subjugated, might contribute.

Other voices in the field took up this important component of the humanist/technology debate. Helen J. Schwartz, for example, recognizes a distinction between humanist and non-humanist software, with recognition of the former prompting her to engage in the uncomfortable political and economic behaviors necessary for leaping into computers and writing when it was safer to stay away. She notes, "...I started seeing *computer applications that looked interesting and humane*," those applications being Tom Dwyer and Margot Critchfield's Solo/NET/Works and "the open-ended, interactive programs of Ellen Nold (1975) and Hugh Burns (Burns and Culp, 1980)" (10, emphasis mine). In "The User-Friendly Fallacy," Fred Kemp makes a similar distinction between writing software applications that relies too heavily on dehumanizing, closed-ended questions that do not allow writers to explore topics in all their richness and those more open-ended in nature, prompting greater and deeper user interaction with the ideas at play in the act of invention ("The User-Friendly Fallacy" 35-36). To both Schwartz and Kemp, the, computers and computer software not only *could* coexist with humanist values, they could also directly support and extend humanistic approaches to writing instruction when done "correctly." In other words, Schwartz's and Kemp's respective arguments went beyond simply persuading humanists that they could metaphorically have their cake and eat it by using technology *and* teaching humanistic writing at the same time. Instead, "good" computer applications could manifest humanistic values and be thoroughly enmeshed in the humanistic teaching of writing, and not be something that might just (sort of) peacefully coexist with composition pedagogy. The relationship, if nurtured, could be almost "natural." The computer itself—or the software it enabled—could actually *be* humanistic, a disposition toward technology that,

while still questioned, suggested a different relationship between technology and humanistic goals more in line with what Lamont and others describe.

Other appeals played a significant role in encouraging a happier relationship between computers and the humanities in computers and writing. Among the most important, though, was healthy skepticism and critique, something Selfe has advocated since the early 1980s. More than highlighting important concerns and qualities of technology that might adversely affect humanistic writing instruction, the move to critique, to acknowledge faults and problems with computer technology, played a pivotal role in the larger move to identify, as an emerging subdiscipline, with disciplinary values held by others in English departments. Skeptical of technology, humanists, no doubt, found off-putting some of the unbridled enthusiasm and uncritical claims made by early computers and writing enthusiasts. However, efforts on the part of many in computers and writing to “self-police” lent strength to the larger argument that computer technology could fit into a humanist paradigm. For example, Anthony DiMatteo sees the possibility for very real, very present instrumental interests in efficiency and progress as potential threats to humanistic education in much the same way Kemp later critiqued the “user-friendly fallacy” as seducing users into thinking the computer was facilitating a rich, humanistic experience for the student writer when in fact poorly designed software was doing the opposite. Such moves, along with others that came later in the 1990s (for example, Selfe and Selfe’s “Politics of the Interface”) lent credibility to the computers and writing movement in the eyes of humanists by demonstrating the type of self-conscious, self-aware critique needed to show identification with humanist colleagues and humanist ideals. To its advocates, computers and writing was not about disdaining

humanist values. Rather, it was about locating those values and the production of those values in a new, electronic space.

Phase II: Constructing a Humanistic Character in the Postmodern, Politicized English department

The computer-as-humanistic argument of much of the 1980s is different in character than the argument in the late 1980s and 1990s-present when local-area networks and the developing Internet became part of the disciplinary conversation. Previously, writing with computers meant, at various stages in the development of computers and writing, using drill-and-practice software to enforce good grammar habits, generating text in user-friendly electronic word processing environments, or providing open-ended heuristics designed to aid the individual writer as he/she went about the task of invention. Networks shifted the focus of computer-based instruction away from individual writers composing texts and on to writers working with other writers to compose text and community-defined knowledge as part of a new epistemological paradigm.

The shift in emphasis to networks and network theory was critical in terms of computers and writing's emerging sense of disciplinary relationship to composition studies, and, at a more macro level, to English classes and an evolving sense of the postmodern humanities. Postmodernism was a binding force, a theoretical space in which computers and writing could readily demonstrate shared values and knowledge theory with its disciplinary peers. Postmodern literary theories challenged the long-held tradition of focusing the critic's attention only the isolated literary text while engaging the act of criticism in an effort to unpack a literary work. If postmodernism describes

culture and reality in terms of the antifoundational, in literature classes, the independent text was where postmodernism's critical forces were aimed. Deconstructionists like Derrida, Culler, de Man, and Miller challenged the view of the autonomous text and the autonomous author, calling into question, along with Michel Foucault and Roland Barthes, the very idea of authorship. Text in postmodern, poststructural English department became a site of contention, a site of instability, and the acts of writing and reading, respectively, were challenged in ways never before seen.

Such theoretical changes offered new opportunities for computers and writing specialists, like technical communication scholars, to develop a stronger case for humanistic alignment and "fit." Composition scholars (Bruffee, Trimbur, Berlin, LeFevre) began to explore the possibilities of seeing composition, the act of composing, as a social act rather than the mental workings of an individual author divorced from context and culture. Social approaches to composition supported emerging emphasis on "process" pedagogy that shifted attention toward invention and the ways in which text came to be rather than the final, finished product considered at a remove from the writing process. Such theoretical shifts, in many ways, mirrored those underway in literary studies. The networked computer, computers and writing scholars asserted, was at once the ideal metaphor and ideal medium to both represent and support changing views of authorship. The emphasis was taken well beyond the fact that the computer, particularly the networked computer, could play a significant role in a postmodern epistemology to considerations of the *ideology made present in the act of invention*. In other words, the networked computer and the act of writing became the very site at which a writer participated in advancing, shaping, and expressing ideology and humanistic values, those

that computers and writing scholars in the 1980s promised could still be a part of a computerized pedagogy. Writers could participate in a communal construction of knowledge and the reproduction of articulation of community-based ideology in the act of composing (Handa 170-172). “The computer, more than any staff development program, journal article, or administrative mandate, has the potential to alter the environment of the classroom, and with it the role of both teacher and student” (Handa 50). And a computerized classroom can blur the line between teacher and student and enhance students’ active participation in their learning” (Selfe 67). This helped create an even greater sense of identification between the purview of computers and writing and that of both traditional composition studies and literary studies, as concerns with ideology manifested themselves in the popularity of critical theory, and cultural studies pedagogy during much of the late 1980s and 1990s.

Networks and Social Composition

Again, the key to computer and computers and writing’s development as a humanistic candidate/discipline was the epistemological shift made possible by a new focus on the power of networks as the primary site for composition instruction. In both their timelines (1990 and 1992, respectively) and their scholarly recognition, Thomas Barker and Fred Kemp’s “Network Theory: A Postmodern Pedagogy for the Writing Classroom” and Lester Faigley’s *Fragments of Rationality: Postmodernity and the Subject of Composition* stand as two significant articulations of the possibilities of computer networks in composition instruction, with each citing the close relationship between postmodern views of language and knowledge and the activity occurring in

electronic networks.⁶ Barker and Kemp, citing Lyotard, Foucault, and Rorty, begin their important chapter by sketching a view of the postmodern that emphasizes epistemology:

Postmodern in our terms means both a way of looking sensitively and self-consciously at the conditions of the present, and also a means of appropriating new ways of knowing about knowing itself, unencumbered by static assumptions or conventions. A postmodern writing pedagogy represents a structured attempt to combine the realities of current social and economic conditions with instruction that emphasizes the communal aspect of knowledge making. (2)

As a means of getting to network theory, Barker and Kemp, then, note the educational realities—burgeoning enrollments, open enrollment, cultural diversity, nontraditional students—of the late twentieth-century university in order to situate historically their postmodern pedagogy. Especially important for this study is Barker and Kemp’s claim, echoing James Mingle, that “planning in the area of higher education should consider a *system perspective* that will allow for the goals of writing instruction to join with the contributions and goals of other university programs” (5). The traditional proscenium classroom model does little to advance the goals of the university, especially the enfranchisement of its students, nor does it particularly aid the university in achieving its larger goals vis-à-vis culture and commercial society.

In response to these conditions, Barker and Kemp propose a postmodern, networked approach to writing pedagogy. A networked writing environment offers new means to make education more progressive and efficient with an eye toward empowering students and better preparing them for life and a career outside of the university setting. A networked approach to learning emphasizes interaction and egalitarianism (16-17) and collaboration. According to Barker and Kemp

The essential activity in writing instruction is the textual transactions between students. These transactions should be so managed by the network as to encourage a sense of group knowledge, a sense that every transactor influences and is influenced by such group knowledge. (15)

Software, not a teacher, manages the interaction, and, “In contrast to stereotypical expectations, networked instructional systems generate many times more student-to-student transactions than traditional instruction...” and “...the sharing of text easily promotes the power of text, which in turn motivates and directs the writer in instructionally effective ways” (17-18). Student attitudes improve, as do revision skills and the adoption of discourse conventions (24).

One key point to note here is that Barker and Kemp recognize the postmodern, networked approach as a new realm of influence for the computer in composition studies, citing the distinct difference between networks and previous comparably unsuccessful forays into computer-based writing instruction: “Nothing has proven more dismal than the lack of instructional success microcomputers have demonstrated in their brief careers as drill-and-practice machines, pseudo-human tutors, and automated graders” (26). Interestingly, this comment echoes the concerns recognized and addressed in other computers and writing scholarship as teachers and theorists responded to humanists’ concerns about the instrumental and isolating, and thus, dehumanizing nature of early computer applications in the writing classroom. Barker and Kemp contrast this with the humanistic *interaction* facilitated by networked computers. Again, this suggests a recognition on the part of computers and writing specialists that changes in epistemology—the shift from modern to postmodern epistemology—calls for a simultaneous change in the way we define humanism and the humanities in which

computers and writing locates itself. Humanism, traditionally taken up with the advancement and priority of the individual finds itself necessarily morphing to a more community-based framework in light of postmodern challenges to the notion of the autonomous author and, for that matter, the autonomous human/citizen, an evolution of sorts illustrated by the progressively international nature of the *Humanist Manifestos*. Interaction and multivocality become associated with English departments and humanistic concern, and Barker and Kemp, among others, identify with the larger disciplinary shift in this direction by describing how these abstractions show up in a computer-based approach to teaching writing.

In *Fragments of Rationality: Postmodernity and the Subject of Composition*, Lester Faigley begins a discussion of the networked classroom by first studying why computers and writing scholarship has been marginalized. According to Faigley, the computer has traditionally been represented as a replacement for the teacher in the information delivery process, with the computer playing the role of an “electronic workbook(s)” that facilitates a “drills-and-skills curriculum in prepackaged modules” (166). This view of computers imperils new technology in the traditional milieu of English classes because such uses “have perpetuated earlier stereotypes of computers in education as reductive, anti-humanistic, and tools for domination.” By emphasizing (and often celebrating) how computers can tirelessly drill students in ways more objective and consistent than human teachers, some computers and writing scholars have further distanced computers from the core values of the humanities.

Although Faigley carefully qualifies his claims for the benefits of new networked classroom, his enthusiasm for the technology is readily apparent and echoes that of

Barker and Kemp: “These technologies now make it possible for a writing class to communicate electronically on networks, and using networked computers to teach writing can change the nature of a writing class” (167). “By allowing everyone to ‘talk’ at once, the use of networked computers for teaching writing represents for some teachers the realization of the ‘student-centered’ classroom. The utopian dream of an equitable sharing of classroom authority, at least during the duration of a class discussion, has been achieved.” Linking the phenomenon of networked writing and discussion to Lyotard’s notion of postmodernity, Faigley recognizes in a *Daedalus InterChange* discussion transcript a “nonliterary text” that “is inherently multiaccentual and defies the conventions of clarity, unity, and coherence” (184). These dynamics resist instrumental critique by foregrounding a self-structuring form of communication and interaction.

Like Kemp and Barker, Faigley’s commentary on networked computer environments highlights a new humanity—a new realm of the humanistic—rooted in postmodernity, which I discussed in Chapter 3. The term “humanistic” becomes associated with socially-constructed authorship, democracy, and nonlinearity. Moreover, these views of postmodern epistemology in writing, facilitated by the computer, again invoke the important issue of ideology and ideological concerns. With postmodernism challenging grand narratives, as Lyotard suggests, replacing them with what Clifford Geertz has called “local knowledge” or Lyotard’s *petit recits* (“little narratives”), knowledge and culture no longer enjoy any sense of large-scale cohesion. Instead, knowledge, writing, reading, and understanding become products of individual or community perspective, opening the door to postmodern modes of analysis, including feminist critique, postcolonial critique, and Neo-Marxism. Text, or reality, in this view,

could no longer be seen as supporting a single, foundational meaning in the wake of postmodernism. Instead, it could be seen as supporting many views and interpretations that could be communally determined as communities and groups arrived at their own definitions of “truth.”

