PART 4

ETHICAL AND POWER ISSUES

As technical communication occupies an increasingly important position in our cultures, and as its work relies more and more on a general rhetorical framework that involves social philosophies and theories, the field has begun to address issues of ethics and power. In Steven B. Katz's analysis of the rhetoric of Nazi memoranda during the Holocaust, he illustrates the potential of an ideologically neutral model of technical communication to serve starkly immoral purposes. Tracing the foundational nature of "expediency" in historical approaches to technical discourse, Katz provides a warning about the problems of prioritizing technical over human needs in communication. Beginning with a related distinction, Dale L. Sullivan explores the implications of understanding technical communication as a social practice as well as a technical skill. Sullivan's work provides the foundation for a technical communication course that requires students to situate technical decisions within concrete communities, exploring the implications and struggles that surround technical development. In a striking analysis of the ways in which technical documents such as psychiatric diagnostic handbooks construct subjects/users, Carl G. Herndl connects technical communication up to the explicitly activist approaches of radical pedagogy. Radical pedagogy provides Herndl with a method for helping students—as well as teachers and theorists—to see discourse as always bound up with issues of contested power and dissensus; rather than dismissing or condemning those issues, technical communicators must learn to understand and work critically within social contexts. The importance of considering technical communication as an ideological practice is demonstrated by Ben F. Barton and Marthalee S. Barton. After showing how maps always involve specific ideological tendencies, Barton and Barton argue for a visual design practice that reveals rather than conceals both its origins and uses. By locating ethics and power in an enormous range of technical communication contexts and theories, the essays in this section argue for a technical communicator who recognizes and engages with issues of power to work toward a more just culture.

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The Ethic of Expediency

Classical Rhetoric, Technology, and the Holocaust

STEVEN B. KATZ

This article came as a total surprise. When I wrote it, discussions of ethics in technical communication were little more than the requisite paragraph or two on accuracy and precision of language, or whistle blowing, stuck in the corners of chapters buried inside textbooks. Certainly ethical debates raged in philosophy, but it was difficult to see how those esoteric or arcane questions were applicable to the kinds of moral dilemmas technical writers faced on the job everyday. While rhetorical advances were being made in other areas of technical communication, ethics seemed immune to the critique of knowledge as a social-linguistic construction; other than practical advice on clarity and truthfulness, there did not seem to be much to say.

It was in this context that I began my paper on teaching technical communication for a special session at the Modern Languages Association conference. But my work was no exception. I had discovered the Nazi memo in one of the hundreds of books on the Holocaust that crammed the little house that my family rented from my now deceased colleague, Larry Rudner, during my first year at North Carolina State University. I simply intended to suggest using this memo as an example of the power of technical communication gone wrong. But a lead by Carolyn Miller, always astute and generous, led me to consider the memo in relation to Aristotle's discussion of deliberative rhetoric, sparking a crazed flurry of research and writing that ended with a ninety-page conference paper! That conference paper, cut and shaped (even as I delivered it), eventually became this article and the follow-up piece published in the *Journal of Business and Technical Communication* in 1993. I am glad to finally have the opportunity to acknowledge Carolyn's contribution, as well as Larry's influence, Leslie Olsen's help with the title, and Jim Raymond's stewardship of the article in *College English.* We do not work alone.

Reaction to the published article was equally a surprise. Despite care to draw ethical and ideological parallels rather than causal relations between technical communication, Aristotle, and Hitler, I expected three major outrages: from technical communication for the implicit comparison between technology and fascism; from classical rhetoricians for the discussion of Hitler in Aristotelian terms; from Jews for the trivialization of the Holocaust in relation to normative capitalistic culture. More gratifying and important than the positive reception of the article has been the subsequent treatment of ethics in technical communication. The field has come not merely to acknowledge the importance of ethics, but also to explore in article and textbook the-

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From *College English* 54.3 (1992): 255–75.

oretical foundations for understanding, analyzing, and teaching ethics as central to and of the same substance as the epistemic nature of technical writing.

Some of this concern undoubtedly has been spurred by developments in science and technology; for instance, I have investigated the ethics of biotechnology communication with the public, as well as moral tensions inherent in science itself. However, we have an eternity to go. Perhaps further advances must wait until humanity can move beyond the directive of happiness that Aristotle characterized as the prime mover of human morality—or perhaps push beyond the hegemony of Greek classical rhetoric (one unexpected turn my research has taken has been work on ethics and Jewish mysticism). I do not think we will see these changes anytime soon. But we do not work alone.

Steven B. Katz

"[T]he stronger this faculty is, the more necessary it is for it to be combined with integrity and supreme wisdom, and if we bestow fluency of speech on persons devoid of those virtues, we shall not have made orators of them, but shall have put weapons into the hands of madmen"

—*Cicero,* De Oratore *III: xiv. 55.*

* * *

Geheime Reichssache (Secret Reich Business)
Berlin, June 5, 1942

Changes for special vehicles now in service at Kulmhof (Chelmno) and for those now being built

Since December 1941, ninety-seven thousand have been processed [*verarbeitet* in German] by the three vehicles in service, with no major incidents. In the light of observations made so far, however, the following technical changes are needed:

[1.] The vans' normal load is usually nine per square yard. In Saurer vehicles, which are very spacious, maximum use of space is impossible, not because of any possible overload, but because loading to full capacity would affect the vehicle's stability. So reduction of the load space seems necessary. It must absolutely be reduced by a yard, instead of trying to solve the problem, as hitherto, by reducing the number of pieces loaded. Besides, this extends the operating time, as the empty void must also be filled with carbon monoxide. On the other hand, if the load space is reduced, and the vehicle is packed solid, the operating time can be considerably shortened. The manufacturers told us during a discussion that reducing the size of the van's rear would throw it badly off balance. The front axle, they claim, would be overloaded. In fact, the balance is automatically restored, because the merchandise aboard displays during the operation a natural tendency to rush to the rear doors, and is mainly found lying there at the end of the operation. So the front axle is not overloaded.

2. The lighting must be better protected than now. The lamps must be enclosed in a steel grid to prevent their being damaged. Lights could be eliminated, since they apparently are never used. However, it has been observed that when the doors are shut, the load always presses hard against them as soon as darkness sets in. This is because the load naturally rushes toward the light when darkness sets in, which makes closing the doors difficult. Also, because of the alarming nature of darkness, screaming always occurs when the doors are closed. It would therefore be useful to light the lamp before and during the first moments of the operation.

3. For easy cleaning of the vehicle, there must be a sealed drain in the middle of the floor. The drainage hole's cover, eight to twelve inches in diameter, would be equipped with a slanting trap, so that fluid liquids can drain off during the operation. During cleaning, the drain can be used to evacuate large pieces of dirt.

The aforementioned technical changes are to be made to vehicles in service only when they come in for repairs. As for the ten vehicles ordered from Saurer, they must be equipped with all innovations and changes shown by use and experience to be necessary.

Submitted for decision to *Gruppenleiter* II D,
SS-Obersturmbannführer Walter Rauff.

—*Signed: Just*

THE FINAL SOLUTION: AN ETHICAL PROBLEM IN RHETORIC

This is a real memo, taken verbatim from the published transcript of *Shoah,* a 9-hour documentary film on the holocaust directed by Claude Lanzmann (103–05). In this memo, the writer, Just, attempts to persuade his superior, Walter Rauff, of the necessity for technical improvements to the vans being used in the early Nazi program of exterminating the Jews and other "undesirables," just months before the Final Solution of gas chambers and death camps was fully operationalized. In this earlier stage of the Final Solution, four Einsatzgruppen, or "Special Action Groups," A, B, C, and D, had been organized by Himmler to carry out executions by firing squads (Shirer 1248–49). Group D, whose field of operations included the southern Ukraine, was from June 1941–June 1942 headed by Otto Ohlendorf, in the R.S.H.A., Himmler's Central Security Office (Shirer 1249). In 1942, Himmler ordered gassing vans to be used for executing women and children, because it was more efficient, "humane" (see Shirer 1250–51, 1254n.). The Wannsee Conference, in which the details of the Final Solution were worked out, had been held on January 20, 1942.

To begin to get at the ethical problem in rhetoric here, let's do a brief rhetorical analysis of this memo from the standpoint of technical communication, argumentation, and style. By any formal criteria in technical communication, it is an almost perfect document. It begins with what, in recent composition theories and technical writing practices, is known as the problem or "purpose statement." According to J. C. Mathes and D. W. Stevenson, this statement should invoke an assumption or goal shared by the audience—here the statistic that 97,000 have been processed without incident—and then introduce a fact that conflicts with that assumption or goal—technical changes are needed—thereby effectively setting up the problem to be solved (29–38; see also Olsen and Huckin, *Principles* 94–104). In keeping with some of what today are recognized as the rules of good document design, the memo is also divided into three numbered sections that are clearly demarcated by white space for easy reading. And most importantly from the standpoint of technical writing, this recommendation for modifying the vehicles is technically accurate and logically argued.

Indeed, in this memo one can find many of the *topoi* first defined by Aristotle in the *Rhetoric* (II. xxiii. 1397a6–xxiv. 1402a29) that are used to investigate any situation or problem and provide the material for enthymemic arguments. For example, in the first section the writer uses the common topic of relationship: cause/effect arguments, in conjunction with the topic of comparison (difference) and the topic of circumstance (the impossible), are used to investigate the problem of maximizing the use of space, to refute the manufacturer's claims that the problem is one of overloading, and to conclude in an enthymeme that a reduction in the load space is necessary. Just further supports his conclusion by cause/effect arguments embedded in the topic of contraries that reducing the number of "pieces" loaded would extend operating time because the empty space would have to be filled with carbon monoxide, while reducing the load space would actually shorten the operating time. Finally, Just argues by cause/effect and contraries to refute the manufacturer's claim that reducing the load space would overload the front axle by arguing from precedent (example) that "the merchandise . . . displays during the operation a natural tendency to rush to the rear doors, and is mainly found lying there at the end of the operation. So the front axle is not overloaded." Thus, in a series of enthymemes that make use of the *topoi,* Just investigates and proves his case for a reduction in load space.

But of course, this is not the problem with this memo. In fact, given the subject matter, we might wish to claim that this memo is *too* technical, *too* logical. The writer shows no concern that the purpose of his memo is the modification of vehicles not only to improve efficiency, but also to exterminate people. This is the ethical problem in rhetoric I wish to discuss. Here, as in most technical writing and, I will argue, in most deliberative rhetoric, the focus is on expediency, on technical criteria as a means to an end. But here expediency and the resulting *ethos* of objectivity, logic, and narrow focus that characterize most technical writing, are taken to extremes and applied to the mass destruction of human beings. Here, expediency is an ethical end as well.