The electronic network put into play postmodern pedagogy and postmodern epistemology, and in doing so, ideology became an important component of computers and writing scholarship and teaching. As teachers and theorists grew to understand and appreciate the multiple perspectives that shape knowledge, they began to see electronic spaces as sites of ideological conflict and articulation. Several scholars (Regan, LeCourt and Barnes, Flores, Handa) in computers and writing joined the larger disciplinary conversation going on in composition studies—fueled by the postmodern and poststructural theories impacting English classes—that considered the electronic space of the network in terms of critical and liberatory pedagogy, as an ideological site in which issues of race, gender, and sexuality took on a postmodern face in a new environment that supported the “trying on” of various perspectives by providing a “voice” for students who were often silenced in traditional classroom environments. As with earlier declarations of newfound freedom and liberation in the networked environment, however, others (Hawisher and Selfe, van Alkemade) in computers and writing worked to limit the scope of such claims and in doing so necessarily balanced the unbridled enthusiasm of many in the field. If postmodernity changed the face of literature studies, the electronic networked writing environment aligned nicely with newfound emphases on identity, ideology, and multivocality, strengthening claims for computers and writing as a humanistic discipline.

Hypertext and the Humanistic

Further developing the connections to the humanities for computers and writing was the emergence of hypertext in the early 1990s. Expanding the possibilities of local area networks, hypertext theorists like George Landow and Jay David Bolter sought to extend the discussion of electronic space, looking at the possibilities of an electronic medium that seemed postmodern by nature in its ability to support alternate readings and defy traditional linear encounters with text. The associative quality of hypertext, some theorists argued, could be seen as *more* human than the fixed, linear printed text that had been the foundation of the humanities for centuries because it allowed readers more individual freedom to follow their desires and needs when encountering text rather than being subjected to the author's wishes and sense of narrative direction.

This point cannot be overestimated in its importance to computer and writing's attempt to establish a humanistic footprint in English departments. While Bolter's purpose in much of his important text *Writing Space: The Computer, Hypertext, and the History of Writing* is to trace historically different writing media in order to better access, position, and describe the capabilities of electronic hypertext vis-à-vis those media, his secondary purpose might be best described as arguing for the humanistic nature of hypertext and electronic writing. He does this by engaging separately but then linking together the past (the oral tradition) and the future (hypertext) of human communication. By returning to oral culture, Bolter appeals to readers' romantic sensibilities regarding the "humanness" of pre-Gutenberg society (59). And by emphasizing the possibilities of new electronic hypertext as the emerging medium, that which will one day replace the printed word (here in the "late age of print") and that which, in many ways, better

articulates human information processing and reading tendencies in its associative nature, Bolter appeals to the human desire for progress over current print technology. More importantly, though, when considered together, Bolter's rhetoric and celebration of a new "writing space" has the effect of dehumanizing the fixed text. Emphasis on the oral tradition and human nostalgia for it, as well as emphasis on the ways in which hypertext replicates some of the dynamics of oral culture, allow Bolter to claim an alignment between electronic media and the complexity of situated communication and textual invention practices being realized and celebrated in English departments broadly defined. The richer dimensionality of hypertext and electronic writing space promises to be a potentially more rewarding forum in which humans might read and write, even as traditional notions of each are blurred and combined. In other words, the hypertextual electronic writing space becomes a new site of human potential—a new humanistic space.

Importantly, then, we see technology in the form of hypertext being celebrated not simply for instrumental purposes and for the sake of recognizing impressive progress. Instead, we see Bolter, Landow, and others making humanistic claims about the ways in which hypertext might be a "better" incarnation of media, one that allows humans access to new means of expression more recognizable in the postmodern world and the views of knowledge and truth that it supports. Landow's *Hypertext: The Convergence of Contemporary Critical Theory and Technology* appropriates Derrida and other deconstructionists and poststructuralists—the stuff of emergent theory in the 1980s and 1990s literature department—to describe the capabilities of hypertext, highlighting the de-centered, multivocal, and intertextual nature of the medium (10-11). Others, like John

Slatin and Johndan Johnson-Eilola, advanced similar arguments for hypertext's theoretical congruence with postmodern and poststructural perspectives on reading and writing. Others still (Sullivan) investigated the epistemological framework supported by postmodernism and hypertext, locating within the new electronic space a new site, in much the same way that the aforementioned network theorists did, for ideological critique and description, one that called for repositioning of contemporary discussions critical literacy, liberatory pedagogy, gender, and sexuality. According to Selber and Karis, "although computers can be used for both productive and unproductive purposes, if we choose the right ones educational and societal progress will necessarily follow" (112). On some level, such logic ring true: a hammer can be used either to build a shelter or to commit a crime. At the same time, however, a hammer cannot replace a screwdriver or a saw. In other words, computer technologies as artifacts of an industrial culture, instantiate particular ways of knowing and working that are far from neutral. But grand narratives perpetuated in Western culture, those linking technological developments with notions of cultural progress, remain an influential force encouraging computer-related optimism in educational settings (Postman 34).

Again, the impact of postmodern thinking on computers and writing's status as a humanistic subdiscipline of English departments cannot be overstated. As new perspectives on text emerged, and literary theory evolved with them, computers and writing, via hypertext, found more and more overlap between the two "cultural" domains.

Conclusion

Identifying possible parallels between the ways technical communication and computers and writing define the parameters of their humanistic character is made

extremely difficult by the vastly different historical circumstances under which each came into being, in addition to the different technologies and technological spaces each field claims as part of its self-definition. Yet there might still be something to say about technical communication's and computers and writing's shared objective here: describing a *humanistic* character in a humanities environment while one of the most significant defining characteristics of each field is its close relationship with technology in one form or another. Given Snow's model and its force in organizing thought and attitudes in academe and society, this similarity warrants consideration in that it gave shape (and continues to shape) to the relationship each holds with English departments. This affects the sense of "fit" each enjoys in English departments.

Both computers and writing and technical communication have had to answer questions about value and ideology in their respective early histories. While many early technical communication courses used literature to ensure that the content of the course contributed to the "humanizing" of students and the cultural transfer objective of the humanities, early computers and writing teachers and scholars like Ellen Nold developed arguments to show how using computers to teach writing would not get in the way of humanist values, and, indeed, might facilitate the pursuit of historically validated humanities objectives, like literacy. Later, both technologized rhetorical subdisciplines defined themselves and their relationship to the humanistic, in part, in terms of postmodern approaches to knowledge and text, as well as ideological concerns that became more visible in light of new theories of reading and writing that "opened up" the text and made prominent issues of gender, politics, identity, and ethics. Such moves have resulted in a greater sense of overlapping concerns with other disciplines, like literature,

that might contribute to greater cooperation between and among those fields of study that identify with English departments but, at this point, have had little more than anecdotal success in doing so.

What remains is the need for a revised way of thinking about technology's relationship to English departments, one that moves beyond asserting the view that humanities concerns can happily coexist *alongside* technology or that the humanities might "discipline" technology to produce positive and acceptable "humanist" outcomes. This view, while improving upon the more traditional perspective of technology-as-enemy, nevertheless reinscribes Snow's dichotomous relationship, making technology "other" than the humanities. As I think the above discussion shows, scholars in computers and writing have been working toward this in implicit fashion, as have many in technical communication, such as Stuart Selber, Robert Johnson, and Johndan Johnson-Eilola, all mentioned in Chapter 4. But I would argue that in the interest of fashioning a representative vision of each of these technologized rhetorical subdisciplines, technology must become a more *explicit* component of these humanistic descriptions. The "coexistence" model does not succeed because it suggests a disciplinary role where technology is seen as an acceptable *component* of humanistic study and concern provided it does not get in the way of other, more traditionally valued, concerns. Looking to the *Humanist Manifestos* as an alternative perspective can help us pragmatically weigh the consequences of rethinking the role of technology in the humanities by considering it not as a possible support to them but as a manifestation of them. In this view, the humanities and English departments, if they purport to define

themselves as interested in the human condition, human values, and the well-being and inspiration of all, must recognize technology as the manifestation of those very hopes.

The move to include technology in humanistic definition radically changes the role of the humanities in the university. According to Dryden:

for those of us involved in literacy education, hypertext's polyvalence—its integration of multimedia and its invitation for students to use cognitive skills not traditionally associated with the study of literature—supports an enlarged view of literacy in the worlds inside and outside academia that are becoming, whether we like it or not, simultaneously more diverse and more interdependent. In this regard, hypertext helps us achieve a number of tasks related to (though not limited to) writing and reading. (285)

In fact, the very potential for the role of the academic humanities changes when technology becomes a part of the field of consideration, rather than an antagonist. It is the process of making these arguments and articulating a relationship between technology and the humanities that puts technical communication and computers and writing in the position to play a greater role in the twenty-first century academic humanities.

¹ Computers and writing is a “subdiscipline” of composition in English departments. Its locus of concern draws from several fields of inquiry, including composition, technical communication, and computer programming.

² Sharon Crowley's *The Methodical Memory: Invention in Current-Traditional Rhetoric* (1990) presents a view of composition as, in large part, a-rhetorical. Current-traditional methods of instruction relied heavily on formula at the expense of rhetorical invention as understood in classical rhetoric. The rise of the “New

Rhetoric” in the latter half of the twentieth century helped restore invention and classical principles of rhetoric in composition instruction.

³ While this perspective is now widely accepted in composition circles, in the early 1980s, a social view of writing epistemology was hardly assumed. Karen Burke LeFevre’s *Invention as a Social Act* (1987) is an excellent example of a comprehensive treatment of the subject of individual v. social authorship.

⁴ Witness Selfe’s aggressive response to Atkin’s article in the Spring 2001 edition of the *Journal of Advanced Composition*.

⁵ It is clear that computers and writing “grew up” alongside the process “paradigm shift” heralded by Maxine Hairston in “The Winds of Change: Thomas Kuhn and the Revolution in the Teaching of Writing,” making appeals to process potentially persuasive to traditional composition teachers.

⁶ Carolyn Handa’s *Computers and Community: Teaching Composition in the Twenty-First Century* (1990) is an excellent resource on the subject, with several authors rooting their pedagogical arguments in postmodern theory.

CHAPTER 6

THE IRONIC CHALLENGE OF MAKING A SPACE FOR TECHNOLOGY IN TECHNOLOGIZED RHETORICAL SUBDISCIPLINES

Introduction

In the last two chapters, I have sketched a way of reading texts that make explicit arguments for the “humanistic” nature or character of both technical communication and computers and writing. I have also suggested that the role of technology has been understated in these arguments, in spite of the importance of technology in defining these two disciplines. Although it is clear that technology¹ is central to the identity of each field, it is also, perhaps, the most complicated characteristic to accommodate when it comes to making a case for the humanistic nature of either. This complication is, in many ways, a function of context: English departments, the academic setting in which both technical communication and computers and writing so often reside.² According to the website for the Society for Technical Communication (STC), approximately 265 academic programs worldwide currently offer coursework, certifications, distance education, or degrees currently, approximately 95 programs worldwide have four year programs at colleges or universities, and approximately 74 schools offer the bachelor of arts degree (“Academic Programs”). Traditionally the site of literary study and, among other things, the pursuit of arch-humanist, romantic concerns with human essence and spirit, English departments have not always been the most hospitable space within which

to describe a humanistic character that accommodates technology. Both the “sweetness and light” Matthew Arnold saw emerging from literary study and the transcendental access to the sublime have seemed and continue to seem at odds with disciplines that concern themselves with corporate training and hypertext, military weaponry and electronic text. Bernadette Longo claims, “Because technical and professional communicators share a history as firmly rooted in the liberal arts as its is in the sciences, we occupy a unique position spanning these two disparate bodies of knowledge and approaches to making knowledge” (164). Certainly, this holds for both technical communication and computers and writing, but the “unique position” is rarely a comfortable one.

In both technical communication and computers and writing, scholars seeking to describe the humanistic character of their respective disciplines have necessarily made such arguments within the academic humanities’—“particularly English departments”—acceptable range of humanistic definition. This range has not typically accommodated technological concerns, with technology oftentimes seen as a force militating against humanity rather than as the embodiment of human dreams and desires or even as a means of fulfilling those dreams and desires. Although some descriptions of humanist philosophy (such as the theory advanced in the three iterations of the *Humanist Manifesto* discussed in Chapter 3) propose a more holistic relationship between and among human interests, values, and communication and technology, scholarly arguments for the humanistic status of technical communication and computers and writing have oftentimes either implicitly or explicitly aligned with the traditional, more institutionally acceptable English departments’ view of technology as something outside the locus of humanist

concern. Thus, persuasive arguments for the humanistic character of both technical communication and computers and writing have focused on historically validated English departments issues like rhetoric and interpretation, and, more recently, postmodern considerations like gender, intercultural communication, ethics, and ideology. Rhetoric stands as the common bond linking humanistic arguments from the inception of technical communication to current similar arguments in both technical communication and computers and writing. I am not the first person to make this claim. In his 1996 article, "Instrumental Discourse is as Humanistic as Rhetoric," Patrick Moore challenges humanistic depictions of technical communication, citing scholars' tendency "to rehabilitate technical communication by redefining it as rhetoric to make it seem more ethical and to make it fit better within the humanities" (114). In his critique of this strategy, Moore recognizes some of the political tensions mentioned in Chapter 4: "By defining technical communication as rhetoric or literature, these scholars have tried to elevate and dignify technical communication for literature professors, and they have tried to naturalize it for the many traditionally (i.e., classically) educated discourse analysts in English and rhetoric departments." In an effort to gain acceptance in traditional humanities spaces, historically dominated by the interests of literature, technical communication scholars have sought to identify with traditional interests by foregrounding the rhetorical and the linguistic. Doing so "naturalizes" or, to put it more urgently, "sanitizes" technical communication for English departments' inclusion by buffering its not-so-savory content and associations with the corporate world and technology. Moore criticizes such arguments for valorizing and foregrounding overlapping interests like literary theory and poetic imagination and abandoning

“instrumental discourse”—a more functional, limiting discourse, in the process. I will return to Moore’s argument shortly. My argument in some ways extends and in other ways diverges from his.

While Moore questions those humanistic arguments that exclude instrumental language and its epistemology in favor of only rhetorical and more blatantly literary characteristics, I question those same arguments based on their tendency to exclude or shift attention away from technology, the product or material artifact, critics claim, of the instrumental epistemology Moore defends. In other words, I second Moore’s contention that in their zeal to describe a humanistic technical communication, scholars have spotlighted one component of the discipline at the expense of another equally important component. However, I argue that as theorists shift critical concern for technical communication toward rhetoric and away from instrumental thinking, they also—consciously or unconsciously—divert important attention away from technology itself. This is done to the extent that visible technologies’ role in humanistic argument remains elusive or, at worst, ignored at great expense for both technologized rhetorical subdisciplines and English departments more broadly defined.

This is certainly not to suggest that scholars have excluded or rejected technology from general disciplinary conversations of practice and definition; nothing could be further from the truth. Indeed, whether it is the networked personal computer in computers and writing or any number of technologies in technical communication such as RoboHelp or HTML, technology broadly defined has always been central to disciplinary definition. But when discussion turns to describing what makes them “humanistic” and defining a disciplinary character, technology moves from its definitional role and into a

peripheral, suspicious space such that it fails to assert the influence it might in such discussions. Using the *Humanist Manifestos* and other humanist and pragmatist philosophy, I argue here that this move—whether implicit or explicit, intentional or unintentional—is to the detriment of both these two technologized rhetorical subdisciplines and English departments itself. Embracing technology, as a humanist element or “aspect,” to use Dombrowski’s term, in and of itself is crucial to developing technologized rhetorical subdisciplines because doing so can allow scholars and practitioners to understand technology more critically as a manifestation of human values. Moreover, claiming a space for technology in humanistic argument allows theorists and practitioners alike to move beyond earlier arguments that strain to show either how technology and the humanistic could coexist³ or how traditional humanistic elements “show up” in and condition a technologized rhetorical discipline.⁴ Elements of Patrick Moore’s epistemological argument for instrumental discourse coupled with the intersection of pragmatic philosophy and the view of technology advanced in the *Humanist Manifestos*, can give scholars in technical communication and computers and writing occasion to rethink oft-adopted traditional English departments’ views toward technology and consider the implications of relocating technology at the *center*, not the periphery, of humanistic argument.

More pointedly, we have to get well beyond the “coexistence” tendency in these humanistic arguments, and the *Manifestos* and pragmatic philosophy together provide a possible lens through which to rearticulate the relationship between technology and the humanities. Doing so is risky given the company that computers and writing and technical communication keep, situated as they so often are in English departments. The

governing assumption in the *Manifestos* and in pragmatic philosophy is that the two—technology and the humanistic—are in essence one: technology is the result, the executor, and the conditioner of the value structure set forth in humanist philosophy. Such a view is no small departure from tradition. But at stake here is an important phase in developing the “scope” and maturity of both technical communication and computers and writing. Moreover, adopting such a perspective can help expand the scope of English departments such that it might influence not only developing and using technology, but also the attitudes and beliefs governing our society and world in significant ways in the twenty-first century.

“Instrumental” Discourse and its Link to Technology

As noted above, humanistic arguments in technical communication and computers and writing have been based on rhetoric and language, which serves as a relatively acceptable and recognizable common ground with traditional English departments. Indeed, “rhetoric” becomes largely synonymous with “humanistic.” Patrick Moore’s critique of this tendency helps situate my own argument by (1) calling into question some of the epistemological assumptions that undergird the rhetoric = humanistic conflation, and (2) rehabilitating, to an extent, instrumental discourse in humanistic argument, which has implications for the way we see technology. While his argument does not explore the role of technology, per se, in humanistic argument, instrumental discourse and its pursuant “rationality” are oftentimes seen as the motivating epistemology behind technology development and with it the more heinous effects of misguided technology use (Habermas, Lyotard). Instrumentality is often linked to efficiency, which, when misappropriated, can become the anti-humanistic part of what Neil Postman calls a

“technopoly” in which human interests are subjugated to technological interests, and human goals become entirely conditioned by what technology deems possible and desirable (20). In this view, efficiency becomes an arch-value to the exclusion of other important human considerations. In this section below, I will, therefore, focus my discussion primarily on technical communication.

According to Moore, technical communication scholars have attempted to distance technical communication from instrumental discourse and instead align with rhetoric and literary theory in order to depict the humanistic nature of technical communication. The key point in the debate hinges on how we define instrumental discourse. Moore finds such a stance problematic, noting that, “overemphasizing rhetorical, literary, and creative aspects of technical communication ignores what is socially useful and humane about instrumental aims of technical communication” (101). Moore cites Stephen Toulmin, Richard Rieke, and Allan Janik’s definition of instrumental discourse as that collection of “utterances that are supposed to achieve their purpose directly, as they stand, without the need to produce any additional reasons or ‘supporting arguments’” (103). To Moore, the sin committed by advocates of rhetoric in technical communication (Tebeaux, Rutter, and Dobrin, among others) is one of degree. In principle, he agrees with their attempt to expand the discursive field of consideration in technical communication beyond positivist “windowpane” language (Miller) and epistemology by exploring the implications of rhetoric and the social construction of knowledge in the discipline, noting “. . . critics who reject the claims that the language of technical communication is objective or a windowpane are certainly right” (110). But attempts to overemphasize the rhetorical or creative side of technical writing to the

exclusion of instrumental discourse are ill advised because “In many technological situations, a rigid, one-to-one correspondence is required between the signifier and the signified or else someone could die.” In other words, technical communicators are often called on to take charge of a rhetorical field and shape such a one-to-one correspondence in pursuit of human interest—in this case, safety from harm, protection from danger. For instance, cautions and warnings necessarily rely on a linguistic efficiency, a one-to-one correspondence between signifier and signified, what Moore claims is an instrumental relationship. A writer’s effort here is not to open language up but rather to narrow it in order to narrow the range of possible reader responses. And, in order to understand and appreciate human communication more fully, technical communicators would do well to study Stephen Littlejohn’s *Theories of Human Communication*. I recommend the following three theories: Speech Act (86), Relevance Theory (133), and Symbolic Interaction (159). In addition, see Charles Morris’ theory about signs, behavior, and interaction (65), and Susanne Langer’s theory of symbols (69). These theories underscore the significance of effective communication.

Moore’s challenge, then, has less to do with the broad scholarly shift toward recognizing technical communication’s inherent rhetorical nature and more to do with actively confronting the corollary notion that defining/limiting technical communication to instrumental discourse must be categorically rejected if we assume a rhetorical disciplinary character. According to Moore, instrumental discourse represents just another means by and through which technical communicators appropriate and condition language for salutary, humanistic purposes. And while much discipline-related scholarship has focused on instrumental discourse as dehumanizing, Moore suggests that

the opposite can, in fact, be true: "...standardized uses of language and instrumental aims of discourse do limit the semantic range of words and limit the creativity of writers when describing actions and functions. But they do so for humanistic reasons: to diminish pain, to increase the quality of life, and to save lives" (113). To Moore, the humanistic goals of instrumental discourse have been inappropriately dismissed as the field of technical communication moved to embrace a rhetorical perspective toward the way technical information is generated and disseminated. Unfortunately, this epistemological sea change simultaneously washed away with it the possibility that instrumental discourse might positively serve human interests. And given the epistemological implications of this perspective, technology—itsself based on efficiency and instrumentality—is cast into a humanistic gray area, if not entirely excluded from the discussion. Technology critiques advanced by Brantlinger, Postman, and others mirror, in many ways, the critiques of instrumental discourse to which Moore responds.⁵

Instrumental discourse and technology both set forth linearity and efficiency as explicit goals, and critics point to this characteristic as indicating a deliberate exclusion of the full particularity of the human experience, the sophistication of language on one hand and the ethical and expansive consideration of human well-being on the other.⁶

In their zeal to align with more traditional humanistic ideas, the theorists Moore interrogates cast light on important characteristics of and possibilities for technologized rhetorical disciplines. Indeed, contemporary issues in both technical communication and computers and writing—gender, politics, intercultural communication, etc.—are clearly the product of seeing language as rhetorical, as constructing meaning, not simply "porting" truth in a Platonic sense. If meaning is constructed through language, these

issues take on a certain vitality, and meaning can be manipulated in important ways with desirable consequences. At the same time, enforcing a rhetorical humanistic character to the exclusion of instrumentality and the technology that emerges from a shared epistemology is dangerous and limiting.

Moore argues that instrumental discourse standardizes meaning in a discourse community, and I am sensitive to his argument, although I tend to believe that the rhetorical/instrumental discourse split is somewhat artificial. But more than for seeing any particularly unique value in instrumental discourse (I tend to see it as another form of rhetoric), I endorse Moore's attempt to rehabilitate instrumental discourse because technology functions in a similar way, reflecting the values of the community while functioning as an artifact that reflexively reflects and conditions human values. Thus, like Moore's suggestion that instrumental discourse plays a vital role in the "humanities" of technical communication, I assert the same for technology—so often associated with or described as "instrumental"—and argue that it, too, needs to play a more prominent role in discussions of what makes both technical communication and computers and writing humanistic. Below, I build upon Moore's argument and reiterate the connection between technical communication and computers and writing.

I offer this qualification: Moore's argument rails against a more visible target in that the scholars he cites more pointedly speak out against instrumental discourse in their depiction of a humanistic technical communication. My argument differs in that one would certainly have to look a long time to find similar scholarly discourse arguing against technology in either technical communication or computers and writing scholarship. Instead, I am suggesting that *descriptions of the humanistic character of*

both technical communication and computers and writing are incomplete in that technology is often marginalized in such conversations, although not as clearly and deliberately as is instrumental discourse. As Moore recommends that technical communicators retain instrumental discourse in humanistic definition, I argue the same for technology itself in an effort to expand the way in which technologized rhetorical disciplines, as well as English departments by virtue of its shared departmental space, accounts for the human experience and defines the horizon of humanistic character. Given the tension between C. P. Snows' "two cultures," it is unlikely that this move will be instigated by paradigmatic representatives of either "culture," both of which have historically been more interested in asserting and preserving power and eminence than in finding intersections and common ground. But as Longo notes, technical communication—and, I believe, computers and writing—have a foot in both the liberal arts and the sciences; these disciplines are best poised to instigate this redefinition in the interest of shaping the future influence and viability of English departments.

Pragmatic Reassessment of the "Two Cultures"

The problem I am outlining here is, in many ways, a cultural clash, a territorial battle. Pragmatism can give us a lens through which we might re-see and reconsider the "two cultures" and see reasons for redrawing boundaries in such a way that they might more readily draw on the strengths Longo recognizes when she claims technical communications' allegiance with both the liberal arts and the sciences. Pragmatic philosophy does this by testing the implications of the traditional division. Specifically, it can offer a telling critique of the two cultures metaphor and provide a glimpse of what a pragmatic/humanistic view of technology might offer technical communication and

computers and writing when technology is seen as a legitimate *part*, rather than opponent, of disciplinary humanistic character.

As a philosophical framework, pragmatism has historically suffered from the suspicions of other philosophers in the analytic tradition. By definition, pragmatism contradicts the explanatory *telos* of analytical philosophy by forsaking the epistemological concerns that govern much of the work traditionally taken on by continental philosophers. Specifically, as Louis Menand notes, pragmatists reject the notion that there exists an explanatory framework that might gainfully orient human behavior. Menand suggests that pragmatism is in large part a critique of “how people think they think,” rather than a prescriptive or explanatory way of thinking. Pragmatists shift their attention away from any allegiance to an analytical philosophical framework because “. . . they believe that these puzzles, when they are not simply wasting the energy of the people who spend their time trying to ‘solve’ them, actually get in the way of our everyday efforts to cope with the world” (xi). This view has led some scholars to brand pragmatism intellectually bankrupt and accuse pragmatists of rejecting theory rather than setting forth any sort of new explanatory theory that might usefully orient human thought and behavior. What I would like to do in this section is briefly sketch two particularly relevant concepts of pragmatism, ending with pragmatist Larry Hickman’s view of technology, in the interest of reconsidering the humanistic arguments made in both technical communication and computers and writing.