This "ethos of expediency" can be seen in the style of Just's memo, particularly the euphemisms and metaphors used to denote, objectify, and conceal process and people—"observations," "load," "pieces," "operating time," "merchandise," "packed solid," "fluid liquid," "large pieces of dirt"—as well as use of figures of speech such as ellipsis ("97,000 have been processed") and litotes ("alarming nature of the darkness," "displays a natural tendency to rush to the rear doors"). What concerns me most here is how, based on an ethic of expediency, rhetoric was made to serve the holocaust.

It is well known that to perform well in a professional organization, writers must adopt the ethos of that organization. Barring errors in translation or differences in language structure between German and English, the ethos of Just's memo is created and supported by a grammatical style that Walker Gibson has labelled "stuffy" (90–101): the heavy use of polysyllabic words, modified nouns ("natural tendency," "full capacity," "sealed drain," "fluid liquid," "technical changes"), of a passive voice that obscures the role of the agent, and of subordinate clauses that separate subject from verb. As Gibson points out, in this style responsibility is shifted from the writer (and reader) to the organization they represent, the organization whose voice they now speak with, in whose interest they act, whose ethos they have totally adopted as their own. All the stylistic features I have pointed out communicate and reveal a "group think," an officially sanctioned ethos grounded in expediency.

Indeed, this brief analysis reflects the rhetorical problem with Just's memo: it is based *purely* on an ethic of expediency. This claim at once corroborates and goes beyond Hannah Arendt's controversial conclusion that Eichmann, the inventor of "the Final Solution," was not a psychopath but a bureaucrat simply doing his duty. For Just is not merely performing his function; in order to perform it effectively, he has adopted the ethos of the Nazi bureaucracy he works for as well. But in Nazi Germany, that ethos also involved an entire nation of people, a whole culture. Thus, I believe the ethical problem is even deeper and more widespread than the ethos of a single bureaucracy. In this paper I will attempt to show that what I have called an ethic of expediency underlies technical writing and deliberative rhetoric (see Olsen and Huckin, *Principles* 70), and that this ethic, which is so predominant in Western culture, was at least partially responsible for the holocaust.

Thus it will be my contention that the ethical problem represented in Just's memo to his superior, while an extreme case, is not an anomaly nor a problem in technical writing only, but a problem of deliberative rhetoric—defined by Aristotle as that genre of rhetoric concerned with deliberating future courses of action. I will argue that the ethic of expediency in Western culture which Aristotle first treated systematically in the *Rhetoric,* the *Nicomachean Ethics,* and especially the *Politics,* was rhetorically embraced by the Nazi regime and combined with science and technology to form the "moral basis" of the holocaust. While there is a concern for ethics in the field of technical communication, and while few in our society believe expediency is an adequate moral basis for making decisions, I will suggest that it is the ethic of expediency that enables deliberative rhetoric and gives impulse to most of our actions in technological capitalism as well, and I will explore some of the implications and dangers of a rhetoric grounded exclusively in an ethic of expediency. In doing so, I hope to mount a critique of the ethic of expediency that underlies technical communication and deliberative rhetoric, and by extension writing pedagogy and practice based on it.

In "The Rhetoric of Hitler's 'Battle'" Kenneth Burke has already demonstrated the importance of rhetorical analysis for understanding the source of Hitler's power, and the significance of his misuse of the rhetoric of religion. However, despite Burke's warning, we have tended to understand the holocaust from a nonrhetorical, Platonic standpoint, which amounts to a refusal to understand it at all. Sometimes this standpoint is justified. Elie Wiesel, for example, eloquently argues for the sacredness of the memory of the holocaust against the attempts to absorb it into popular culture and so trivialize it. But for Wiesel, and I would suggest, most people, the holocaust appears as a breach in the Platonic wall of Virtue, an aberration in Western civilization, and so lies outside human culture: "Auschwitz is something else, always something else. It is a universe outside the universe, a creation that exists parallel to creation" (Wiesel 1). In this Platonic realm of anti-Forms, the holocaust lies beyond rhetorical analysis. For Wiesel and many other survivors and scholars,

erence of silence that surrounds a mystery.

However, as George Steiner intimates throughout *In Bluebeard's Castle,* the holocaust may not be so much a breach of the Platonic wall of Virtue, an aberration of Western culture, as an outgrowth of it, the final development and manifestation of something deeper and more problematic in Western civilization itself. In this view, the holocaust falls under the purview of rhetoric. Although Steiner points to the Platonic utopianism inherent in Western culture rather than to expediency as the root of the holocaust, I will show that much of Hitler's ethical and political program is also directly or indirectly based on the ethic of expediency first treated by Aristotle, and is thus amenable to analysis from an Aristotelian point of view. While I agree with Wiesel's argument against the trivialization of the holocaust through popularizations and respect him immensely, an exclusively Platonic stance toward the holocaust prevents us from fully understanding how it happened, and from understanding the relationship it reveals between rhetoric and ethics.

ETHICS IN DELIBERATIVE DISCOURSE: EXPEDIENCY

Let's start with the issue of objectivity in technical writing. While the fallacy of the objective stance in technical writing has been discussed extensively from an epistemological standpoint (see Miller, "Humanistic Rationale"; Dobrin), it has not been discussed enough from an ethical one. The concept of *ethos* in rhetoric might help us here. In rhetorical theory, the role of ethos ("the moral element in character") in enthymemic arguments has been demonstrated by William Grimaldi, for example, who, interpreting Aristotle, argues that it is an essential link between deliberation and action (144–51). Virtue for Aristotle involves choice informed and led by both intellect *and* natural disposition or appetite (*Nicomachean Ethics* VI. xii. 1143b16–xiii. 1145a14). Thus Grimaldi argues that while *logos,* or reason "considers the means necessary" to reach some end in deliberative rhetoric, it is *pathos* and *ethos* that provide the impetus to act.

In this sense, ethics, defined as human character

concerned with decision and action. Technical wri
ing, perhaps even more than other kinds of rhetoric
discourse, always leads to action, and thus alway
impacts on human life; in technical writing, epist
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technical communication and deliberative rhetor
generally, then, is not only one of epistemology, th
relationship of argument, organization, and style
thought, but also one of ethics, of how that relatio
ship affects and reveals itself in human behavior.

It is easy to see how the epistemology of objecti
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ethic of expediency would lead to an epistemology
objectivity) in so far as the viewing subject and th
viewed object are technical means to some "higher
end—that is, "truth." But even discussions based o
the principles of problem statements, audience adap
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used to form the "moral" basis of Nazi society, to cre
ate the ethos of that entire culture, and to provide th
necessary warrant for the holocaust. As Olsen an
Huckin suggest in the second edition of their text
book (*Technical Writing* 40–41; 91–94), we need t
consider technical writing based on deliberative rhet
oric from the standpoint of both rhetoric *and* ethics.

From the debates between the sophists and Plat
to present-day criticism of advertising and politica
propaganda, there has always been an uneasy rela
tionship between rhetoric and ethics. Perhap
nowhere is that relationship more clearly treated—
and the strain more evident—than in Aristotle'
Rhetoric. In the *Rhetoric,* Aristotle states that "rheto
ric is a combination of the science of logic and of th
ethical branch of politics" (I. iv. 1359b10)—of logi
and ethics. According to Aristotle, then, ethics in po
litical discourse is a matter of Goodness as well a
Utility. However, in his discussion of deliberativ
discourse in the *Rhetoric,* Aristotle elides Goodnes

aim," he says, "is utility: deliberation seeks to determine not ends, but means to ends, i.e., what it is most useful to do" (I. vi. 1362a17–20).

In the *Rhetoric* Aristotle thus seems to collapse all ethical questions in deliberative discourse into a question of expediency. As he says, "all other points, such as whether the proposal is just or unjust, honourable or dishonourable, he [the political orator] brings in as subsidiary and relative to this main consideration" (I. iii. 1358b23–25). Nan Johnson argues that it did not seem to matter much to Aristotle whether the ends of deliberative rhetoric were ultimately just or unjust, true or false, as long as the means were expedient. However, several scholars have argued that Aristotle's conception of rhetoric as *praxis* (social action) is not amoral, but rather ethical insofar as praxis involves *phronesis* (practical wisdom or prudence) as an end in itself (see Sullivan 377–78; Kallendorf and Kallendorf 55–57; Rowland and Womack). But it is precisely because rhetoric is a practical art rather than a theoretical science, one located in praxis, in the contingent realm of action, that deliberative rhetoric can be understood to be primarily based on an ethic of expediency. If praxis depends on phronesis, on the practical wisdom or prudence of the speaker to reason about "the good," that wisdom, that prudence, is itself a means to an end, that end being praxis.

Further, as Dale L. Sullivan points out, "the good," and thus what counts as practical wisdom or prudence, is defined by society (378). Thus phronesis, like ethical appeal for Aristotle (*Rhetoric* I. ix, esp. 1367b10), can also be considered an expedient, a means to an end of rhetoric as praxis—determining the "right" course of action in the first case, finding the available means of persuasion in the second. (Eugene Garver, however, argues that this understanding of phronesis depends on whether one defines it as "prudence," which is rooted in character as an end in itself, or as "practical reason," which is detached from character in modern political thought and thus more "technical" [xi]. But as I will show, prudence, like virtue itself, can be redefined by society, become a means to another end, as was the case in Nazi Germany.) In Aristotle's treatment of deliberative rhetoric, then, expediency seems to become an ethical end in itself. Expediency is always the good—"utility is a good thing" Aristotle says (I. vi. 1362a20), concluding: "any end is a good" (I. vi. 1363a5). This is a conclusion which, in light of the holocaust, we may want to reconsider. For following Aristotle, in deliberative discourse, including technical communication, we are in the habit of giving expediency too much free reign.

In fact, most technical communication is deliberative. (Indeed, in a scientific and technological society, much deliberative discourse is technical.) As Olsen and Huckin teach, technical writing is concerned both with arguments of fact *and arguments of policy*—with what should or should not be done (*Principles* 67). But as they also point out, since most technical communication is deliberative, it is based primarily on arguments of expediency rather than worth or goodness (*Principles* 70). What Aristotle gives us in the *Rhetoric,* then, is a practical ethic for technical writing and deliberative discourse, an ethic based almost exclusively on expediency. Most arguments of worth and goodness, if they are present at all, are subsumed under expediency, becoming another means to a desired end, becoming expedient in themselves (like appeals to give to charity based on the advantage of a tax break).

However, Aristotle's treatment of ethics is not as simple as that. Alasdair MacIntyre argues that in Aristotle's *Nicomachean Ethics* the relationship between means and ends is ambiguous (148). On the one hand, it does seem that for Aristotle virtue is a means to an end, that end being happiness. In the *Nicomachean Ethics* Aristotle says that "Happiness . . . is something final and self-sufficient, and is the end of action" (I. vii. 1097b21; see also X. vi. 1176a30–viii. 1179a34). It is not erroneous, says MacIntyre, to see that in positing "the good" as the *telos* or goal of human life and defining that telos as happiness or pleasure, Aristotle renders happiness the ideal object of all virtue (148). In fact, G. E. R. Lloyd suggests that Aristotle waxes positively Platonic in his discussion of happiness (239).