As noted, pragmatism has not always been actively embraced in the academy, enjoying a vogue in the first half of the twentieth century spearheaded by several notable thinkers, including William James, Charles Sanders Peirce, John Dewey, and others.

Contemporary pragmatists like Richard Rorty and Hilary Putnam, in addition to Cornel West, have ignited some new interest in the last twenty-five years, but pragmatism has continued to lack ethos for various reasons, not the least of which is its public image. Indeed, skepticism and antipathy have been reinforced by casual public appropriation of the term “pragmatic” in much the same way that the same type of use has colored the term “rhetoric.” Rather than communicating the extent of the philosophical framework, “pragmatic” is typically made synonymous with “practical,” a term that carries much freight in day-to-day behavior but little in academic circles where theory reigns and the rejection or radical remaking of it constitutes an occupational treason of sorts.

But pragmatism can be quite useful in assessing the limits of humanistic arguments that implicitly or explicitly resist the inclusion of technology. Pragmatism, on the whole, is an extremely optimistic, hopeful theory of knowing, and its emphasis on present and future alike can help show how rearticulating the humanistic nature of technical communication and computers and writing can be done and what positive results might accrue in such a task. Perhaps the most important is its general reluctance to endorse *a* theory of knowledge. Throughout this text, I have cited C. P. Snows’ “The Two Cultures” as an apt illustration of the tension between what we have come to know as the academic humanities and the empirical world of the sciences and technology. As I have suggested, the same tension show up residually in scholarship set forth in both technical communication and computers and writing. Theorists continue to cling to the difference mandated by this model and the history it represents, resulting in the quiet replication of division. Pragmatism, though, recommends a different view of the “two cultures,” not by replicating the typical inquiry—which, depending on which

“side”/culture one identifies with, is little more than an assertion of which side’s set of knowledge claims was “right”—but, rather, by throwing out altogether such a line of questioning in favor of new questions focused on the consequences of such a divide, rather than looking at two ways of finding truth. Specifically, what consequences arise when technical communicators and computers and writing scholars remain reluctant to admit technology into their depiction of what makes these disciplines humanistic? And, conversely, what consequences emerge when these technologized rhetorical disciplines expand their humanistic definition to include technology?

Pragmatists hold that consequences and only consequences can guide human beings as they seek truth and the right path of action. Emphasis, then, is less on agreement with an abstract code or framework and more on the results of certain decisions people make every day. William James, who, along with Charles Sanders Peirce, provided some of the most cogent early statements of the range and thrust of pragmatism, states

A pragmatist turns his back resolutely and once and for all upon a lot of inveterate habits dear to professional philosophers. He turns away from abstraction and insufficiency, from verbal solutions, from bad *a priori* reasons, from fixed principles, closed systems, and pretended absolutes and origins. He turns towards concreteness and adequacy, towards facts, towards action, and towards power. (97)

Elsewhere, James terms this “concreteness and adequacy” the “cash value” of a certain decision, not necessarily as part of a larger materialist philosophy but rather in terms of the significance of the decision—what type of results does the decision yield? Here, James describes a philosophical disposition toward decision making that abandons appeals to any sort of abstract code of beliefs. The pragmatist asks, what benefits accrue,

and are they more desirable than those yielded by another choice? Menand notes that James' thinking about pragmatism was largely motivated by a desire to make sense of his own religious beliefs. For instance, from a pragmatic point of view, James was able to assert that the question of God's existence was unimportant: what matters is what consequences arise from choosing to believe or not believe in God. "Proving" that God exists or does not exist means little compared to what results from believing that God exists, and humans "try on" different beliefs and embrace those that yield the most desirable consequences. While this does not comprehensively detail James' views on religion, it does illustrate how pragmatism shifts attention from questions of eternal right or wrong to situated "rightness"; in a given context, the pragmatist asks, what decision or belief yields preferable consequences?

The relevance of pragmatism to humanistic conversation and the present investigation has much to do with this view of consequences and "cash value." But before discussing that relevance, I would first like to make more explicit the connection between consequence and pragmatists' critique of metanarratives, which I allude to above. The writings of Richard Rorty, arguably the foremost American pragmatist today, have been particularly incisive on the subject of metanarrative. In *Philosophy and the Mirror of Nature* (1979), Rorty sets forth a radical postmodern epistemology that forms the (anti)foundation of his thinking in subsequent texts, among others *Consequences of Pragmatism* (1982) and, more recently, *Achieving Our Country: Leftist Thought in Twentieth-Century America* (1998). According to Rorty, attempts made by analytical philosophy to explain reality in the form of a comprehensive philosophical theory are

misguided and do little to either explain or provide a guide for future action, qualities Rorty sees as essential to any such theory.

Because the consequences of an idea or an action are the final arbiter of its “rightness,” appealing to immutable “Truth” principles that fail to accommodate contingencies leads to significant strife, especially when abstract codes come into conflict in the process of making very material, very concrete decisions. Attempts to sort out and articulate a theory of reality or truth are misguided because of the constantly fluctuating nature of human existence. This threatens the entire traditional philosophical endeavor, which Rorty claims, “is to be a general theory of representation, a theory which will divide culture up into the areas which represent reality well, those which represent it less well, and those which do not represent it all” (*Philosophy and the Mirror of Nature* 3). Any attempt to embrace a timeless explanation of truth or reality is doomed to fail because “. . . specifically, there is no way to ‘naturalize’ them (such timeless explanations) or otherwise connect them to the rest of inquiry, or culture, or life” (311). As society and culture evolve, new contingencies arise, making different frameworks of thought, different ideas and practices, preferential based on the consequences they elicit. For instance, laws and policies are always in flux and in need of reinterpretation—as notable pragmatist Oliver Wendell Holmes argued, there exists no fundamentally internal logic to law, and lawyers and justices must focus on the consequences of certain interpretations. The environmental policy of 1960, for example, would seem ill equipped to deal with the environmental issues of today because our perception of the consequences at stake is much different.

Rorty's antifoundational approach no doubt evokes connections to Jean Francois Lyotard and other postmodernists in its iconoclastic tone. Yet Rorty's views respond more gracefully to claims of relativism—what Ken Wilber calls “flatland”—and the accompanying pessimism that often plagues postmodern theories of knowledge and culture (243). Pragmatists, Rorty included, keep an eye toward the future and a faith that certain practices will reveal themselves as “better” within unique contexts. What is “right” is constantly open for reconsideration and revision, but transitional agreement or consensus is attainable to the extent that groups are capable of discerning consequences and making local judgments with the understanding that those judgments are constantly available for critique. Contingent consensus can and does emerge.

The pragmatic assumption is that people, contexts, and conditions continue to change, making it impossible to identify a fixed explanatory framework that might guide action and the search for truth. This Darwinian attitude shows up in pragmatic approaches to technology. Contemporary pragmatist Larry Hickman argues that the role of technology in pragmatist thought is closely linked to definitional disregard for meta-narrative and consequence. Pragmatic technology “. . . breaks with this long tradition. It treats ideals and rules as artifacts, and it holds that neither artifacts nor the tools that are used to produce them are absolute” (103). One important thing to note is the broad definition of technology Hickman uses here. He indicates that his Deweyan perspective has broad application, guiding the way people might think about technologies as diverse as language and a trowel, a computer and a chair: “He (Dewey) held that technology is the invention, development, and use of tools of all sorts to resolve problematic situations.” This means that tractors and televisions, tables and calculators, are used in a

context of *human* problems. These technologies become manifestations of desire and interest, carrying with them the frustrations and hopes that led to their development even as they play a role in conditioning what might be possible in the future given their influence on present conditions. Therefore, technical communication and computers and writing, too, are influenced by present conditions and human desires.

By connecting technology to human values and not limiting it to a static abstraction concerned only with efficiency, this view suggests the necessity of expanding disciplinary definition of the humanistic in technical communication and computers and writing to more explicitly include technology as a central component of that definition, rather than a foundational element of each discipline that humanistic currents can police or correct or discipline. Hickman nicely illustrates the rich cultural connections and the “humanness” of technology as defined by Dewey:

Sports skills, universities, political parties, and pi are as much technological artifacts as is a hammer, for neither individual habits, nor social institutions, nor shared concepts are just ‘given’ to us by a god or by nature. They are instead artifacts that are constructed in much the same way that hardware is constructed—not out of nothing, but out of various raw materials and previously constructed artifacts. And since it holds that goals and plans are also technological constructs, pragmatic technology takes seriously individual and collective responsibility for the future. Unlike the less complex animals, we human beings construct our own futures; they are among the artifacts that we continually build and rebuild.
(113)

Indeed, one of the foremost technologies Dewey recognized was that of language. This has interesting implications for the present consideration of how the *humanistic* is defined. At present—and in Snow’s model of the “two cultures”—it seems clear that technology is not defined so expansively. Or, rather, it might be, but the two cultures take responsibility for certain technologies. For instance, the humanities might

appropriate language and ethical frameworks, while the sciences absorb engineering, space travel, and industry. This, however, creates a false division. Pragmatism offers one lens through which we might revisit this bifurcation, casting into relief the arbitrariness and unhelpfulness of such a divide. The clash of these two cultures, these meta-narratives, yields less than satisfactory consequences when they suggest that the motives behind one set of technologies—those of the humanities—are somehow more “human” than those of the other.

We need to ask what type of disposition toward technology or technology use is going to have the most pragmatic value for technical communication and computers and writing and the students, scholars, and practitioners working in these fields. In other words, what will yield desirable consequences? The two-culture model that continues to color attitudes, depicting technology as something to discipline with humanistic influence rather than recognizing technology itself as humanistic, fails to yield positive consequences for either technologized rhetorical disciplines or for English departments more broadly defined. To use James’ phrase again, we must assess the “cash value” of our present perspective. Not centrally locating technology in our own disciplinary humanistic arguments jeopardizes technical communication and computers and writing by re-inscribing old views. Pragmatism’s emphasis on consequences and de-emphasis on philosophical meta-narratives supplies us with a way of thinking that could benefit those of us in the humanities as we attempt to reconcile our tradition with escalating technology. My contention is that we need to begin thinking more pointedly about an English department that continues to rely on outmoded thinking and the “two cultures” metaphor and also to think about the ways in which we conspire—deliberately or not—to

reproduce these conditions, this disposition. Technical communication and computers and writing, two technologized subdisciplines that have made some inroads into traditionally non-technologized spaces, might play a leading role in blending these cultures effectively but only if they are able to refashion their own humanistic aspect such that technology *is* a part of the humanities and the humanistic, not an optional or fashionable addition.

Merrill Whitburn and Rhetorical Scope: Reconsidering Whitburn's Expansion Plans

In the remainder of this chapter, I would like to discuss ways in which both pragmatic and humanist philosophy as articulated in the *Humanist Manifestos* might recommend positive consequences for the humanistic discussion in technical communication and computers and writing, respectively. In doing so, I hope to clarify the important reflexive relationship between the “two cultures” that these technologized rhetorical disciplines are uniquely situated to articulate and cultivate. Pragmatically re-seeing the ways in which we define the humanistic aspects of computers and writing and technical communication allows us to expand in productive ways what Merrill Whitburn has called the “scope” of technical communication. I would like to use Whitburn’s concerns about the trajectory of the discipline to help further situate my own claims. I should first, however, acknowledge the significant differences between our arguments; in many ways, it seems that we are arguing for the same objective but from opposite ends of a continuum. Whitburn’s concern with what he describes as the scope of technical communication as a profession centers on what he describes as the “narrowing” of rhetoric over the course of history and the resulting insufficiency of present theory and

practice to deal with contemporary concerns. Part of his argument, then, relies on defining the narrow efficiency of what passes as rhetoric in contemporary technical communication. While his desire to move *away* from such thinking might seem at odds with my own urge to move *towards* technology in defining scope of the profession, we have a similar desire to construct a view of technical communication that is sufficient for contemporary challenges. For both of us, the “scope” of rhetoric and of the field is of great importance.

Whitburn organizes his argument around an observation: the scope of rhetorical concern has shrunk so throughout time as to render it incapable of serving as a viable critical apparatus in the face of the complex of problems faced in contemporary technical communication. He locates technical communication’s history within the larger historical narrative of rhetoric, citing Aristotle and Plato as early figures whose influence continues to dominate in rhetorical circles yet who also can and should be held responsible for a troubling historical trajectory: the narrowing of rhetorical scope.

Since classical antiquity, a growing division of attention has compromised performance by limiting the scope of human goals, social structures, and methodologies. What has become clear is that improving our lives in many respects is contingent on reversing a trend that received its greatest impetus from a struggle between Isocrates, on the one hand, and Plato and Aristotle, on the other, some 24 centuries ago (2).