On the other hand, according to MacIntyre, Aristotle does not clearly separate means and ends as we do. MacIntyre argues that in Aristotle's teleological philosophy, happiness as "the good" is not only an end of virtue but a part of virtue, the result of virtue as an activity of the soul: "The enjoyment which

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Aristotle identifies is that which characteristically accompanies the achievement of excellence in activity" (160). Lloyd too points out that there is no ideal form of the Good as such, but rather individual goods associated with particular activities or subjects (208–13). Thus, says MacIntyre, "the enjoyment of itself provides us with no good reason for embarking upon one type of activity rather than another" (160).

Further, if there is no ideal form of the Good, virtue (like knowledge without the ideal form of Truth) is communal in nature, and is at least partially determined by the society in which one lives. That is, virtue, like knowledge, is socially constructed, culturally relative, an awareness of a condition of our civilization from which, as Steiner laments, there is no turning after the holocaust (59–93). In fact, according to MacIntyre, virtue was not a matter of individual moral authority for Aristotle, as it is for us, but was always directed toward and made possible by the *polis* (148–64). Thus, MacIntyre suggests, it is probably incorrect to consider happiness or pleasure the telos of human life for Aristotle; rather, it was the excellence of activity (160).

And of course, the highest activity resulting in supreme happiness was philosophical contemplation. For Aristotle, the reason for the polis to exist is to make possible the pursuit of excellence and the happiness that is concomitant with it (*Ethics* I. ii. 1094a20–1094b10; *Politics* VII). Indeed, to reduce MacIntyre's thesis to its simplest terms, the decline of both the philosophy of ethics and of virtue itself is marked by the breakdown in Western culture of a communal teleology and the shift to an individual moral authority and utilitarianism that can be seen, for instance, in the philosophies of Nietzsche and Bentham (MacIntyre 62–78; 256–63). This last point may be important when we consider some of the implications for rhetoric of the ethic of expediency in a capitalistic culture.

Thus, although the roots of totalitarianism have been perceived in Aristotle's conception of the polis as well as in Plato's conception of the republic (see Popper 1–26), and the darker side of the Greek polis itself has come under some scrutiny from rhetorical quarters (Miller, "Polis"), we may wish to locate the ethic of expediency that culminated in the holocaust not in Aristotle's corpus, but rather in the trace of subsequent history. For if MacIntyre is correct, not only Aristotle's concept of ethics but virtue itself has "deteriorated" under the pressure of individualism and the utilitarianism that individualism gives rise to. In any case, it is important to understand how the ethic of expediency that evolved in Western culture and underlies most deliberative discourse also at least partly formed the moral basis of the holocaust. And Aristotle's treatises can provide a clear point of reference.

It is not my purpose in this article to establish a direct connection between Aristotle and Hitler. There is little evidence in *Mein Kampf* to suggest that Hitler actually read Aristotle either when he "studied" in Vienna or while he was an inmate at Landsberg Prison, where he wrote *Mein Kampf*, although he almost certainly read or had secondhand knowledge of the work of Plato, as well as Fitche, Nietzsche (see *Mein Kampf* 579–81n.), and other German philosophers and historians (see Shirer 142–64). Indeed, in his early days in Vienna, Hitler "was a voracious reader" (Shirer 40), and throughout his life possessed a keen if selective passion for political writing and biographies of powerful leaders (see Shirer 1439). But it is my belief that Hitler, like those around him (see Speer 246), was at least familiar with Aristotle's work, especially the *Politics*. Machiavelli, Renaissance statesman, student of politics, and author of Hitler's "bedtime reading" (Gauss 8), almost certainly was (cf. Garver).

But it is crucial that we examine Hitler in conjunction with Aristotle's *Rhetoric*, *Nicomachean Ethics*, and *Politics* to see how Hitler used the ethic of expediency rhetorically to create a "moral" warrant for Nazi action. To do so, it will be necessary to turn to Hitler's writings, speeches and conversations (as collected, edited, and in some cases translated for the first time in the short but incisive *Hitler* by George H. Stein). For it is in his writings, speeches, and conversations that Hitler lays bare not only his political program, but the ethic of expediency that guided it.

HITLER'S "ETHICAL" PROGRAM?

Although the characterization seems hard to swallow, Hitler's *was* an "ethical" program in the broadest

sense of that term. As Stein writes in a prefatory remark, "In *Mein Kampf,* Hitler set down clearly and systematically his principles for political action" (45). Indeed, in *Mein Kampf* Hitler asks: "Can spiritual ideas be exterminated by the sword? Can 'philosophies' be combated by the use of brute force?" (51).[1] If Aristotle maintains in the *Nicomachean Ethics* (VI. xii. 1143b16–xiii. 1145a14) that "practical wisdom" must be accompanied by "moral virtue" to supply the right end, that "it is not possible to be good in the strict sense without practical wisdom, nor practically wise without being good" (VI. xiii. 1144b30), Hitler maintains that the application of technique and power must be based on a "spiritual idea," a philosophy, to be successful. Hitler understood—all too well—that his political program for world war and mass extermination would not be accepted without a moral foundation. While "the continuous and steady application of the methods for repressing a doctrine, etc., makes it possible for a plan to succeed," Hitler proclaims, "this persistence . . . can always and only arise from a definite spiritual conviction. Any violence which does not spring from a firm, spiritual base, will be wavering and uncertain. It lacks the stability which can only rest in a fanatical outlook" (52).

For Hitler, as for Aristotle—at least in his discussion of deliberative rhetoric—there seems to be no distinction between "practical wisdom" and "moral virtue," between expediency and the good, as long as rhetoric serves its end, that is, the State. Thus Hitler asserts: "Conceptions or ideas, as well as movements with a definite spiritual foundation, regardless of whether the latter is false or true, can, after a certain point in their development, only be broken with technical instruments of power if these physical weapons are at the same time the support of a new kindling thought, idea, or philosophy" (51). In Hitler's rhetoric, expediency is the necessary good that subsumes all other goods, and becomes the basis of virtue itself.

And depending on how one interprets the word "support" in the previous quotation, there were two possible ways in which expediency might become the basis of virtue for Hitler: politically and technologically. In the first interpretation, "support" can be read to mean that the technical instruments of power must be used in the service of (must implement and enforce) a new political philosophy. In the second interpretation, "support" can be read to mean that the technical instruments of power must themselves become the basis of (must embody and engender) a new "technological philosophy." In other words, for Hitler there seem to be two kinds of expediency that can be used to supplant an existing morality: political expediency, motivated by a "concern" for the State (at least ostensibly), and technological expediency, motivated by technology itself.

Thus, to see how Hitler "takes" the Aristotelian notion of expediency and combines it with technology to create a new moral order, it is useful to make a distinction here between expediency based on politics and expediency based on technology. I have already mentioned that for Aristotle, if the end or "good" in deliberative discourse is political expediency, the function of the "ideal" state is to supply the material means necessary to secure "happiness" and the "good life" for *its* citizens—their moral and intellectual development. These material means included enough people and land to be self-sufficient (*Politics* VII. iv. 1326a5–v. 1327a10), a defense against enemies, both external and internal, both in the present and in the future (V; VII. vi. 1327 all–1327b15; xi. 1330b35–1331a17), and a large slave class (I. v. 1254a18–vi. 1255b15; VII. ix. 1328b25–x. 1330a34). (Based on the ethic of expediency, it also included killing deformed children or mandatory abortion to control the population of the state! [*Politics* VII. xvi. 1335b20–28].)

Hitler almost seems to put Aristotle's observations into practice. In his political speeches and writing, Hitler continually proclaimed the political (i.e., "ethical") need and practical utility of conquering Europe and enslaving its farmer peasants, turning Russia into "Germany's India" (63), and exterminating the Jews and other "inferior, subhuman species" in order to eradicate "social disease" and facilitate the moral, material, and intellectual development of the German people. In Hitler's oratory and mind run amok, the Final Solution was necessary because neither exile nor quarantine of the Jews could guarantee the purity, safety, and well-being of the Aryan race.

But Hitler unfortunately also understood that the moral grounds for war and mass extermination could be rhetorically founded on science and technology

themselves. Science and technology as moral expedients could be used to generate a "new philosophy," a "spiritual foundation," a "fanatical outlook." There was the belief in genetic hygiene and Germanic supremacy grounded in racial biology as well as natural selection (see Proctor). But in addition, grounded in the ethic of expediency, "the technical instruments of power" themselves, "the physical weapons" as well as the political program they served, also could be the rhetorical basis of the spiritual element.

In Nazi Germany (and I will suggest, in our own culture) science and technology become the basis of a powerful ethical argument for carrying out any program. Science and technology embody the ethos of objective detachment and truth, of power and capability, and thus the logical and ethical necessity (what Winner has called the "technological imperative" [*Autonomous* 100–06]) for their own existence and use. Sullivan arrives at a similar conclusion (379). But in Just's argument for technical improvements to the gassing vans, we see the technological imperative at its worst. Technological expediency actually subsumes political expediency and becomes an end in itself. Progress becomes a virtue at any cost.

Thus, the theoretical distinction I just made between technological and political expediency breaks down in practice. Technology is political (see Winner, "Artifacts"; *Autonomous*). Both technology and politics can become the basis of ethics; both lead to power. But technology can become the basis of politics as well. Based on what we now know about the holocaust, there can be no doubt that Hitler believed in the efficacy of science and technology, no matter how perverted, as the basis of ethics and politics. "A movement like ours mustn't let itself be drawn into metaphysical digressions," Hitler states; "It must stick to the spirit of exact science" (69).

The result: Just's memo. Mass extermination. Horrible biological and technological experiments on those considered subhuman. A cold-blooded methodology the standard for dealing with the Jews, as well as with the conquered. A cold-blooded method the ethos of an entire country. Gas chambers replacing vans, systematically "processing" hundreds of thousands of "pieces" a day. New and improved methods for administering pain and eliminating people. The whole society organized into a death machine for the efficient extirpation of millions, lauded by the Nazis as a hallmark of organization, elegance, efficiency, speed, all of which became ends in themselves for those planning and those executing the procedures.

For Hitler, technological expediency served to make mass extermination seem not only necessary, but just and honorable: "every persecution which occurs without a spiritual base seems morally unjustified," says Hitler (51–52). It is the ethic of technological expediency that we sense in the memo by Just to the SS—if we sense any ethic at all. Underlying the objectivity, detachment, and narrow focus of this memo (and of Nazi rhetoric in general) is an assurance that the writer's "action" is *technically* justified and correct, and thus morally right, an assurance that is grounded not in the arrogance of a personal belief in one's superiority, but rather in a cultural and ethical norm of technology as well as Party. The ethic of technological expediency that underlies this memo and constitutes its ethos at least in part provided the warrant that propelled Nazi Germany into the forefront of war and of infamy. Perhaps this ethic can explain the cold logic with which Just addresses the gassing of innocent people. Perhaps the ethic—as well as apathy, and fear, and hatred—can explain the complicity of millions.

THE TECHNOLOGICAL ETHOS AND NAZI RHETORIC

To further understand how the ethic of expediency based on technology partially formed the moral basis of the holocaust, and to begin to realize the implications of this for rhetoric, it would be useful to understand the ethos of technology a little more, how rhetoric was used to create it, and what its effect on rhetoric was. While I don't mean to suggest this is the "final answer" to that question murmured so many times before—how could the holocaust have happened?—the imperatives of science and technology as moral expedients create a powerful ethos that may partly explain what occurred. As Jacques Ellul discusses at length in *The Technological Society,* technology, the embodiment in techniques and procedures as well as machines of scientific method, becomes its own *raison d'etre* and driving force in

ulture. Technology becomes both a means and an nd in itself.

In addition, Jurgen Habermas argues that in late ndustrial capitalism, technological values do indeed ubsume political/economic ones, and that this "purposive-rational subsystem" of industrial capitalism quietly usurps the "traditional-institutional framework" of social customs, values, and beliefs (90–107). That is, a "technological rationality" that calculates the value of everything in terms of its own echnical criteria and use (and that drives postmodern economics, for example), supplants and replaces the raditional values of the society. In Just's memo, we see that technical improvements to the vans become the only criteria necessary to consider.

Obviously, "technological rationality" is based on expediency. Unlike honor or justice, which are based on higher, more abstract moral principles, expediency is the only "technical" ethic, perhaps the only ethic that "pure rationality" knows. (Stein even calls Hitler a "religious rationalist" [67].) With expediency, the only ethical criterion necessary is the perceptible movement toward the technical goal to be achieved—including expediency itself. Indeed, expediency is the only ethic that can be "measured," whether that measure be a cost-benefit analysis employed by an industrial engineer to argue for the automation of a plant, or the number of people exterminated in one day—"pure" expediency (undiluted and uninhibited by other ethics) recognizes no boundaries, no degrees of morality or other ethical limits. While expediency can be the basis of desire and emotion (like greed or the lust for power), the ethic of expediency is an exclusively logical, systematic, even quantifiable one, can lead to a rationality grounded in no other ethic but its own, and is symptomatic of a highly scientific, technological age.

And of course, technology is the embodiment of pure expediency. Thus, "the spiritual element," the ethos of technology, is expediency: rationality, efficiency, speed, productivity, power. It is in this way that technology creates the "ethical appeal" I mentioned earlier. Both science and technology are "a good" not only because they are a rational means for accomplishing a task and/or achieving leisure and thus happiness (the virtues heard most in regard to sci- are ethical ends in themselves as well. As Carolyn Miller points out, the *ethos* of technology can even become a form of consciousness (see "Technology"). And as Heidegger expounds, the essence of science and technology is "enframing," a manifestation and mode of perception and of being that arrests, objectifies, turns everything into a "standing-reserve" for use (14–49).

In Nazi Germany, where gold fillings were extracted from the teeth of the victims of the gas chambers and melted down and the hair of victims was used "in the war effort," we see the ethic of expediency taken to extremes. Germans under Nazi rule were an efficient people of an industrious nation who totally lost themselves in the ethos of technology. The holocaust reminds us not only of the potential brutality and inhumanity of the ethic of expediency, but of a rationality taken to such extremes that it becomes madness.

How did this ethos come about? If Hitler used the ethic of expediency as first treated in Aristotle's *Politics* as part of the moral basis of his political program (significantly, his fervent appeals to the "Platonic" right of the Third Reich were the other part), he used the ethic of expediency first treated in Aristotle's *Rhetoric* to create the technological ethos of Nazi consciousness and culture. Based on that ethic of expediency, Hitler can be understood to have turned Aristotle's concept of deliberative rhetoric inside out, exploiting the ethic of expediency that underlies and enables it and essentially turning deliberative rhetoric against itself. To understand how Hitler perverted Aristotle's concept of deliberative rhetoric to create the ethos of Nazi Germany, we must look more closely at Hitler's conception of rhetoric.

We have seen that Just's memo is based purely on expediency; the memo itself is a technical instrument (like the vans themselves) for carrying out the organizational "task." I have also already pointed out how in Aristotle's conception of deliberative rhetoric, expediency seems to be the primary virtue. Deliberative rhetoric is expedient when it serves its end, that is, political persuasion. The test of success in Aristotelian rhetoric is in the persuasion of the audience (the so-called "audience criterion"). As "the art of [illegible] in any given case the available

rhetoric could be considered a means to an end, an expedient, a *techne* (although as Grimaldi and others have shown, for Aristotle it was much more than this; for Aristotle rhetoric was also an *episteme* or faculty for discovering social knowledge).

Hitler takes the ethic of expediency underlying deliberative rhetoric to its logical extreme. For Hitler, propaganda, the truest form of "technical rhetoric," replaced deliberative discourse as the preferred mode of communicating with the masses:

> The function of propaganda does not lie in the scientific training of the individual, but in calling the masses' attention to certain facts, processes, necessities, etc., whose significance is thus for the first time placed within their field of vision.
>
> The whole art consists in doing this so skillfully that everyone will be convinced that the fact is real, the process necessary, the necessity correct, etc. (46)

Based on the ethic of expediency, rhetoric for Hitler was pure technique, designed not to encourage debate, but rather to indoctrinate: "all effective propaganda must be limited to a very few points and must harp on these slogans until the last member of the public understands what you want him to understand by your slogan"; the reason, Hitler adds, is that "As soon as you sacrifice this slogan and try to be many-sided, the effect will piddle away, for the crowd can neither digest nor retain the material offered. In this way the result is weakened and the end entirely cancelled out" (47). Even in these abbreviated quotations we see not only a greater (political?) distrust of the masses than we find in Aristotle (*Rhetoric* I. ii. 1357a5), but also a greater "technical" preoccupation with the end to be achieved, both of which tend to work against free discussion, true deliberation.

In fact, founded on the ethic of expediency and taken to extremes, rhetoric itself becomes a kind of technology, an instrument *and an embodiment* of the end that it serves. In *Mein Kampf* Hitler asks, "Is propaganda a means or an end? It is a means, and must therefore be judged with regard to its end. It must consequently take a form calculated to support the aim which it serves" (45). In Nazi Germany, propaganda served the function of creating the technological ethos of Nazi consciousness and culture: rationality, efficiency, speed, productivity, power. In fact, as a technology, propaganda itself embodies this ethos and actually becomes personified in Hitler's rhetoric existing for those ends only. If Aristotle observes that deliberative discourse is based on questions of expediency rather than justice or honor, Hitler declares that "The function of propaganda is . . . not to weigh and ponder the rights of different people, but exclusively to emphasize the one right which it has set out to argue for. Its task is not to make an objective study of the truth, in so far as it favors the enemy and then set it before the masses with academic fairness; its task is to serve our own right, always and unflinchingly" (47).

For Hitler, this technological ethos was necessary to create the rhetorical/moral basis for the violence and brutality to which he incited the German masses. If Aristotle observes that for political orators "all other points, such as whether the proposal is just or unjust, honourable or dishonourable, are subsidiary and relative and have little place in deliberative discourse. . . . [W]hether it is not *unjust* for a city to enslave its innocent neighbors often does not trouble them at all" (*Rhetoric* I. iii. 1358b25; 1358b35), Hitler insists that in questions of political struggle "all considerations of humanitarianism or aesthetics crumble to nothingness . . ." (45).

Finally, if the purpose of Hitler's propaganda was to instill in the German people an ethos of detachment and power by which the Aryan race would build the Third Reich, as leader of this race Hitler sought to embody this ethos himself: "the masses love a commander more than a petitioner and feel inwardly more satisfied by a doctrine, tolerating no other beside itself . . ." (42–44). If ethical appeal, the most important of the three appeals for Aristotle (*Rheto*

the audience that he or she possesses sound sense, high moral character, and good will (II. i. 1378a9), Hitler redefines these ethical categories based on the ethic of expediency, reducing them to their basest, "technical" level. In the ethical system Hitler rhetorically created for "the master race," sound sense is reduced to expediency, high moral character is reduced to courage to use brutal force, and good will is reduced to "benevolent violence" against those considered inferior: "When I think about it, I realize that I'm extraordinarily humane. . . . I restrict myself to telling them they must go away. If they break their pipes on the journey, I can't do anything about it. But if they refuse to go voluntarily, I see no other solution but extermination" (72).

In word and act, Hitler created an ethos of expediency in order to carry out his pogrom for the greater good of Germany: "The people at all times see the proof of their own right in ruthless attack on a foe, and to them renouncing the destruction of the adversary seems like uncertainty with regard to their own right if not a sign of their own unright" (50). It was an *ethos* that Hitler thought necessary for the German people to embrace and adopt as well: "Close your hearts to pity. Act brutally. Eighty million people must obtain what is their right. Their existence must be made secure . . ." (76).

It is clear that Hitler combined the ethic of expediency embedded in rhetoric with technology to create the ethos of Nazi Germany. That is, Hitler used technological expediency to create the polis necessary to carry out world war and mass extermination. In addition, the ethic of expediency then served as the telos—"the will to power"—of that polis. It is therefore also clear that the telos within a *polis* is not universal but socially constructed and relative, and renders ethics that are based on and serve them relative as well. MacIntyre too recognizes this (159). In fact, if we understand Aristotle's acceptance of slavery as a reflection of "the blindness" of his culture (MacIntyre 159), then perhaps we can also understand the holocaust as a reflection of "the blindness" of Nazi culture as well—a political and technological blindness deliberately created in and through rhetoric.

This is in no way meant to diminish or forgive the profound tragedy of the holocaust. Nor is it meant to devalue rhetoric. Rather, it is to bring home the significance of the holocaust for our understanding of the essential relationship between rhetoric and ethics. In considering that relationship, we must always look at rhetoric in the context of historical, political, social, and economic conditions which govern the nature and use of rhetoric in culture. In Just's memo to the SS we clearly see the view of human beings that can result when technology becomes an ethos, when a polis embraces a "pure" ethic of expediency as its telos. To understand the holocaust from a rhetorical point of view is to understand the *extreme* limits and inherent dangers of the prevailing ethic of expediency as ideology in a highly scientific and technological society, and how deliberative rhetoric can be subverted and made to serve it.

EXPEDIENCY IN TECHNOLOGICAL CAPITALISM: THE "FINAL PROBLEM" FOR US

Having said this, I think it is important in the conclusion of this paper to briefly explore the implications of the ethic of expediency manifested in Nazi Germany for rhetoric in our capitalistic culture. Certainly, our polis is as different from Nazi Germany's as Nazi Germany's was from ancient Greece's. While the telos of the ancient Greek polis was the intellectual development of the mind (for its few "citizens" anyway), the telos of the Nazi polis was the development of the power of the State itself, as embodied in technology, Party, and Führer. And while the polis in both ancient Greece and Nazi Germany can be understood to have had a communal telos—the development of the State (though for different ends)—the telos of our polis is understood to be the individual. Individualism is the basis of both democracy and capitalism.