Without taking too many liberties here, I would claim that Whitburn is arguing, at least in part, against the instrumental discourse and instrumental thinking that Patrick Moore attempts to rehabilitate in “Instrumental Discourse is as Humanistic as Rhetorical Discourse,” the type of discourse and thinking that I have suggested is cut of the same cloth as technology, which ostensibly relies on “limiting” and efficiency. According to Whitburn, embracing a more expansive Isocratean perspective—one that embraces rather

than disdains rhetoric in the way that he claims both Plato and Aristotle have—can provide technical communicators with new ways to approach communication challenges:

...it can help expose the narrowness of goals in governments, industries, and universities. It can also expose the problems caused by overly narrow social structures in modern society...it can expose the all-too-frequent methodological ineptitude of the 20th century, particularly the tendency to use preset methodological approaches to problems without using the full particularity of problem situations to generate the unique methodologies appropriate to them. (2)

Indeed, according to Whitburn, scholars and practitioners continue to reinscribe the instrumental thinking and “windowpane” approach to language and text that Carolyn Miller critiques years prior in “A Humanistic Rationale for Technical Writing” in spite of much scholarly effort to reconstruct technical communication in rhetorical terms. In doing so, Whitburn attacks the categorical thinking of Aristotle and Plato while endorsing the more diverse, more expansive rhetoric of Isocrates and those who followed in his more broadly defined rhetorical tradition, namely Cicero and Quintilian. Whitburn cites Plato’s antipathy toward rhetoric and emphasis on philosophy as the beginning of a narrowing process that has gone on for over 2000 years and has seriously damaged technical communication’s ability as a discipline to deal with complex contemporary problems: “While Isocrates focused his attention on human affairs, Plato—in numerous passages—directed attention away from the world of human affairs to a supposedly divine or spiritual world arranged hierarchically above it” (14). In Plato’s schema, rhetoric, like poetry, is emasculated, losing its comprehensive scope and concern with humanity richly defined, and instead, made “no more than an instrument of persuasion,” no more than verbal chicanery.

Plato's ideas, in turn, suffuse the rhetorical theory of Aristotle. Because Aristotle's rhetoric has been so central to Western attitudes and pedagogy, his lineage is particularly significant. According to Whitburn, Aristotle, too, elevates theory and philosophy over the practical matters with which rhetoric is concerned:

Aristotle's distinctions and values affected goals, social structures and methodologies which furthered the narrowing of attention in human deliberation already explored in the works of Isocrates and Plato. In his process of defining rhetoric, Aristotle excluded so much included by Isocrates that the decline of rhetoric—if this definition is accepted—was inevitable....He excluded the art of ethical choice, the selection of subject matter and the multiplicity of human goals beyond persuasion. (26)

Aristotle grants the importance of rhetoric for certain civic tasks but clearly subjugates it to dialectic in the search for truth. Whitburn notes that both Plato and Aristotle greatly diminish rhetoric by reducing it to persuasion in its crassest sense; rhetoric, while it might be used to sway the passions of an audience would be of little use in coming to real answers to real problems—problems of truth: “The art of ethical choice, the selection of subject matter and the multiplicity of human goals beyond persuasion were stripped from the purview of rhetoric so that it became nothing more than an instrument of persuasion, largely in oral discourse that could be used for either ethical or unethical ends. . .” (35). In this view, rhetoric lacks consequence. It is divorced from “Truth”-seeking, decidedly temporal, and thus subjugated to those processes more apt to yield certainty.

Whitburn recognizes these early dispositions as the basis for the longstanding second-class relegation of rhetoric, reinforced first by the rise of Christianity in the Middle Ages and then the rise of science as truth schemas that placed less emphasis on the transitional truths of civic life and more on the eternal truths made available by God or, later, by rational inquiry. The latter, according to Whitburn, continues to hold sway,

demonstrated in twentieth-century examples like the post-WWII Cold War military buildup, a site of tremendous ethical implication yet one that, in the zeal to produce and maximize weaponry and technology, often went ignored in technical communication at the time. Commenting on technical writing in the 1970s and 1980s, Whitburn notes,

The scope of their (technical writers') responsibilities, especially in multinational corporations, could be very broad. If technical communicators wished to perform ethically, that is, if they wished to achieve a balance between minimizing the afflictions and maximizing the pleasures in their own lives and helping humans present and future, do the same in their lives, they needed to consider the impact of their actions on humans, present and future, throughout the world. . . . Despite such responsibilities, however, anyone involved in the activities of technical communicators in the 1970s and 1980s would have been struck by the relative absence of political and ethical deliberation or, where present, its narrowness. (122)

Whitburn's argument for greater rhetorical scope is particularly persuasive in that it points to the dangers of an implicitly or explicitly limited rhetoric. Yet while Whitburn's thesis is ostensibly a critique of the condition of modern rhetoric in workplace settings, I read him as also making an interesting but potentially dangerous subargument pertaining to the way in which the humanistic aspects of technical communication might be articulated. In identifying Isocrates, Cicero, and Quintilian as exemplars of a more expansive rhetoric, he seems to be arguing that rhetoric—human discourse in all its richness and complexity—is the key to progress in technical communication's growth as a discipline. However, such a stance is problematic in that while it lauds rhetoric for its humanness and sees it as key to disciplinary development, instrumental discourse and the discourse of technology is thus demonized or excluded. The implication, again, is that rhetoric's "humanness" is somehow more so than instrumental discourse, which Moore

argues against, or its complementary efficiency dynamic that Whitburn sees in a discipline traditionally driven by technology and efficiency.

The polemical nature of Whitburn's position calls into question the role of instrumentality and, in some ways, constructs a view of technical communication (one that seems more humanistic to Whitburn and, likely, others) that isolates technology, too, because technology is oftentimes minimized in humanistic circles and made to be little more than the industrial offspring of a consumer economy designed to do as efficiently as possible the bidding of the corporate world. My view is that it is unwise to allow critique of instrumentality to crowd it and, by association if not definition, technology, out of humanistic thought. Instead, we need to consider the views of technology advanced in the *Humanist Manifestos* and pragmatism as new lenses through which we might view humanistic arguments in technical communication and computers and writing. When we start to see technology and instrumental epistemology (or any epistemology) as a manifestation of human values, we are then forced to complicate our view of the humanistic and the humanities. Indeed, we are in a rare position in the technologized rhetorical disciplines of English to make strong arguments for technology as a legitimate part of the humanities—as “humanistic” by definition and not merely in need of humanistic remediation and rehabilitation.

Whitburnian Implications and the Reorganization
of Humanistic Argument in Technologized
Rhetorical Disciplines

Whitburn joins others like Janet Atwill, Kathleen Welch, and Robert Johnson who have embraced Isocrates as an ancient rhetorician setting forth a more promising, more expansive scheme of rhetoric than offered by Aristotelians. Much of the purported strength of Isocrates' rhetoric comes from his emphasis on political rhetoric, which differs from some of his contemporaries' narrowed attention to epideictic discourse. Thus, at his best, Isocrates suggests a rhetorical scope "encompassing the whole life of civilized man" (13), one that effectively historicizes human decisions and sees rhetoric as a tool for invention and ethical exploration. While some who endorse Isocrates are more explicit in their claims than others, the implication in all such scholarship is that the more sophisticated, expansive, ethical, and political rhetoric of Isocrates is not only more capable of dealing with contemporary rhetorical situations—both print and electronic (see Welch's *Electric Rhetoric*, for example)—but also somehow more "human." These theorists are locating Isocrates on an unspoken rhetorical continuum, one on which he stands as "more" rhetorical than others to whom technical communicators have previously looked for guidance. "More human," in this instance, becomes "more rhetorical." In other words, a rhetorical framework that pays more attention to the material conditions of human existence and the context within which humans act, communicate, and decide is one that is more humanistic than one that is

decontextualized, such as the instrumental, efficiency-based rhetoric that technical communication has purportedly suffered from using since its inception.

What I am arguing here, however, is that an adequate humanistic scope in technical communication and computers and writing takes on the character of Whitburn's Isocratean rhetorical framework with regard to technology, specifically, and responds to the pragmatic forces outlined above, as well as the social needs those forces illustrate. While Miller, Dombrowski, and others root their claim for humanistic character in rhetoric, Whitburn describes an insufficient rhetoric that is, in large part, *inhuman*, lacking in the capacity to address the cultural and political realities that condition technical communication as a profession and study in the twenty-first century. The implication is that technical communication might be more humane or humanistic if it might only adopt "more" or "better" rhetoric, as if there were some sort of humanities-centric continuum on which to locate such abstractions.

My concern is not with Whitburn's or others' arguments to see technical communication in a more sophisticated rhetorical light but rather with the subtle argument that seems to follow: humanistic equals rhetorical and excludes instrumental rhetoric and with it technology, and this must be brought to bear on or, rather, to discipline, in some way, the technologies that are a vital part of both technical communication's and computers and writing's respective definitions and identities.

Pragmatism and the humanist philosophy of the *Humanist Manifestos* provide a way of rethinking and rehabilitating technology's role in humanistic arguments and recognizing a role for technology in the humanistic "scope" of technologized rhetorical disciplines, seeing technology as central to the humanist interest in placing the potential

of human beings above all other things. My argument based on rhetoric is that to improve and expand the humanistic scope of technical communication and computers and writing, we must rehabilitate our view of “instrumentality” in order to use it pragmatically rather than ghettoize it and technology in our humanistic discussions. In other words, we need to accept Moore’s argument to the extent that we see a role for instrumental discourse and technologies as ways to explore human potential and achieve human goals. If technology is somehow deemed *inhuman*, it remains an opponent, an “other,” and not a manifestation of human values, which makes it possible to relinquish responsibility for it. To return to James for a moment, his conception of the “instrumental,” a view he shared with other pragmatists, can be surmised from this quote defining truth:

It means, they say, nothing but this, that ideas (which themselves are but parts of our experience) become true just in so far as they help us to get into satisfactory relation with other parts of our experience....Any idea upon which we can ride, so to speak; any idea that will carry us prosperously from any one part of our experience to any other part, linking things satisfactorily, working securely, simplifying saving labor; is true for just so much, true in so far forth, true instrumentally. This is the “instrumental” view of truth taught so successfully at Chicago, the view that truth in our ideas means their power to “work,” promulgated so brilliantly at Oxford. (100)

At face, technology critics would likely bridle at this quote for it seems to reaffirm fears of technology and its epistemology—efficiency at all costs, false linearity, lack of concern for human interests. But again, considering this from a pragmatic point of view means understanding instrumentalism in terms of contingency and consequence.

Interestingly, James notes that Mr. Schiller (Oxford philosopher Ferdinand Canning Scott Schiller) “still gives to all this view of truth the name of ‘Humanism,’ but, for this

doctrine too, the name of pragmatism seems fairly to be in the ascendant” (103-4).

Dewey himself referred to pragmatic technology as “instrumentalism,” which suggests a richer meaning for the term than the amoral and functional or patently immoral connotations claimed by technology critics.

Pragmatism helps us overcome the false dichotomy between technology and rhetoric/humanistic because it refuses the easy divide between cultures, and this view aligns well with other views of humanism in the *Humanist Manifestos* suggesting that humans need not apologize for the alliance they share with technology. Thus, as scholars, we must not try to “sneak it in” to the humanities, nor must we speak in terms of how the humanities might rehabilitate technology. Rather, taking a cue from the *Humanist Manifestos* and other documents, we must consider the possible desirable consequences arising from seeing technology as a foundational component of the humanistic. In *Humanist Manifesto 2000: A Call For A New Planetary Humanism*, Paul Kurtz echoes sentiments about the role of technology that were voiced in the previous two iterations (1933, 1973) of the document, as well as those of Corliss Lamont in *The Philosophy of Humanism*. Kurtz offers five claims regarding the humanist stance on technology:

- a. First, *humanists strenuously object to efforts to limit technological research or to censor or restrict inquiry a priori...*
- b. Second, *we hold that the best way to deal with issues concerning technological applications is by informed debate, not by appealing to absolutist dogma or emotional sloganeering...*
- c. Third, *we cannot abandon technological solutions...*

- d. Fourth, *technological innovations that reduce overall human impact on the environment must be encouraged...*
- e. Fifth, *the spread of intermediate technologies that are affordable to the poor should be encouraged...*(28) [italics mine]

The significance of technology is clear: it is a means of reaching human potential and heavily invested with human values. But while Kurtz holds that technology is central to humanist philosophy, he insists upon caution and constant inquiry into consequences of technological use: “There are vast dangers inherent in the *uncontrolled* use of technology.” Thus, control and assessment of consequence is of the utmost importance: “...breakthroughs in genetics, biology, and medical research (such as biogenetic engineering, cloning, organ transplant, and so forth) pose possible dangers, yet they offer enormous potentialities for human health and welfare” (27). In sum, carefully considered and cautiously deployed technologies can greatly benefit human beings, but the consequences of such technologies must be constantly monitored. What is most important is deliberate, controlled development and implementation that genuinely and thoroughly considers consequences.