I said earlier that MacIntyre believes that Aristotle's concept of ethics and virtue itself have "deteriorated" under the pressure of individualism and the utilitarian ethic that individualism spawned. As MacIntyre suggests, we probably can't understand happiness as Aristotle did. We may not understand Aristotle's concept of expediency either. Whether ethics have actually "deteriorated" or not, with the shift in moral authority from the State to the individual, *personal* happiness has become the goal of life in the

fined primarily in economic terms. I think it can be asserted without too much argument that the telos of life in the United States is economic progress. In the United States, success and happiness, both personal and communal, are measured in monetary terms. In a capitalistic culture, it is "economic expediency" that drives most behavior.

Further, that expediency is both political *and* technological. I have already mentioned how 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. In our capitalistic society, economic rationality, facilitated by and dedicated to the development of new technologies, is one manifestation of this. The danger, then, is that technological expediency in the guise of free enterprise can become de facto both a means and an end. That is, in our culture, the danger is that technological expediency (unlike happiness for Aristotle, which appears to be only a part and result of virtue) can become the only basis of happiness, can become a virtue itself, and so subsume all ethics under it, making all ethics expedients and thus replacing them. According to Habermas, this has already occurred.

The ethic of expediency *in extremis* and combined with technology underlies the rhetoric of Just's memo to the SS and the holocaust in general. But *to some extent,* technological (i.e., economic) expediency is the "moral" basis of many decisions/actions in our society that sometimes harm human welfare or imperil human life. A recent example would be the decision not to notify the public of the bomb threat to Pan Am Airlines to keep the airlines operating; in December 1988, Pan Am Flight 103 from London to New York exploded over Locherbee, Scotland, killing all two hundred and seventy people on board. Ethically speaking, the difference is only one of degree, not kind. The decision not to notify the public was a "systems decision," concerned more with the "efficient" operation of the transportation system than with the people the system is supposed to serve. In any highly bureaucratic, technological, capitalistic society, it is often the human being who must adapt to the system which has been developed to perform a specific func-

ward the continuance of its own efficient operatio (see Winner, *Autonomous,* especially 238–48). In capitalistic society, technological expediency ofte takes precedence over human convenience, and some times even human life.

Now, I am not saying that science and technolog are inherently fascist, or that we are becoming like th Nazis. Nor am I saying that expediency is all bad. can be and is used to argue for increased safety or otherwise enhance human welfare. What I am sayin however, is that expediency as we understand it in ou culture in the twentieth century, as a technological en in itself, is problematic. The ethic of expediency th provides the moral base of deliberative discourse use to make decisions, weigh consequences, and argue re sults in every department of society, also resulted i the holocaust—a result that raises serious and funda mental questions for rhetoric. (This is especially im portant when so many of our decisions, so much o our discourse, both public and professional, is techn cal in nature, and is therefore most likely to be dom nated by the ethic of expediency.)

If technology can become a form of conscious ness, as Miller suggests, and technological exped ency in the guise of economic rationality can becom our telos, then deliberative rhetoric—devoted to th use of reasoned debate to arrive at informed consen sus and decisions in a democracy—could becom nearly impossible, at least as far as technologica political issues are concerned. Although in "Rhetori of Decision Science" Miller holds up deliberativ rhetoric as a form of reasoning that is opposed to de cision science—a technique based on technologica rationality that is used to make managerial decision by quantifying all the variables—we have seen tha based on the ethic of expediency that underlies an enables it, deliberative rhetoric can be made to serv exclusively the technological interests of "the State Although not a decision "science," deliberative rhe oric could become technological, replacing the dem ocratic decision-making process with *techniques* persuasion and audience adaptation calculated serve their own end only. Some would argue it a ready has.

Although I can't explore it here, there are man

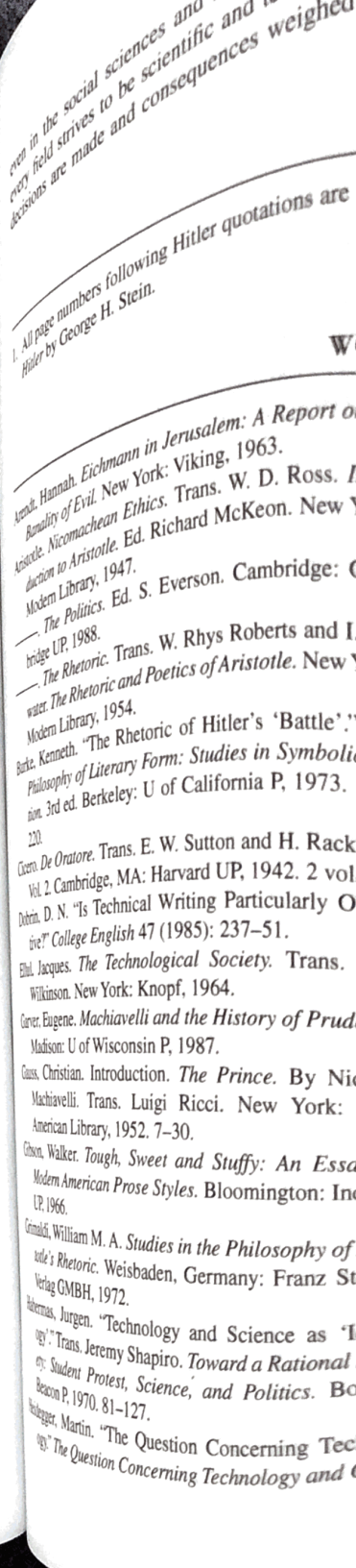
and contemporary political campaigns and commercial advertising in the United States. Rhetoric, especially the "rhetoric of science and technology," is increasingly being called upon and used to make or justify decisions based on technological expediency—to create the necessary technological ethos for accepting actions or events, especially in military procurement and operations, and in the management of risky technologies such as hazardous waste disposal facilities or nuclear power plants.

The question for us is: do we, as teachers and writers and scholars, contribute to this ethos by our writing theory, pedagogy, and practice when we consider techniques of document design, audience adaptation, argumentation, and style without also considering ethics? Do our methods, for the sake of expediency, themselves embody and impart the ethic of expediency? If telos is politically constructed and ethics are culturally relative, we must realize the role our rhetoric plays in continually creating, recreating, and maintaining not only knowledge, but values as well—including the value of technological expediency—through how we teach rhetoric, and how we use it.

And if we do contribute to this ethos, what can we do to counter it? We can begin by recognizing the essentially ethical character of all rhetoric, including our writing theory, pedagogy, and practice, and the role that expediency plays in rhetoric. We no longer have the luxury of considering ethics outside the realm of rhetoric, as in the Platonic model of knowledge, for the holocaust casts serious doubt upon this model. And Aristotle's division of ethics in rhetoric according to audience and function (deliberative, forensic, epideictic), is appealingly *useful* but problematic and ultimately limited. For based on that division, and the ethic of expediency in deliberative rhetoric under which we have operated, Aristotle does not seem to consider other ethics, such as honor and justice (or kindness and humility) important in deliberative discourse—at least not for their own sake.

In the gruesome light of the holocaust, then, we should question whether expediency should be the primary ethical standard in deliberative discourse, including scientific and technical communication, and whether, based on Cicero's advocacy of a rhetoric grounded in a knowledge of everything and Quintilian's definition of the orator as "a good 'man' skilled in speaking," we can and should teach the whole panoply of ethics in deliberative discourse in our rhetoric and writing courses. We could start with Just's memo. Perhaps we should even begin to question whether "happiness"—as *we* understand it in our individualistic and utilitarian culture, as personal or corporate gain grounded in economic progress—should be the only basis of virtue and the primary goal of human life. For when expediency becomes an end in itself or is coupled with personal or political or corporate or scientific or technological goals that are not also and ultimately rooted in humanitarian concerns, as is often the case, ethical problems arise. (Of course, this presumes that we can define and agree upon what these "humanitarian concerns" are—a presumption which is not at all certain, given the "true" relativity of values, the multiplicity of needs, and the current climate of personal and corporate greed.)

But I trust we can agree that Hitler's rhetoric, politics, and ethics are not based on "humanitarian concerns." I also hope we can agree that Hitler's rhetoric, politics, and ethics are not only based on insane hatred and racial prejudice, but also on the ethic of expediency carried to extremes and unchecked by any other ethical concerns, on science, technology, and reason gone awry. For in an age when it is sometimes considered "economically rational" to accept high insurance costs on plane crashes rather than improve the safety of planes; when Ford Motor company decided that it would be more cost-effective to incur the law suits (and loss of life) caused by the placement of the gas tank on the Pintos rather than fix the problem, and only changed its mind when an equally expedient solution was found; when *personnel* are now referred to as Human Resources, like shale or oil, with the metaphorical implications that they (we) can be used up and disposed of or replaced when need be; when launch dates are more important than the safety of astronauts and production quotas more important than the safety of workers and residents alike; when expediency outweighs compassion in government and cost/benefit analyses are applied to human welfare and technical considerations outweigh human considerations in almost every field of endeavor,



even in the social sciences and humanities—when every field strives to be scientific and technical and decisions are made and consequences weighed and value argued on the ethic of expediency only—the holocaust may have something to teach those of us in technical communication, composition, and rhetoric.

NOTE

1. All page numbers following Hitler quotations are from *Hitler* by George H. Stein.

WORKS CITED

Arendt, Hannah. *Eichmann in Jerusalem: A Report on the Banality of Evil.* New York: Viking, 1963.

Aristotle. *Nicomachean Ethics.* Trans. W. D. Ross. *Introduction to Aristotle.* Ed. Richard McKeon. New York: Modern Library, 1947.

———. *The Politics.* Ed. S. Everson. Cambridge: Cambridge UP, 1988.

———. *The Rhetoric.* Trans. W. Rhys Roberts and I. Bywater. *The Rhetoric and Poetics of Aristotle.* New York: Modern Library, 1954.

Burke, Kenneth. "The Rhetoric of Hitler's 'Battle'." *The Philosophy of Literary Form: Studies in Symbolic Action.* 3rd ed. Berkeley: U of California P, 1973. 191–220.

Cicero. *De Oratore.* Trans. E. W. Sutton and H. Rackham. Vol. 2. Cambridge, MA: Harvard UP, 1942. 2 vols.

Dobrin, D. N. "Is Technical Writing Particularly Objective?" *College English* 47 (1985): 237–51.

Ellul, Jacques. *The Technological Society.* Trans. John Wilkinson. New York: Knopf, 1964.

Garver, Eugene. *Machiavelli and the History of Prudence.* Madison: U of Wisconsin P, 1987.

Gauss, Christian. Introduction. *The Prince.* By Niccolo Machiavelli. Trans. Luigi Ricci. New York: New American Library, 1952. 7–30.