Such a view is thoroughly pragmatic in a practical sense and disdains artificial bifurcations between cultures and worldviews in favor of a holistic view that recognizes technological sites as *the* (or at least *a*) site of human interaction. Indeed, pragmatism gives us the freedom to “try on” or adopt such a view in order to “test” the consequences of seeing technology in this way, and shortly, I will explore what I think some of those consequences might be. Technological sites, in this view, become sites where human values are embodied and enacted. In this view, much of the more radical technology

criticism is wrongheaded in that the oft-criticized “technological imperative” is incorrectly targeted as something somehow divorced from *real* human concerns—a throwback to romantic views espoused by Matthew Arnold and others who looked for truth in literature or others who looked for truth in religion. While all of these topics/truth realms are considered “valid” humanistic sites, technological sites have often been deemed their antithesis. Technical communication and computers and writing scholars must insist upon this subject because if we fail to do so, we passively conspire to reinscribe the “two culture” metaphor to the detriment of technologized rhetorical disciplines and to the detriment of English departments more broadly defined. Each “culture” sees as its duty rehabilitating the other in an endless cycle/circle. If we are constantly arguing that in order to humanize we need to make more rhetorical, we are 1) categorically denying the rhetorical nature of technology, 2) agreeing with our disciplinary peers and others in English departments that technology is not humanistic and that it has little to do with the humanities, and 3) seeing the instrumental nature of technology as a-rhetorical and in need of a false remediation.

Technology has historically been the antithesis of what the humanities are about in the academy even as other humanist philosophy suggests otherwise. The time has come to rethink this opposition and explore more fully the implications of starting with the assumption that technology is central, not peripheral, to the humanist mission and not in opposition to it. Let me repeat Bernadette Longo’s comment mentioned earlier: “Because technical and professional communicators share a history as firmly rooted in the liberal arts as it is in the sciences, we occupy a unique position spanning these two disparate bodies of knowledge and approaches to making knowledge” (164). To deny

this is to be dangerously selective in describing the identity of either technical communication or computers and writing.

I am not suggesting that we reorganize around instrumental rationality and the technological imperative to the exclusion of the other humanistic elements that theorists have used in the past to assemble incomplete descriptions of the humanistic character, others like Whitburn have demonstrated just how pervasively that has failed technical communication, for one. Rather, we need to historicize, to contextualize—to see our technologies as part of an historical and cultural dynamic and to embrace the importance of understanding—and understanding how to use—technology in the humanist paradigm. This is not something new, *per se*, to either technical communication or computers and writing, but it is new to our broader English departments and academic humanities communities, and it represents an important step in the development and maturity of both disciplines. We need to describe fully our disciplines and our humanistic contribution without fear of reprisal in an effort to reach the potential of two disciplines that, in their complex, two-culture straddling nature, become uniquely poised to extend the influence of English departments in dramatic ways never foreseen in a discipline that for so long was defined solely by literature and divorced from the “other” culture of science and technology.

Some theorists are already clearly engaged in this line of thinking, and it is likely no coincidence that they are some of the same people I mention above who are invested in Isocratean perspectives on rhetoric given the more expansive status for rhetoric that Isocrates develops. I wish to look briefly at four such thinkers—Robert Johnson, Bonni Nardi and Vicki O’Day, and Cynthia Selfe—in an attempt to sketch the usefulness of

their work in establishing a view of the humanistic that puts technology at the center of technical communication's and computer and writing's respective humanist contributions.

Let me begin with Robert R. Johnson's *User-Centered Technology: A Rhetorical Theory for Computers and Other Mundane Artifacts*. In it, Johnson attacks what he identifies as the traditional trajectory of technology development and production, the "systems-centered" approach that sets forth a technological system—be it a computer or a car—and forces the user of that system to adapt to its capabilities rather than responding to the unique needs of the user. In other words, what the user can do and, indeed, what the user views as the horizon of possibilities are determined by the system designer; central here is the notion that "the inventors or developers of the technology know best its design, dissemination, and intended use" (25). In a system-centered design, "the system is at the center and . . . the job of the user is to learn what the designer provides" (29). According to Johnson, the shortcomings of this approach are numerous, yet, unfortunately, "we continue to create technologies that baffle users and in the worst cases promote unethical uses of technology." This systems-centered approach is of particular interest to those in technical communication. As technical communicators, it is our responsibility to respond to the needs of the user.⁷

Johnson contrasts system-centered design with "user-centered" design, which emphasizes user context and the types of tasks the user wishes to perform and then seeks to develop a responsive system. Designers interact with users, then, rather than simply and blindly designing a system to which users must respond. Users take on a role of parallel importance to that of the designer/developer; in other words, they become a part

of the development complex, part of the rhetorical field of voices that shape the development of a system. Johnson notes: “This is not meant to imply that users are the sole or dominant forces in technology development. Rather, they are allowed to take part in a negotiated process of technology design development, and use that has only rarely been practiced” (32). Johnson’s user-centered theory represents one example of how technology can be useful and ethically-constructed such that human beings and their interests shape development and the consequences of use. In this type of humanistic technology narrative, technology is a normal outgrowth of human interests, and Johnson’s theory ensures that the human interests or values being represented are those of the user, not the system. Such a relationship reinforces a view of technology as humanistic. Technology is not a threat to humanistic goals here, but is rather a manifestation of them; it is more visibly and apparently a human construction. The “instrumentality” that inheres is designed and controlled.

Nardi and O’Day share Johnson’s interest in the user and use an ecological metaphor to illustrate the complex interaction between technology and culture. Importantly, they articulate a problematic view held by many, particularly those in the humanities, that caters to those critics who argue for a general technological determinism: “As long as we think we do not have enough expertise to engage in substantive discussions about technology, we are effectively prevented from having an impact on the directions it may take” (13). New technologies are enshrouded in mystery, seen as novelties that people are not to understand but are rather to admire and then watch silently as they shape their lives: “We have noticed that people seem to distance themselves from a critical evaluation of the technologies in their lives, as if these

technologies were inevitable forces of nature rather than things we design and choose” (14). Indeed, technologies can take on such a persona when users have no voice in their development or appropriation, and the “two culture” metaphor that still influences thinking continues to reinforce a sense of learned helplessness in the humanities: we are subject to the will of technology.

To situate their ecological metaphor, Nardi and O’Day first explore the limits of other technology metaphors, including views of technology as a tool, a text, or a system. The limitations of each metaphor color our interaction with, attitude toward, and use of technology by, respectively, oversimplifying (tool) or overcomplicating (text). The system metaphor seems apt in many ways in that it suggests a complex of competing values and interactions but is limited by its oppressive connotations. “System” typically evokes thoughts of neutrality at best and control and pursuant helplessness at worst (27-41). On the other hand, Nardi and O’Day argue that seeing technology as an “ecology” provides us with a better way of understanding its richness and complexity. They define an information ecology to be “a system of people, practices, values, and technologies in a particular local environment. In information ecologies, the spotlight is not on technology, but on human activities that are served by technology” (49). What makes this metaphor particularly evocative to the authors is its emphasis on constant change and evolution, in addition to the interaction and participation of those people and elements that make up a local information ecology (56-57). An ecological view stands opposed to pessimism and helplessness: “We feel the need to take control of our information ecologies, to inject our own values and needs into them so that we are not overwhelmed by some of our technological tools” (56). Values spur humans to envision and design,

and then use, certain technologies in local spaces, and the ecological metaphor empowers workers and thinkers to resist determinism and instead to think in terms of how decisions can be made to yield desirable consequences in local information ecologies. And like Johnson, Nardi and O'Day theorize technology within humanistic space by situating it such that it is an outgrowth of a locality, a local "ecology" with unique needs, thus becoming a value-laden manifestation of human desire and interest, rather than a manipulator or threat.

In computers and writing scholarship, Cynthia Selfe's ongoing exploration of computers, and how the political and cultural climate is situated, has shaped many central concerns in the field. In a sense, her work has served as an evolving challenge to a perspective voiced by Elizabeth A. Sommers and James L. Collins in a chapter of one of Selfe's early co-edited collections, *Computers in English and the Language Arts: The Challenge of Teacher Education* (1989):

Computer skills, we believe, are not an appropriate focus of instruction for English and language arts teachers; instead, we advocate keeping the focus on language skills and on using the computer as an instrument to enhance the learning of language, writing, and literature. The microcomputer in this approach is not the subject being studied but, rather a resource or tool for teaching and learning. (27)

No doubt, Sommers and Collins have likely altered this stance, which keeps the technology under discussion—the computer—at arms length in an effort to keep it from getting in the way of traditionally validated humanistic interests, like language and education. Indeed, such a cautionary stance was natural in the field in 1989 when the computer, as representative of that other culture, was looked upon skeptically as a potential threat to move purely humanistic pedagogy. But if that conservative approach

has softened over the last fifteen years or so, it is largely because Selfe has taken an aggressively political stance on the networked and stand-alone computer, taking a cultural studies approach to evaluation that has resisted, for the most part, attempts to see computers as anything other than value-laden, ideological artifacts that are at once embodiments of cultural values and transformers of pedagogy. To Selfe, the computer is never value-neutral, a cultural artifact to investigate. For example, in their 1994 “Politics of the Interface,” Selfe and Selfe investigate the implications of the traditional Macintosh interface, highlighting the heavy reliance on business and corporate metaphors (“trash,” “desktop,” etc.), and questioning the visible presence of such values in educational settings. In *Technology and Literacy in the Twenty-First Century: The Importance of Paying Attention* (1999), Selfe historicizes the computer technology boom of the 1990s by carefully linking technological advances and the infiltration of computers into mainstream society to deliberate political moves made by the Clinton administration. Doing so makes the proliferation of computer technology a result of *human decisions*—sometimes ethical, sometimes not—not the assimilation of humanity authorized by some abstract, disembodied technological imperative.

What all three of these scholars do so well is locate technologies—of various types—within a cultural and historical context that *foregrounds the notion that the technology under discussion is but an iteration of human value*. In doing so, they eradicate barriers between Snow’s “two cultures” and situate technology within, rather than outside of or in opposition to, a humanistic paradigm, recognizing technological sites—computers, military installations, sewing machines, etc.—as sites of human value and interest, as sites where human beings’ values yield a contingent artifact subject to

review and ongoing revision as its response to evolving human needs and desires changes over time. This perspective optimistically holds that not only do human values motivate the development of technology but also that no single technology can ever claim privileged status as the permanent solution to human problems or embodiment of human desires. Because human beings and their problems and values evolve over time, consequences of technology use will continue to be evaluated and reevaluated. And as consequences fall out of favor, technologies will evolve to create more favorable consequences or simply fall along the wayside. Technology cannot be seen, then, as anything but humanistic if “humanistic” signifies the complex relationship between and among human interests, desires, values, and protections.

Conclusion

One thing I must emphasize again is that I am not suggesting that those in technical communication and computers and writing disdain or fail to recognize the importance of technology in their respective disciplines. What I am calling for, rather, is a stronger, more unified statement of the *humanistic nature of that technology*, or, perhaps, a recognition that it is impossible to separate the human from the technological, something that I think scholars have resisted for various reasons. Separating the human from the technological results in a general lack of responsibility and needs to be avoided. Technology, in the two-culture model that continues to hold sway, is not seen as viably humanistic and is, therefore, for all practical purposes, beyond the reach of the humanities, except for critique. By looking outside of English departments to pragmatism and humanist philosophy, we can find other ways to describe the humanistic, ways that strongly suggest the important and central role that technology plays in

defining the humanistic. And there is a power in that—a power for technologized rhetorical disciplines and, by association, a power for English departments.

For technical communication and computers and writing, acknowledging the role of technology in the humanist paradigm—English departments' purported purview—means no longer trying to reconcile what we do with our literary counterparts or trying to relocate to a separate program, department, or building in order to find a happier place to exist. It means no longer trying to discipline or apologize for our allegiances to the computer, to industry, and to the corporate world. Instead, we open these arenas up for understanding and analysis, recognizing them and the values they indicate as ways in which *humans* have chosen and continue to choose to map their existence in what they deem to be an effective, desirable manner. We can proceed then to look at these technologies, these structures, as manifestations of values and conditioners of values. We can deconstruct these technologies and structures pragmatically, focusing on the consequences they elicit and the desirability of these consequences. We can balance ideological critique with an honest, non-polemical look at the desirable consequences that emerge, for instance, from the corporate world as the instantiation of the free market system, rather than railing against it in ideologically charged ways that have no hope of *consequential change*. The techno-industrial narrative that humanists critique is actually quite humanist in this view, and there is no way to swap this narrative of our contemporary existence with another one, at least not in the way that radical critics would suggest. Therefore, like pragmatists say with regard to the existence of God, there is no pragmatic use in “proving” the superiority of one narrative over the other; expanding our vision of the humanistic frees us from this ongoing chase and lets us focus on the how

technology is being received culturally. And at once to teach and celebrate it and decry it as we participate in the ongoing struggle with contingency and consequence that pragmatism sets forth as our reality. Only by embracing technology into our humanistic definition can we do this. Otherwise, it remains out of reach, out of our conscious grasp.

For English departments, we get away from polemic and in doing so expand our socio-cultural influence significantly. Far too often, we find safe haven in deconstruction and critique at the expense of action. We bring out critical skills to bear on institutions that contradict our humanist belief structure but offer little along the lines of pragmatic courses of action. There is nothing wrong with Marxism and critical theory that investigates material conditions and technology's role in producing and reproducing those conditions. But there are significant limits to the value of polemic. Reconsidering technology's relationship to the humanistic can open new doors and create new possibilities for influence and critique by assessing the value technologies represent and the consequences that emerge from different technology use or development.

The *telos* of humanistic education, then, is to help students see that democratic institutions' purpose is, as Richard Rorty states, "making possible the invention of new forms of human freedom, taking liberties never taken before" (126). What we need to do is break with the myth that the unified "humanities" can claim as its content only "the best that has been thought and said." Any honest consideration of human knowledge and values recognizes the Pollyanna-ish nature of such an approach. A more plausible tack would be to recognize the possibility for good and evil in humanity and to engage such a dynamic through inquiry.

Technology, most assuredly, plays a central role in this dynamic. On one hand, we have a polio vaccine, saving millions and millions of lives and eradicating a dreaded plague disrupting countless lives and engendering human suffering in epic proportions. On the other, we have seen Nazi Germany eliminate Jews with chilling efficiency using American-made technologies (Black, par. 1). Both technologies are oddly humanistic, provided we do not ascribe a natural nobility to the term; both are instances where technology became, in one way or another, the instantiation of contextually-defined human values and then the means through which values were enacted. A consideration of the human condition is necessarily a condition of the technologies humans produce and then use.

And finally, by actively seeking points of overlap between C. P. Snow's "two cultures," we provide an educational framework that can support and encourage our students as they begin their careers and their adult lives as engineers and history teachers, conservatives and liberals. The technology and humanism issue is at the core of so many of these ideological scraps. We can bridge rhetorical gaps by reframing the educational and cultural perspectives that reinscribe dissonance and anger by helping to shape a new rhetoric that refuses the oversimplification at work here. Technology is not here to discipline romantic illusions of grandeur and past harmony. Nor are the humanities capable of disciplining technology and science in any productive way.

¹ See Chapter 1 for a more detailed explanation of how I am framing "technology" here. While the book, for instance, is certainly a technology that has been accepted—indeed, valorized—in the humanities for centuries, my definition, borrowing from Ong and Bolter, suggests that it is no longer recognized as such given its complete assimilation.

² See MacNealy and Heaton's "Can This Marriage Be Saved: Is an English department a Good Home for Technical Communication?" (1999) discussed earlier in Chapters 1 and 3. While their article reports a variety of departmental assignments for technical communication teachers and programs, many such teachers and programs find themselves working within English departments that are defined in large part by literary interests.

³ See Ellen Nold's "Fear and Trembling: The Humanist Approaches the Computer" and Helen Schwartz's "The Confessions of Professor Strangelove; Or, An Apology for Literacy" for examples of this type of argument.

⁴ See Paul M. Dombrowski's *Humanistic Aspects of Technical Communication* (1994).

⁵ See Brantlinger's *Who Killed Shakespeare: What's Happened to English since the Radical Sixties* (2001) and Postman's *Technopoly: The Surrender of Culture to Technology* (1992).

⁶ Kreth, Miller, and Redish offer a more exhaustive rebuttal of Moore's thesis in "Comments on 'Instrumental Discourse is as Humanistic as Rhetoric'" in the *Journal of Business and Technical Communication* 10.4 (1996)

⁷ For more information about systems and system theory, see Littlejohn's *Theories of Human Communication* (42).

CHAPTER 7

CONCLUSION: FINDING POWER IN A PRAGMATIC, TECHNOLOGY-INCLUSIVE HUMANITIES

In Chapters 2-6, I have sketched one possible reading of an important strain of thinking in two “technologized rhetorical subdisciplines” of English, technical communication and computers and writing: the ongoing effort in each field to establish the parameters of humanistic identity. Theorists in both areas have sought to identify the particular characteristics of their respective disciplinary domains that fit into a humanistic paradigm, and this task has been made difficult because the ideological heritage of English departments, the typical departmental location for technical communication and computers and writing, as well as self-imposed pressures to conform to those pressures.

In the mostly twentieth century environs in which technical communication and computers and writing emerged, English departments have been, first and foremost, the world of Matthew Arnold, the world of literature as a site of truth, not a readily identifiable space for technological interests or affiliations. Indeed, technology and science have traditionally been seen as inhabiting another realm, another culture entirely, as C. P. Snow described in his famous “Two Cultures” lecture. To Snow and to many others, the culture of literature and the humanities and the alternative culture of science and technology spoke mutually incomprehensible languages. It is this view of the humanities as opposed to technology that has made English departments—something of an “arch humanity”—an odd, if not often inhospitable, place for technical communication and computers and writing to mature. I argue that the disjuncture and discomfort is apparent in attempts to sketch humanist educational frameworks that leave little, if any,

room for technology study and consideration. As cited earlier, Martha Nussbaum's *Cultivating the Humanities* assumes a link between technology and the vocational, and her vision for the humanities is to develop "world citizens." Technology, apparently, is not part of this world. Rather, the humanities in this view are an assembly of values yielding a disposition of tolerance, appreciation of diversity, and critical sensibility toward culture and the world.

Yet while this vision of the humanities might be well supported by history and tradition, it does not necessarily recommend itself in contemporary times. Therefore, in Chapter 3, I looked closely at the three iterations of the *Humanist Manifesto* as a sequence of documents in terms of the present discussion in the manner in which they articulate the role of technology in a humanist philosophy. From the first *Manifesto* (1933), signed by many, including John Dewey, through the most recent (1999) penned by Paul Kurtz, president of the International Academy of Humanism, the message has been clear: human beings invest their values into the creation of technologies to achieve human goals, and it is up to humans to make wise decisions about developing those technologies and the consequences they bring about. Such a perspective has remained consistent in these documents in spite of catastrophic misapplications of technology in the twentieth century, most notably in the Holocaust and World War II.

To reiterate, the secular humanism outlined in the *Manifestos* recognizes no real alternative to a pragmatic approach to technology and refuses to reduce technology to a punitive meta-narrative of oppressive determinism and capitalism: human beings face challenges that complicate humans' ability to enjoy life and live to their potential—fundamental tenets of humanist philosophy. Technologies are developed as a

manifestation of values and desires. And, contrary to some skeptics, responsible technology development and use is pragmatic and consequence-based, meaning that all technology is constantly under review, a view that is supported in the *Humanist Manifestos*. While some scholars argue for a view of technology as rigidly deterministic and dehumanizing, the humanist view suggested within the *Manifestos* holds that human beings are the authors of using technology. Although humans are the authors of using technology, I am not suggesting that technology does not play a role in shaping human beings' horizon of possibility. However, the pragmatic view of this alternative view of humanism offers hope that humans might play a role in, rather than be subjected to, the whim of technology.¹

Taking Responsibility for Technology:

Swapping Despair for Hope

In this dissertation, I have argued that the humanities, particularly English departments—even technical communication and computers and writing—have operated under the assumption that technology is, at worst, villainous and contrary to humanist ideals, or, at best, simply not part of the humanities' locus of concern (see Nussbaum). This attitude is likely attributable to a number of forces, and there is neither time nor space here to explore this issue fully, but arguments for opposing technology with more traditional humanist interests are compelling, relying on powerful metaphors to illustrate the ways in which technology overrides or undermines humanity in insidious ways. In this view, technology is hardly seen as a manifestation of human values. Instead, it is positioned in opposition to them, the quest for “salvation” in technology seen as divorced from the human desire to solve problems. Technology is portrayed as part of an ongoing

and doomed pursuit of perfection as if such perfection exists, not a manifestation of what humans believe, desire, and hope for.

Such a staunch insistence on portraying technology in this way, as part of a narrative situated in opposition to what can be termed an equally problematic pursuit of the “good” in the form of cultural values and ideology, somehow divorced from technology, flies in the face of pragmatism and diverts attention from the type of contribution that a humanities that embraces technology as a *part of* the ongoing quest for best practices and the “good” might offer. For instance, Noble makes the pragmatic point that when technology is aligned with this salvation narrative, “Pleas for some rationality, for reflection about pace and purpose, for sober assessment of costs and benefits—for evidence even of economic value, much less larger social gains—are dismissed as irrational” (207). Again, though, the value of this critique, even as it outlines a critical role for English departments and the humanities in technology development and application in contemporary society, is nullified by the implicit argument that technology is somehow not a part of what we *should* be doing. This disposition jeopardizes the good things—the assessment of consequences of technology use, for instance—that some humanist critique has done and could do.

Locating a Role for the Technologized

Rhetorical Subdisciplines in an

Alternative English department

Some English departments have operated under the assumption that technology is not part of the humanities’ locus of concern and that has created unique challenges for technical communication and computers and writing, and these challenges have

challenged their ability to claim legitimacy in English departments given the general disdain or disinterest the field has shown technology. For apparent political reasons, in addition to other motives to define the parameters of their emerging disciplines, both technical communication and computers and writing scholars have both implicitly and explicitly attempted to describe a humanistic character in each field. Specifically, they have argued to (1) be considered *a part of* an academic humanistic “category” of sorts and thus in alignment with the overarching discipline of English—a “status” argument, and (2) define what *constitutes* such a character, to qualify it. The two facets of argument are closely related. In defining the humanistic character of each technologized rhetorical discipline (argument #2), scholars have typically gravitated toward arguments that support argument #1; in other words, in defining a humanistic character, they have usually worked hard to demonstrate similarity to English departments and both its traditional and contemporary humanistic character.

For instance, computers and writing has provided a foreground for traditional and contemporary English departments’ interests, like gender and politics, while technical communication has emphasized elements like ethics and rhetorical epistemology; these “humanistic aspects” fit well with the values and epistemology of English departments in that they are familiar by virtue of their similarity with concerns in postmodern literary and cultural studies—the purview of the contemporary English department. Such a strategy has, I think, improved the disciplinary acceptance of both technical communication and computers and writing as demonstrated by the greater visibility of each subdiscipline at conferences, in journals, and in tenure-line positions. Thus, on some fronts, the conservative humanistic strategy has been successful: scholars have

forged something approximating a shared sense of purpose or, at least, a locus of concern that overlaps in places.

To solve the problem described above, I believe that as these technologized rhetorical subdisciplines mature, it is important for scholars in each to expand present humanistic arguments and more visibly include technology, which, in spite of its centrality to each subdiscipline's identity, has oftentimes been marginalized in conversations about humanistic character definition, even as it has obviously continued to define each discipline's concerns. I believe that technical communication and computers and writing will benefit—and English departments as well—by more deliberately incorporating technology in its various forms into humanistic definition. Doing so might engage an important disciplinary conversation about technology with implications for the role of English departments and its responsibilities in the twenty-first century. Moreover, while politically problematic, doing so would allow for a more authentic self-representation.

To date, traditional English departments—mostly literature—have dictated the terms of the humanistic, and as I discussed earlier, these terms include human interests, values, passions, hopes, ethics, and language, with emphasis on the individual human subject accessing a worldly or transcendent potential, with this dynamic frequently analyzed against a backdrop of society and its mechanisms: government structures, economic structures, and various technologies used to actualize these structures. In this relationship, the freedom and hope of the individual human subject is frequently sketched in opposition to societal mechanisms with abstractions like capitalism, for instance, deemed to be passively or aggressively dehumanizing.

What technical communication and computers and writing have done as relative newcomers is frame what they “do” or what makes up their locus of disciplinary concern in traditional English terms. As noted in Chapters 4 and 5, this effort includes subtle moves either to distance themselves from technology when defining humanistic character or, at least, to limit humanistic definition to traditionally acceptable terms, like text, ethics, and language and the latter’s role in epistemology.

Taking a pragmatic stance toward technology that both examines the consequences of English departments’ traditional relationship with technology and reconceives the role of technology in humanism might allow for an expanded influence that could have broad implications for the vitality of the discipline and the role it might play in shaping student use and understanding of technology. The arguments for a humanistic character in these technologized rhetorical disciplines have passively or actively engaged the narrative of skepticism and/or hostility toward technology that their disciplinary peers have often set forth as the English departments standard. Indeed, one of the most important things that technical communication and computers and writing can do in fulfilling their humanistic mission is to participate in the ongoing critique of technology.