Gibson, Walker. *Tough, Sweet and Stuffy: An Essay on Modern American Prose Styles.* Bloomington: Indiana UP, 1966.

Grimaldi, William M. A. *Studies in the Philosophy of Aristotle's Rhetoric.* Weisbaden, Germany: Franz Steiner Verlag GMBH, 1972.

Habermas, Jurgen. "Technology and Science as 'Ideology'." Trans. Jeremy Shapiro. *Toward a Rational Society: Student Protest, Science, and Politics.* Boston: Beacon P, 1970. 81–127.

Heidegger, Martin. "The Question Concerning Technology." *The Question Concerning Technology and Other Essays.* Trans. William Lovitt. New York: Harper, 1977. 3–35.

———. "The Turning." *The Question Concerning Technology and Other Essays.* Trans. William Lovitt. New York: Harper, 1977. 36–49.

Hitler, Adolph. *Mein Kampf.* New York: Reynal, 1941; Houghton, 1939.

Johnson, Nan. "Ethos and the Aims of Rhetoric." *Essays on Classical Rhetoric and Modern Discourse.* Ed. Robert Connors, Lisa S. Ede, and Andrea Lunsford. Carbondale: Southern Illinois UP, 1984. 98–114.

Kallendorf, Craig, and Carol Kallendorf. "Aristotle and the Ethics of Business Communication." *Journal of Business and Technical Communication* 3 (1989): 54–69.

Lanzmann, Claude. *Shoah: An Oral History of the Holocaust.* New York: Pantheon, 1985.

Lloyd, G. E. R. *Aristotle: The Growth and Structure of His Thought.* Cambridge: Cambridge UP, 1968.

MacIntyre, Alasdair. *After Virtue: A Study in Moral Theory.* 2nd ed. Notre Dame, IN: U of Notre Dame P, 1984.

Mathes, J. C., and D. W. Stevenson, *Designing Technical Reports: Writing for Audiences in Organizations.* Indianapolis: Bobbs-Merrill, 1976.

Miller, Carolyn R. "A Humanistic Rationale for Technical Writing." *College English* 40 (1979): 610–17.

———. "The Polis as Rhetorical Community." Paper presented at the International Society for the History of Rhetoric. Gottingen, West Germany, 1989.

———. "The Rhetoric of Decision Science, or Herbert A. Simons Says." *The Rhetorical Turn: Invention and Persuasion in the Conduct of Inquiry.* Ed. Herbert W. Simons. U of Chicago P, 1990. 162–84.

———. "Technology as a Form of Consciousness: A Study of Contemporary Ethos." *Central States Speech Journal* 29 (1978): 228–36.

Olsen, Leslie A., and Thomas N. Huckin. *Principles of Communication for Science and Technology.* New

14

Political-Ethical Implications of Defining Technical Communication as a Practice

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This article sprang out of a nexus of concerns in my life at the time. We were developing a PhD degree at Michigan Technological University, and I was hoping the degree would focus on scientific and technical communication strongly supported by studies in the philosophy and sociology of science and technology. I had been reading philosophy of technology material for several years, being influenced most heavily by Jacques Ellul's *The Technological Society* and Langdon Winner's *Autonomous Technology.* Even though I believed that the technological imperative was destroying many things I valued, creating alienation at many levels, I had four school-age children, who, I knew, would have to find a way to make a living in a technological world created by our evolving economic system. Thus, the article reflects internal conflicts between my desires for the well-being of my children and my reactionary stance toward the technological society.

But it also sprang from the ongoing dialogue in the literature on technical communication. Until the late 1970s or middle 1980s, most articles were "how to" articles: how to write an effective proposal; how to teach a segment based on a case study; how to integrate passages from *Moby Dick* into the teaching of technical writing. The discussion, however, had been enhanced by volume two of Baywood's Technical Communication series, edited by Paul Anderson, John Brockmann, and Carolyn Miller; by *Writing in Nonacademic Settings,* edited by Lee Odell and Dixie Goswami; and by articles such as S. Michael Halloran's "Eloquence in a Technological Society." In my own reading of the literature, it seemed as though the articles tied to rhetoric or to the philosophy of technology were widening the scope of technical communication, giving the discussion increased depth, and increasing academic legitimacy. My reliance on Carolyn Miller's three articles in this essay reflects my desire at the time to continue the dialogue along that trajectory. However, I was not confident that I could publish a critical, theoretical article without the pedagogical twist that characterizes much of the literature in composition and technical communication; hence, the discussion of my experimental class.

So much for my attempted reconstruction of motives. What do I think about the article now? I have always been ambivalent about the article because it sounds radical, perhaps even Marxist, whereas, in fact, I am basically reactionary rather than progressive. I still worry about unreflective adoption of technology. Presently, I am concerned about globalization as described by

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Thomas Huckin in his 2002 Council for Programs in Scientific and Technical Communication (CPTSC) keynote address, especially as it manifests itself in the widespread planting of genetically engineered crops, a revolutionary practice that has gone on largely unnoticed by the public in the United States but faces mounting resistance in Europe. I question the function played by technical communication within companies like Monsanto, which developed and presently markets crops genetically modified to withstand the spraying of herbicides, and I wonder about the ethical and political stance of communicators and designers who work for such multinationals. Do they think of themselves as specialists seeking the most expedient way of achieving ends chosen by others, or do they think of themselves as responsible citizens engaged in social action? What about our students? Are they eager to work in such environments, ignoring ethical questions and reaping the financial rewards that go to those who embrace the company's agenda?

Therefore, although I am ambivalent about the article, I find that it still speaks to political and ethical concerns perennially associated with technical communicators' roles in the technological society, and it still calls for the widening of the scope of technical communication to include political discourse and public debate about whether we want to adopt the innovations being marketed by those who stand to profit from them.

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WORKS CITED

Anderson, Paul V., R. John Brockmann, and Carolyn R. Miller, eds. *New Essays in Technical and Scientific Communication: Research, Theory, Practice*. Farmingdale, NY: Baywood, 1983.

Ellul, Jacques. *The Technological Society*. Trans. by John Wilkinson. New York: Vintage, 1964.

Halloran, S. Michael. "Eloquence in a Technological Society." *Central States Speech Journal* 29 (1978): 221–27.

Huckin, Thomas. "Globalization and Critical Consciousness in Technical and Professional Communication." Keynote Address, 29th Annual Meeting of the Council for Programs in Scientific and Technical Communication, October 3–5, 2002, Logan, Utah.

Odell, Lee, and Dixie Goswami. *Writing in Nonacademic Settings*. New York: Guilford Press, 1985.

Winner, Langdon. *Autonomous Technology: Technics-out-of-Control as a Theme in Political Thought*. Cambridge, MA: MIT Press, 1978.

Let me present one possible version of the history of teaching writing in the last century and a half. When the tradition of classical rhetoric was restricted to composition in the nineteenth century, teachers of writing found themselves teaching service courses, usually defined as skills courses. Furthermore, having lost touch with the classical tradition, they began to teach writing particularly suited to current needs and, by extension, to teach thought forms that imitate modern consciousness—a form of consciousness largely molded by forms of production, or technology. As Richard Ohmann says, much modern composition instruction reflects this technological consciousness. it casts the writing process in terms of problem solving, stresses objectivity and thereby denies a writer's social responsibilities, distances the interaction between writer and reader, deals with abstract issues, and denies politics (206). As a result, teachers of writing indoctrinate students, turning them into the sorts of people who will fill the slots available in our technological society.

If this story is a suggestive account of rhetoric's metamorphosis into composition, it is even more interesting applied to rhetoric's transformation into technical communication. Rhetoric has always aimed at teaching professional discourse—particularly the discourse of the assembly, the court, and later the pulpit—and so it is possible to see technical communication as a direct descendant of rhetoric, even more in tune with its aims than is composition. However, though technical communication shares classical rhetoric's orientation toward the professions, those of us who teach technical communication don't often think of ourselves as carrying on the rhetorical tradition. Indeed, it is rather hard to do so, since we teach thought forms and discourse forms demanded by the workplace, and we often find ourselves representing the military-industrial complex instead of the humanistic tradition. As John Mitchell puts it, we "indoctrinate our students in the forms appropriate to their employers," for "the students know they must dance with the guy that brung them, and they elect our courses to learn his dance steps" (5). In fact, the social contract that legitimizes the teaching of technical writing seems to insist that we adopt the technological mindset. For example, J.C. Mathes, Dwight Stevenson, and Peter Klaver warn engineering teachers that it is dangerous to let people trained in classical rhetoric and literature teach technical writing, because in so doing they "risk having their students taught principles that are in conflict with engineering principles" (332).

Another way of looking at this situation is to say, as Michael Halloran has, that we perpetuate the "ethos" of the technological society, primarily by viewing the rhetorical art as "a set of technical skills practiced by specialists" (221). These skills are forms of technology—they are *techne*, to use Aristotle's term—and, as such, their products can be separated from the maker and marketed, relieving the writer of responsibility (Halloran 227). As teachers of composition or technical writing, we sometimes find this project something we can live with, but there exists a fairly long tradition of reaction against it. Nan Johnson, for instance, documents the attempts of three nineteenth-century rhetoricians—Theremin, Day, and Hope—to stand against the reduction of rhetorical education to the teaching of specialized skills; and Robert Connors describes the continuing battle over the issue of humanism versus vocationalism in technical communication, a battle that has apparently been part of the profession from its inception early in this century.

TECHNICAL GENRES AND POLITICAL ETHICAL STASIS

In the past ten to fifteen years, several articles have contributed to this ongoing debate, but it is not my purpose to catalog them. Instead, I would like to focus on three essays by Carolyn Miller that, I think, lead to a point of political and ethical stasis for those of us who teach technical communication. In the first article, "A Humanistic Rationale for Technical Writing" (1979), Miller argues that traditional technical writing instruction is based on the "windowpane" theory of language, a theory that frames technical and scientific writing as "just a series of maneuvers for staying out of the way" (613). If we discard this antiquated view of language, Miller says, teaching technical writing can be more than teaching a set of skills; instead, it can be a "kind of enculturation" that helps students understand how to belong to a community (617). This conception of teaching technical writing has the virtue of fitting nicely with students' definitions of the course; that is, it is a course that gives them passage "in" to a certain group (Ronald 23). More to the point, it offers an important advance over the skills-based approach to teaching technical writing. Nevertheless, it leaves unanswered a crucial question: what are we enculturating our students into?

To answer this question, we must take up the issue of genre, for genres are schemas of response considered appropriate by a discourse community (Swales). Clearly, these schemas are not value neutral; when students learn them, they learn what may be said about possible subjects on particular occasions (Miller, "Genre" 165). In other words, genres change the way we think by defining rhetorical situations—what the Greeks called *kairos*, or the opportune moment (Poulakos 36). Thus, as Patricia Bizzell says, it is "difficult to maintain the position that discourse conventions can be employed in a detached, instrumental way." Unfortunately, genres in technical discourse seem to preclude the opportunity for citizens to speak simply as citizens on the issues of technology in any meaningful way. So one way we encultur-

ate students is by teaching them the genres of technical discourse, though the concept of genre is often reduced to the notion of form. As Connors has shown, teaching technical forms has been a long-standing tradition among technical writing teachers (338), a tradition still followed by many today.