But what they cannot do is collaborate in sustaining the belief that a humanistic character could be somehow defined at a remove, *separate from technology*. Most dangerous are those arguments that assert humanistic character or humanistic concerns existing *alongside* technological concerns—a fairly common conceit in both technical communication and computers and writing, but especially in early computers and writing literature when scholars and teachers faced the difficult task of persuading peers to fund

expansive technology initiatives and to entertain the possibility that a computer might do something valuable for writing pedagogy. Scholars typically talked about how technology would not compromise their humanistic emphasis on literacy, pedagogy, and language. Things have improved, though, in more recent literature where scholars have argued not that technology exists alongside traditional pedagogical goals but that it actually transforms pedagogy by changing what is possible and thus conditioning practices and outcomes. The technology—computers in this case—is seen as a manifestation of human values, not as a peripheral, amoral tool.

Technical communication and computers and writing can play a vital, albeit challenging role in recasting English departments' relationship to technology of all kinds. Doing so fits in with a pragmatic vision for English departments and for the academic humanities. Successfully doing this begins with changing our assumptions about what the humanistic should be. Indeed, we might consider our own situation in light of the governing assumption that authors of the *Humanist Manifestos* take: technology is the manifestation of human interests and values, and the consequences of technology must be continuously monitored in order to maintain control of it—a pragmatic view that refuses to categorically cast technology into a skeptical light and one that takes an even approach based on consequences (social, ethical, political, commercial, etc.) broadly defined. Otherwise, we run the risk of simply not participating in important conversations, of remaining what Richard Rorty has called “spectators”—the antithesis of “agents.”

I must emphasize that this is not a plea to vocationalize the humanities. This criticism has followed technical communication throughout its history, and although I have misgivings about the validity of such criticisms, I do extend some sympathies

toward those who would argue that English departments or the humanities is no place to expect exhaustive vocational training and skill development. What I am arguing for here does not necessarily preclude the possibility of including some technological skill development (for instance, I see part of my argument as creating a space for or legitimizing the teaching of tools in technical communication programs) in English departments—likely computers and software literacy. But we need to be aware of the limits of this approach and not confuse the practical with the pragmatic, an oft-made mistake everywhere the term is used. I say this because I believe that it is the “practical” nature of technologized rhetorical disciplines that is oftentimes deemed most undesirable by disciplinary peers. But if we take a pragmatic stance toward the humanities and technology’s role in them, we start to see technologies not simply as tools to learn or demons to rail against, but rather as sites of cultural manifestation involving real human subjects—sort of like text has traditionally been.

It is part of a pragmatically responsible humanistic mission to revisit this disposition, and, in doing so, computers and writing and technical communication might take the lead in establishing new trajectory in English departments, one that sees the technological milieu as an opportunity, a space where “real” humanistic activity and work takes place. But what I am much more interested in is claiming a necessary interest and a confidence. By recognizing technological sites, tools, applications, and consequences as highly visible sites of humanistic interest and influence, English departments can reclaim vitality in a society that oftentimes seems to have little interest in and little perceived need for the humanities. Traditional English departments brings

much, but students often struggle to make connections across media and across attitudes toward the technological society in which they live.

Thus, when Robert Scholes talks about “reconstructing” English departments as “a discipline based on rhetoric and the teaching of reading and writing over a broad range of texts,” (179) citing examples like advertisements, films and television shows, political speeches, poems, plays, essays, stories, and “everything else under the sun” (169), the latter broad category ought to include careful reading of technology and the way in which human values shape, appropriate, and assess it—as a text but as still more than that. We need a pragmatic humanistic vision that allows us to act, to be agents because technology is such an important part of society and culture that to ignore it is to withdraw from that same society and culture. To gain this, we need to rethink—pragmatically—the consequences of excluding technology from our definition of the humanistic.

Illustrations: Putting Technology in the Midst

Again, what I am arguing for is a disposition and a coordinate expansion of scope in English departments spearheaded by technical communication and computers and writing faculty. One of my central points has been that in explicit arguments for humanistic character, scholars have been reluctant to foreground technology as a humanistic element. And here it is important to note that while some technologies might seem more acceptable in humanities circles in that they align more closely with established or evolving humanities values, the point is that no technology is inherently “good” or “evil.” Instructional technology is a good place to look for examples of this. Whereas one type of courseware might offer drill-and-practice grammar quizzes to assess student performance—the type of activity often lambasted in the process/post-process era

of writing instruction—and another type might foster dialogic interaction between students, teachers, and tutors—the type of activity often valorized in contemporary writing theory, neither is necessarily good or bad, humanistic or not humanistic.

Looking pragmatically at the applications and the consequences of using each to teach writing might help teachers make decisions about which they will use in their courses given their specific objectives. But neither is inherently outside the realm of the humanistic. In the view of humanism described in the *Humanistic Manifestos*, both are equally humanistic. Indeed, both applications are manifestations of human goals—different in some ways, similar in others.

Future Research Directions

I am arguing for a disposition in English departments that can begin with computers and writing and technical communication and have implications for the way we envision the purview of the humanities and the way we educate students. The technologized rhetorical disciplines discussed here might take a leading role in this because they have already *implicitly* taken on this role, as demonstrated in the work of Steven Katz, Nancy Blyler, Cynthia Selfe, and others. These scholars have complicated various technologies and the types of discourse surrounding them by situating them in cultural narratives and envisioning them as more than tools, as manifestations of human values—and while efficiency and profit might be two of those values, they are not the only two.

Because I believe in the importance of this for English departments, I must first suggest that the role technical communication and computers and writing might play in this development is in many ways contingent upon their continued location in English

departments. While computers and writing, a part of composition, rarely face the issue of relocation, technical communication scholars, such as, Leon Heaton and Mary Sue MacNealy, often take up the question of whether an English department is a good place for a technical communication program and computers and writing program to flourish. The ideological and political problems arising from this arrangement have been documented. Yet, I would argue that the English department might be the most important site for technical communication to be in order to have influence on the way in which the “two cultures” of the humanities and technology/science interact. Arguments for freestanding technical communication departments (such as those at the University of Washington and Texas Tech University) have some allure, but other arrangements seem less than satisfying in that they create distance from English departments, making it possible that such departments, linked to other disciplines, might not get the humanistic nourishment (critical theory, ethics, epistemology) that they need to develop responsible, pragmatic technology critics and developers.

For future research, scholars in technical communication and computers and writing must make a visible and uncompromising claim for technology as a part of humanistic studies. As Bernadette Longo acknowledges, we’ve made moves in epistemology that have led us to consider human design factors and context as “humanistic” themes that help us get beyond the sometimes suffocating power of science. But what remains to be done is careful incorporation of technology into the humanistic face of technical communication rather than distract attention from it. How can we convince our colleagues that technology is not only a part of “executing” the humanities and humanities education but also *the* site of humanistic action and, perhaps,

intervention? For one, we must direct humanistic argument that has too often focused on meeting traditional English departments on its own terms, focusing on “acceptable” humanistic qualities and either omitting or talking around technology in an effort to be accepted and validated. Both computers and writing and technical communication scholars have enjoyed modest success in gaining access to broader disciplinary discussions in the form of panels in major conferences and articles in significant disciplinary forums like *College English*. We need to make a renewed push for visibility in these spaces in order to convey the importance of reexamining the role of technology in what we teach.

Future research also needs to develop appropriate curricula in technical communication and computers and writing that responds to societal problems and does not devolve into vocational teaching, one of Nussbaum’s strong critiques of the contemporary academic humanities. When we teach tools and technology skills—be they web design, hypertext, or RoboHelp—we often raise suspicions among peers who can reductively see these selected course components as the *only* course components. Our curricula must reflect the more expansive tradition of humanistic philosophy and education that we are advancing, with technology introduced and understood as a manifestation of human goals and values, and we need to communicate this stance to our English colleagues.

Part of this curriculum must be made up of technology criticism and critical theory, focusing on the pragmatic humanistic development and use of technologies. While I have disagreed with technology critics for their doomsday forecasting in other places in this dissertation, I support efforts to understand technology and its effects on

our lives, to examine the “technopoly” in which we live. Responsible, pragmatic, humanistic instruction, however, seeks to examine carefully the entire constellation of consequences precipitating and emerging from technology use. Moreover, such instruction looks for a balanced consideration, one that refuses polemic and, while considering the insidious and deleterious effects technology can have, considers, too, the positive effects it makes available. Rather than seeking a utopian in pre-Information Age, such a curriculum would help move toward realizing dreams within the framework of present conditions.

As reductive as the term itself is, we need, too, to teach “tools.” While the concerns about vocationalism that I mention above are real, we can and should supply students with opportunities to learn how to use different applications in a supportive environment that emphasizes technological literacy in its most robust sense and is not content to envision an application as only a “tool” to solve a problem. A more comprehensive humanistic approach recommends careful attention to the complex in which that tool exists, including some consideration of the problem to which the tool responds, the implications of the problem, and the consequences emerging from utilizing the technology.

Such moves can be a part of articulating a pragmatic humanistic stance that develops abilities and dispositions in students—not just critical abilities but the ability to assess and change technology, or to assess and have the courage to abandon technologies when that is most desirable. The main challenge is assuring that students—and the humanities—are equipped to deal with the challenges of our society and not content to

ignore them in favor of ideology or lack of identification. Technological concerns are humanistic, and English departments needs to take note and act.

Lastly, technical communication and computers and writing scholars alike have, since the inception of each discipline, held technology in a central position when working to define the discipline; indeed, both disciplines are largely organized around various technologies. Embracing technology, as a humanistic element, or “aspect” to use Dombrowski’s term, in and of itself is crucial to developing technologized rhetorical disciplines because doing so allows us to understand technology more critically as a manifestation of human values. Doing so allows theorists and practitioners alike to move beyond other, more peripheral humanistic arguments that strained to show either how technology and the humanistic could “get along” or how other humanistic elements “show up” in the discipline. Constructing a pragmatic disposition toward technology in the humanities requires a reconsideration of role—beyond the ways in which we have typically organized that role, which has been geared primarily toward cultural transmission and, more recently, ideological critique. Those roles remain central. But our role can expand and with it, so can our influence.

To take a pragmatic stance, we must ask what the consequences might be should we seek to perpetuate this polemical perspective. For one, inquiry slows down dramatically; we are left with one of two options: either ignore technology and have no voice in its milieu or attack it at every turn. Neither choice seems to result in positive consequence; the first promises us no voice in technological debate and thus no influence whatsoever. The second is perhaps more dangerous still in that it guarantees marginalization in technology debate: the humanists are branded Luddites and so

categorically opposed to technology and the technological imperative that their perspectives are for all intent and purpose ignored. And this, to me, would happen at great expense. Pragmatism invites us to constantly test, to revise according to current conditions, to evaluate consequences. At one point, our narrative of truth-in-text worked, and it still does in a sense. But we have to be sensitive to our audience's needs and interests. And what we are seeing now, more than ever, is the intersection, the blurring of the two cultures such that it seems almost nonsensical to describe the dynamic as blurring or intersection; rather, it seems that there is no difference. Thus, a view of English departments that sees the humanistic in the way that the *Manifestos* do seems useful here; we need to see technology as within our purview and recognize the significant influence we might have on shaping the way technology is thought of and utilized in society. We have always been drawn, I think, to the possible influence we might have on students—exposing them to great ideas, etc. We cannot ignore this when it comes to technology, which is never any more or any less than an embodiment of values.

¹ The stance taken by Kurtz and endorsed by others in the *Manifestos* challenges the assumption that technology removes all choice by seizing and sculpting the horizon of possibilities—technological determinism. Kurtz's view is pragmatic and analytical, suggesting that those with humanist values retain the ability to make choices beyond the narrow framework suggested by technology.

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VITA *J*

Denny B. Kramer

Candidate for the Degree of

Doctor of Philosophy

Dissertation: UNDERSTANDING TECHNOLOGY MORE CRITICALLY AS A
MANIFESTATION OF HUMAN VALUES IN TECHNOLOGIZED
RHETORICAL SUBDISCIPLINES

Major Field: English

Biographical:

Personal Data: Born in Austin, Texas, on October 9, 1969, the son of
Dennis Lee Kramer and Margaret Anderson Kramer.

Education: Received Bachelor's Degree in English from Baylor University,
Waco, Texas, in December 1993. Received Master's Degree in
American Studies from Baylor University in December 1996.
Completed the requirements for the Doctor of Philosophy degree
at Oklahoma State University in August 2003.

Work History: Teacher, China Spring Independent School District, China Spring,
Texas, 1994-1996; Graduate Fellow, Institute for Oral History,
Baylor University, 1996; Teaching Assistant, English department,
Baylor University, 1996; Teaching Assistant, English department,
Oklahoma State University, 1997-2001; Assistant Director of
Technical Writing, English department, Oklahoma State
University, 1999-2001; Instructor, Independent &
Correspondence Study, Oklahoma State University, 2000-
2001.

Memberships: Society for Technical Communication.