At this point, Miller's "Genre as Social Action" (1984) becomes pertinent. Miller's own definition of genre as "social action" leads her to deny that certain technical forms, specifically environmental impact statements, are genres because they preclude social action (164). That is, because these forms attempt to incorporate the interests of several factions, the writer becomes mechanized and, in Burkean terms, produces motion rather than action (156). I have little doubt that careful study of other standardized technical forms, whether governmental or industrial, would suggest that Miller's observations obtain widely. My own conclusion, therefore, is that teaching standardized formats and forms means teaching the technological mindset, and, thus, enculturating students into the military-industrial complex. This conclusion further suggests that we implicitly accept present restrictions on public discourse about technology and fail to give students power to engage in social action.

The third article that bears on this issue is Miller's "What's Practical about Technical Writing?" (1989). In this paper, Miller suggests that we define technical writing as *praxis* rather than as *techne*, praxis being the Greek word for social action and techne for an art of making. This move allows her to recommend that we question present practices, ask our students to do the same, and encourage them to take socially responsible action (23). As this recommendation suggests, Miller's three articles show an evolution in her thought, always in a consistent direction, but they also lead to a point of stasis: if we enculturate students in the technical writing classroom, at least in part by teaching technical genres that reinforce the dominance of the technological system, how can we then call them to responsible social action?

PRAXIS, VIRTUE, AND SOCIAL ACTION

I wish to suggest that this conflict is only an apparent paradox and that those of us who teach the course are really placed in a situation that allows us to be powerful agents for change. But to have a class that encourages social action requires adopting Miller's suggestion that we define technical communication as a practice rather than as an art or skill. As she points out, Aristotle makes a distinction between the ability to produce products, a technical skill that he calls *techne*, and the ability to take social action, or *praxis* (*Ethics* 6.4). Further, the ability to take social action involves the virtue of practical wisdom or prudence (*phronesis*), a virtue defined as the ability to reason about ends rather than means. *Phronesis* enables a person to deliberate about the good rather than the expedient and, as such, to act in the political sphere rather than in the sphere of work (*Ethics* 6.5). As Barbara Warnick says, techne is "a habit of producing," whereas phronesis is concerned with the uses to which products are put (304–05). Taking this distinction into account, we can define social action as action free from the economic constraints of the workplace: it is the political-ethical act of someone functioning in the citizen's role rather than in the worker's role. Unlike techne, which has an end other than itself, responsible social action constitutes *eupraxia*, Aristotle's word for "good action," an end in itself (*Ethics* 6.5).

When rhetoric, of whatever type, is defined as a practice, it is linked with virtue. Aristotle himself does not directly link them: he defines rhetoric as an art (*Rhetoric* 1354a.10). However, Halloran argues that eloquence was considered a virtue by many classical rhetoricians (226), and Eugene Garver, Lois Self, and Oscar Brownstein all make connections between rhetoric and phronesis. Implicit in all of these studies is the definition of rhetoric as a social act or practice rather than an art, and this definition brings rhetoric out of the amoral realm of technique into the world of ethics and politics. This distinction is important, for a skill can be used for good or bad ends, but a virtue automatically embodies good ends (Garver 69). That is, if rhetoric is merely a skill, someone may use it to manipulate people, but if it is a virtue, then it must be used for good.

The definition of the "good," however, is problematic. In his *Ethics*, Aristotle defines it as happiness (*eudaimonia*), and *happiness* he defines as the virtuous activity of the soul. Furthermore, he says that virtuous activity is the ability to conform to the ideals of the society (1.7.7). In other words, Aristotle's view of the good is sociological: the community defines what the good is, and the individual is good when he or she performs well the functions required by society—that is, when the person is a good citizen. Alasdair MacIntyre says much the same thing in *After Virtue*, a modernized version of Aristotelian ethics in which he approaches the subject by discussing the meaning of virtue. According to MacIntyre, the concept of virtue is embedded in at least three contexts. First, a virtue is the human quality that enables a person to engage in a practice with excellence (191). Second, such a quality is part of a person's complete life and character, which can be seen as an "embodiment" of a socially sanctioned narrative (144). Third, such socially sanctioned narratives are really roles within a larger narrative, the narrative of the culture and its tradition (258). Thus, we see that virtue—the good—is defined socially by a society's ideals, which, in turn, valorize roles within the society. When people fill the roles well, when they possess character traits that allow them to perform the functions of these roles with excellence, then their actions are considered virtuous.

Let us now take this depiction of ethics and apply it to our present situation. I have tentatively decided to define technical communication as a practice; therefore, I am claiming that it takes virtue to participate in technical communication. I can do this, according to Aristotelian ethics, only by agreeing that my students are developing character traits that enable them to perform their functions well. Moreover, I imply that these functions are good, that they fit in with the ideal of virtue that dominates our society.

There is no problem with this account if we are willing to accept the values embedded in the technological society, for ours is a technological society—or at least the arguments made by such social critics as Jürgen Habermas, Jaques Ellul, and William Barrett would lead us to believe that it is. But, of course, this is where we run into trouble. Many of us do not agree or identify with the values of the technological society and the military-industrial complex. Instead, we identify with a variety of alternative social groups quite diverse in their plurality but all sharing at least one value: that human beings should not be subordinated to the technological imperative. As such, we want to regain the upper hand; that is, we want to make technology serve humans instead of letting technology shape our society and its values. Therefore, we can call technical communication a virtuous practice only when it is put to the service of one of these alternative humanistic visions.

But the very thought processes embodied in most modern technical genres have grown out of the technological mindset, and they continue to support the dominance of the technological society while denying people the power to take social action as citizens when they write. In effect, if we continue to teach these genres, we indoctrinate our students into a system we don't agree with; but if we stop preparing them for their roles in the technological world, then we are no longer really teaching technical communication according to the social contract that we all bought into when we agreed to teach the course.

It seems that we're back to the original point of stasis. Like David Dobrin, in "What's the Purpose of Teaching Technical Communication," I find myself faced with a set of alternative actions I can take, though my alternatives differ from his: (1) I can get with the program, change my values, and become a representative of the technological society; (2) I can leave the profession of teaching technical writing; (3) I can become schizophrenic; or (4) I can figure out how to change my course so that it at once teaches the discourse appropriate for the technological world *and* makes students aware of the values embedded in such discourse and the dehumanizing effects of it. Obviously, I think number four is the best alternative, and I would like to suggest some ways to begin teaching technical communication as a truly virtuous practice, as responsible social action.

POLITICAL DISCOURSE IN TECHNICAL WRITING

My suggestions—to be taken as explorations of possibilities rather than as prescriptive guidelines—involve altering what we teach when we teach technical communication and changing how we teach it. Altering what we teach requires redefining not only the function but also the scope of technical communication. Certainly, we can redefine its function simply by calling it a practice, a social act, rather than an art. But we must also look at the boundaries we have drawn for technical communication, boundaries often summed up in the phrase "writing for the world

of work," a phrase set in contrast to the rhetoric of leisure, as Miller points out ("What's Practical" 15, 18). Classical rhetoric, though it aimed at preparing students to fill professional roles, was concerned with roles reserved for citizens, or the leisured class. We often misinterpret leisure, associating it only with elitism and forgetting that the leisured class was responsible for politics. Conversely, most of the writing done in the "world of work" was done by slaves. The ancient class distinctions implicit in classical rhetoric still carry over, even though social conditions have changed. That is, when we define technical communication as writing for the world of work, we tend to draw a boundary at the point where political discourse picks up. Within the present boundaries, technical discourse is constrained by the criteria established by industry, the division of labor within large companies, and bureaucratic procedures in government. As Susan Wells puts it, the goal of this discourse is "systematic misunderstanding and concealment." She goes on to say that "the subjective responses of readers and writers are irrelevant, and the monologic voice conceals, not a dialogic relation, but the total fragmentation and dispersal of knowledge" (256).

I think we stop short of including political discourse within the boundaries of technical communication because of the marriage between private enterprise and government bureaucracy, a system that blocks citizens from participating in effective deliberative rhetoric about the direction that technology should take (Rossini 342). In the place of public deliberation, we have the twin motives of profit and technological advance, sacred territory in our society. There are few, if any, socially sanctioned opportunities for citizens to participate effectively in making decisions about the large issues associated with technology, or most other issues for that matter (Goodnight). Therefore, our present way of defining technical communication as the discourse appropriate for industry is equivalent to defining it as the rhetoric appropriate for slaves—those barred from making decisions about the ends, those whose decision-making authority is restricted to determining the most efficient means of obtaining predetermined ends.

If we are serious about defining technical communication as a practice, then we must expand its scope to include political discourse. To do this is to act on the ideal that all citizens, though workers, are responsible political agents; it is to act as though slavery really was abolished and not just restructured, and it is to treat the individual as a unified whole, not as a person who must divide his or her personality between the roles of the worker and the citizen. In short, expanding the scope of technical communication to include political discourse is to fight against the alienation produced by our economic and technological systems.

I am not saying we should refuse to teach the discourse appropriate for the world of work, for I think the social contract we have with our students demands that we prepare them for their future careers. But it *is* possible to teach this discourse from a critical perspective and to supplement it with discourse that is appropriate for social action. For example, Wells, using Habermas' ideal of communicative action, suggests that we begin by teaching the structures of "purposive-rational action"—Habermas' term for action consistent with the technological imperative—but that we also identify authority claims and suggest ways of contesting these claims. In short, we can "identify the relations of power that block the desire for communicative action and "offer strategies for subverting that power, for betraying it into communicative action" (264). Wells' strategy for critical instruction can be supplemented with other strategies, such as Kate Ronald's proposal that students write *about* professional texts, examining discipline-specific constraints (28). Or the teacher may point out how the problem-solution pattern in technical reports implies a closed system; discuss the possibility of opening up a broader definition of criteria for writing proposals and feasibility reports; or suggest using a less impersonal style to bring the human element back into technical discourse.

However, it is important to go beyond teaching traditional structures from a critical perspective. If we claim the territory of political discourse as part of the province of technical discourse, we should teach students practical reasoning, that is, the process of deliberation and judgment that Garver describes in "Teaching Writing and Teaching Virtue." Garver claims that practical reasoning goes beyond expressive and scientific writing, for the subject of practical reasoning is "contingent facts that can be other than they are, that action can do something about, that are

worth worrying about" (66). While we probably already teach deliberation and judgment when we teach feasibility and investigation reports, we tend to do it within the constraints of an assumed audience—namely decision-makers within a company—and present private and governmental forums. Certainly, the power of audience over the writer is widely acknowledged, the most well known statement of this phenomenon being Perelman and Olbrechts-Tyteca's claim that the rhetor must always adapt the discourse to the audience (25). Therefore, it is important that we open up the definition of audience to include the public; that is, we should incorporate at least some deliberative or judgmental discourse appropriate for a public forum.

But to do this, we need to create an imaginary society in which a public forum for such issues actually exists. It is at the point where we break with present reality, where we pretend that we live in an idealized society, that we begin to create a new social order. By writing for a public forum, even an imaginary one, students can begin to see the possible clash between the values of an audience in industry, heavily influenced by the profit motive, and the concerns of the public. Further, such writing works against the rhetoric of concealment by bringing issues before citizens and by calling into play value judgments that usually are not part of the decision-making process when deliberations about technology are confined to the privacy of an in-house report.

Redefining what we teach—that is, expanding the scope of technical communication to include public discourse about technology—would change programs as well as classes. Ph.D. programs in rhetoric and technical communication would begin to incorporate classes devoted to policy and to the philosophy of technology. This already happens in informal ways at places like Rensselaer Polytechnic Institute, where many students supplement their studies in rhetoric by taking classes from the Science and Technology Studies Department and by asking faculty from that department to sit on their committees. But a serious commitment to technical communication as a social act would eventually require that these sorts of studies be officially incorporated into the program, a direction presently being pursued in the new Ph.D. program in rhetoric and technical communication at Michigan Technological University.

THE APPRENTICESHIP MODEL OF TEACHING

Not only do I suggest that we expand the definition of what we teach; I also suggest that we change the way we teach technical communication. Present practices often do not take seriously Miller's claim that teaching the course means enculturating students. As a result, we often teach the course as a skills course, creating a professional distance between ourselves and students, comparable to a seller-buyer relationship. After all, if all we are doing is teaching skills, we can impart what we know and never attempt to influence students. However, if we are enculturating students, if we are introducing them to the discourse community of industry and the larger discourse community of public citizenship, then the model offered by apprenticeship is more appropriate than the model offered by the market.

I am aware that some will object to the apprenticeship model. Marilyn Cooper's criticism of the concept of discourse communities applies to apprenticeship as well, for apprenticeship assumes that something like discourse communities exists and that the teacher initiates students into that social structure (216). Indeed, apprenticeship implies that the teacher represents the culture and that students learn through imitation (Polanyi 53). Reactions against this hierarchical system are understandable, especially since cultural systems have usually excluded or marginalized certain people. However, the alternative requires a commitment to expressive discourse, a form of discourse that excludes its practitioners simply because members of empowered communities perceive it as alien or unorthodox.

Therefore, we should make cautious use of apprenticeship as we employ it to bring students into the cultures that we represent. That is, even though we teach the discourse of the military-industrial complex, we can make clear that alternative cultures exist and that we identify with those cultures. Admittedly, such a view produces a rhetoric of conversion, but, after all, this is exactly what Ohmann calls for when he says that "we either teach politically . . . or we contribute to the mystification that so often in universities diverts and deadens the critical power" (335). The word of the teacher is somewhat alien to the world view of the students, but it is nevertheless an

authoritative word; and as John Edlund points out in his analysis of Bakhtin, the teacher is a member of the social group that constitutes the class (62). Thus, we are in a position to help students appropriate and assimilate language practices about technology that go beyond the reductive structures of traditional technical genres.

There are many ways to apply the concept of apprenticeship to technical communication courses, but by way of example, I will briefly describe one system that I have been experimenting with. Since I identify primarily with the tradition of classical rhetoric (despite some of its social inequities, it nevertheless offers ways to subvert the technological mindset), I have adopted classical pedagogical practices that depend on imitation, a way of teaching I have discussed elsewhere (see "Attitudes"). I divide the course into two segments. During the first half of the course, I teach technical forms by asking students to do such things as copy, imitate, summarize, and transform examples of technical discourse. During class, we discuss these structures, and I link them to thought processes, pointing out how the structures exclude various considerations. This part of the class fairly closely resembles a traditional technical writing class, with two exceptions: students go through the forms rapidly by using the imitation exercises, and my discussion of the forms focuses primarily on their schematic nature and their function in social settings, rather than on details of correctness and usage.

The second segment of the course breaks with tradition. In an attempt to model the process of deliberation and judgment, I assign a single topic to the whole class, which is divided into two advocate groups and one arbitration group. Ideally, the topic is a question about a present policy decision, but because of the rhetoric of concealment that dominates our present discourse about technology, students find it difficult to get the information they need to build cases and decide issues. For instance, when I asked students to work on a local current issue—whether or not a paper mill should be built nearby—they soon ran out of information because the paper industry wanted to protect newly developed technology that they claimed could produce white paper without creating dioxins. Therefore, I choose a well-documented case from the past and ask students to take sides. My most successful assignment requires students to investigate the 1913 labor strikes in the copper-mining region where we live. The university's archives are rich in material on this subject, and students have access to information they would not be able to get about a current issue.

Part of the class is prolabor, part is procompany, and part is arbitration. Thus, the class as a whole models the deliberative process. During this time, I teach rhetorical concepts like *stasis* (how to determine the issue in a case), *kairos* (learning to take advantage of the opportune moment), and invention. I also teach students alternative genres for presenting their cases, such as the classical polemic speech and the Rogerian argument suggested by Richard Young, Alton Becker, and Kenneth Pike (283). Students go out on strike and participate in debates, and even the arbitration group writes majority and minority opinions. In this way, the total rhetorical exchange within the class functions to forge a *prakton agathon*, "a concrete act of enlightened expediency" (Brownstein 23), and the students engage in a modeled experience of performing a social act no longer constrained by present social restrictions.

Defining technical communication as a practice has major significance for technical communication teachers. It allows us to see ourselves as doing more than teaching a set of skills, but it also places ethical and political responsibility upon us. If we continue to teach the course in traditional ways, we perpetuate a form of discourse that blocks social action; if we refuse to teach the conventions appropriate for industry, we fail to give our students the power they need to enter the dominant culture. Bizzell expresses the dilemma better than I can: "Our dilemma is that we want to empower students to succeed in the dominant culture so that they can transform it from within; but we fear that if they do succeed, their thinking will be changed in such a way that they will no longer want to transform it." However, by redefining the function and scope of technical communication, we may be able to teach it in such a way that students will be able to use technical genres and yet resist their power. We can even hope that a few among our students will find ways to transform present practices and open up opportunities for public social action.

WORKS CITED

Aristotle. *Ethics*. Trans. J.A.K. Thompson. New York: Penguin, 1976.

———. *Rhetoric*. Trans. W. Rhys Roberts. New York: Modern Library, 1954.

Bizzell, Patricia. "What Is a 'Discourse Community'?" Penn State Conference on Rhetoric and Composition. University Park, PA, July 1987.

Brownstein, Oscar L. "Aristotle and the Rhetorical Process." *Rhetoric: A Tradition in Transition*. Ed. Walter R. Fisher. Michigan State UP, 1974. 19–32.

Connors, Robert J. "The Rise of Technical Writing Instruction in America." *Journal of Technical Writing and Communication* 12 (1982): 329–52.

Cooper, Marilyn M., and Michael Holzman. *Writing as Social Action*. Portsmouth, NH: Boynton, 1989.

Dobrin, David N. "What's the Purpose of Teaching Technical Communication." *Technical Writing Teacher* 12 (1985): 146–60.

Edlund, John R. "Bakhtin and the Social Reality of Language Acquisition." *Writing Instructor* 7 (1988): 56–67.

Garver, Eugene. "Teaching Writing and Teaching Virtue." *Journal of Business Communication* 22 (1985): 51–73.

Goodnight, G. Thomas. "The Personal, Technical, and Public Spheres of Argument: A Speculative Inquiry into the Art of Public Deliberation." *Journal of the American Forensic Association* 18 (1982): 214–27.

Halloran, S. Michael. "Eloquence in a Technological Society." *Central States Speech Journal* 29 (1978): 221–27.

Johnson, Nan. "Three Nineteenth-Century Rhetoricians: The Humanist Alternative to Rhetoric as Skills Management." *The Rhetorical Tradition and Modern Writing*. Ed. James J. Murphy. New York: MLA, 1982. 105–17.

MacIntyre, Alasdair. *After Virtue: A Study in Moral Theory*. 2nd ed. Notre Dame, IN: U of Notre Dame P, 1984.

Mathes, J.C., Dwight W. Stevenson, and Peter Klaver. "Technical Writing: The Engineering Educator's Responsibility." *Engineering Education* 69 (1979): 331–34.

Miller, Carolyn R. "Genre as Social Action." *Quarterly Journal of Speech* 70 (1984): 151–67.

———. "A Humanistic Rationale for Technical Writing." *College English* 40 (1979): 610–17.

———. "What's Practical about Technical Writing?" *Technical Writing: Theory and Practice*. Ed. Bertie E. Fearing and W. Keats Sparrow. New York: MLA, 1989. 14–24.

Mitchell, John H. "It's a Craft Course: Indoctrinate, Don't Educate." *The Technical Writing Teacher* 4 (1976): 2–6.

Ohmann, Richard. *English in America: A Radical View of the Profession*. New York: Oxford UP, 1976.

Perelman, Chaim, and L. Olbrechts-Tyteca. *The New Rhetoric: A Treatise on Argumentation*. Trans. John Wilkinson and Purcell Weaver. Notre Dame, IN: Notre Dame UP, 1969.

Polanyi, Michael. *Personal Knowledge: Towards a Post-Critical Philosophy*. 1958. New York: Harper, 1964.

Poulakos, John. "Toward a Sophistic Definition of Rhetoric." *Philosophy and Rhetoric* 16 (1983): 35–48.

Ronald, Kate. "The Politics of Teaching Professional Writing." *Journal of Advanced Composition* 7 (1987): 23–30.

Rossini, Frederick A. "Technology Assessment: A New Type of Science?" *Research in Philosophy and Technology* 2 (1979): 341–55.

Self, Lois S. "Rhetoric and *Phronesis:* The Aristotelian Ideal." *Philosophy and Rhetoric* 12 (1979): 130–45.

Sullivan, Dale L. "Attitudes toward Imitation: Classical Culture and the Modern Temper." *Rhetoric Review* 8 (1989): 5–21.

Swales, John. "Approaching the Concept of Discourse Community." Conference on College Composition and Communication. Atlanta, GA, March 1987.

Warnick, Barbara. "Judgment, Probability, and Aristotle's *Rhetoric*." *Quarterly Journal of Speech* 75 (1989): 299–311.

Wells, Susan. "Jürgen Habermas, Communicative Competence, and the Teaching of Technical Discourse." *Theory in the Classroom*. Ed. Cary Nelson. Champaign: U of Illinois P, 1986. 245–69.

Young, Richard E., Alton L. Becker, and Kenneth L. Pike. *Rhetoric: Discovery and Change*. New York: Harcourt, 1970.