Realism, Human Action, and Instrumental Discourse

M. Jimmie Killingsworth

It is easy to imagine a language consisting only of orders and reports in battle.—Or a language consisting only of questions and expressions for answering yes and no. And innumerable others.—And to imagine a language means to imagine a form of life.

Ludwig Wittgenstein

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Unscrew the locks from the doors!  
Unscrew the doors themselves from their jambs!  

Walt Whitman

In *A Pragmatic Theory of Rhetoric*, Walter Beale offers a concept of instrumental discourse that represents an important achievement in rhetorical theory, one that opens a theoretical space for documents like technical manuals and recommendation reports. In earlier taxonomies, such writings were often lumped together with news reports and scientific papers in the unwieldy category of "referential" discourse (Kinneavy). The instrumental genres (how-to manuals, future-looking reports) defy classification as referential because they are more concerned with stimulating and shaping human actions than with describing objects and reporting past events. Beale thus defines instrumental writing as "the kind of discourse whose primary aim is the governance, guidance, control, or execution of human activities. It includes such specific products as contracts, constitutions, laws, technical reports, and manuals of operation" (94). Instrumental texts are structured around imperative sentences (*do this*) and other performatve constructions: *you (or he or she or it) will/shall/should do this*. The reader is the active agent, the "you" to whom commands, recommendations, requests, and suggestions are addressed. The directives usually flow from a point of greater knowledge or authority to a point of lesser knowledge or authority, from a master of a technique or body of knowledge (author) to an apprentice (audience). Prototypes may be found not only in the world of government and technical
writing, but also in the wisdom literature and holy scriptures of ancient cultures and in many political writings. Instrumental texts are, as Beale correctly notes, situated in the gap between “contemplative” scientific writing, on the one hand, and “persuasive” rhetorical writing on the other.

Even more important than this new category is Beale’s recognition of the instrumental as a discourse aim in its own right. Though *A Pragmatic Theory* is devoted above all to establishing rhetoric as a central and paradigmatic aim of discourse, it is the cultivation of insights about the instrumental and performative nature of all writing that makes the book *pragmatic* in the philosophical sense and that hints strongly at an extensive revision of the rhetorical as well as the scientific and poetic aims. A focus on the instrumental aim urges us toward a new understanding of the relationship between discourse and other human actions, a relationship crucial to many socially conscious movements in the field of composition, including universal literacy and feminist studies, as well as two of the three epistemological perspectives that James Berlin describes in his monograph on the recent history of writing instruction: the “subjective” and the “transactional” (only the “objective” stance is not action-oriented). Not only technical writing teachers, then, but ethnographers, social constructionists, cognitivists, historicists, expressivists, ideologists—all schools of research and theory interested in the ways and means of human action and empowerment—are bound to take an interest in a discourse that is directly concerned with the “governance, guidance, control, or execution of human activities.”

Encouraged by Beale’s implied extension of the territory of the instrumental aim, this essay sets out to explore the theoretical role of the instrumental in the other aims of discourse. I will argue that the rhetorical success of a document often depends upon its author’s willingness to write instrumentally, to provide for readers an explicit or implicit course of action, a way to put the words and ideas to work. Though rhetoric and instrumental discourse are habitually connected in moral-religious writing (such as the *Bhagavad Gita* and the book of Proverbs) and in the literature characteristic of advanced technology (technical writing), the connection holds just as well in the discourses of theoretical science, the humanities, radical politics, and the institutions of democratic communication.

The first step in my argument will be to consider social and epistemological objections to an emphasis on instrumental discourse within the humanist research program. The second step will be to ground the concept of the instrumental in pragmatic theories of realism and human action. The last step will be to offer examples of how the instrumental aim influences radical (or action-conscious) poetic and rhetorical discourse.

**The Range of the Instrumental Aim: Extensions and Objections**

From the start, we must face up to and contend with the dark side of instrumentalism. Just as rhetoricians must ever worry about the association
of their discipline with the excesses of propaganda and advertising, instrumentalists must account for the association of their characteristic discourse not only with the aesthetic dullness of the technological enterprise but also with the more sinister aspects of mechanization and social control. Of the four forms of action that Beale associates with instrumental discourse, "governance" and "guidance" will have a familiar ring, a comfortable feel for the humanist scholar and teacher, but "control" and "execution" may raise an ugly question about the place of instrumental discourse in a humanist research program: does Beale's introduction of the instrumental into the theory of aims represent a concession to the forces of mechanization and technologizing of knowledge that we should either discount or resist?

The question evokes the well-known ambivalence of Weberian social theory toward the concept of instrumental rationality, the form of intelligence that drives the "scientific management" of human action in technological societies, the organization of people into bureaucracies. Early in our century, in an extensive analysis of bureaucratic organization, Max Weber outlined the principles of instrumental rationality, which will be familiar to anyone who has worked in a government or corporate setting: hierarchical distribution of power and control, standardized rules and procedures, specialization and division of labor according to tasks and subtasks, employment based on technical competence, detailed job descriptions, prescriptive and rigid information flow, and subordination of individual needs to organizational goals (Cummings, Long, and Lewis 34). Ever the humanist, Weber was ambiguous, even cynical, about the overall effects of this type of organization upon the moral life of individual human beings, as he made clear in the famous conclusion of his historical work The Protestant Ethic and the Spirit of Capitalism:

No one knows who will live in this cage in the future, or whether at the end of this tremendous development entirely new prophets will arise, or there will be a great rebirth of old ideas and ideals, or, if neither, mechanized petrification, embellished with a sort of convulsive self-importance. For of the last stage of this critical development, it might well be truly said, "Specialists without spirit, sensualists without heart; this nullity imagines that it has attained a level of civilization never before attained." (182)

He was nevertheless quite clear about the advantages he observed in instrumental rationality: "The decisive reason for the advance of bureaucratic organization has always been its purely technical superiority over any other form of organization. The fully developed bureaucratic apparatus compares with other organizations exactly as does the machine with the non-mechanical modes of production. Precision, speed, unambiguity, knowledge of the files, continuity, discretion, unity, strict subordination, reduction of friction and of material and personal costs—these are raised to the optimum point in the strictly bureaucratic administration" (Economy and Society 973). Thus, Weber praised the great success of instrumentally organized social groups in
increasing efficiency and productivity, in saving time, money, and energy; but he recoiled at the way instrumental organization limits the creativity and full participation of each individual person.

When Weber's interpretation of the bureaucratic means of social control was strained through the neo-Marxian dialectic of the Frankfurt School, an outright pejorative reading of instrumental rationality emerged. Max Horkheimer would write, "The factors in the contemporary situation—population growth, a technology that is becoming fully automated, the centralization of economic and therefore political power, the increased rationality of the individual as a result of working in industry—are inflicting upon life a degree of organization and manipulation that leaves the individual only enough spontaneity to launch himself onto the path prescribed for him" (4). "If the dream of machines doing men's work has now come true," Horkheimer cautioned, "it is also true that men are acting more and more like machines" (26). To extend this critique to the field of discourse would mean to compare the step-by-step procedures of a computer program to the similar structure of an ever-increasing number of instrumental and procedural documents which shape the action and thought of individuals not only within government bureaus, factories, and corporate offices but also within mass culture, where consumers are presented with an astounding selection of how-to books on topics ranging from home repair to weight loss to personal enlightenment and psychological adjustment. Faced these manifestations in the popular literature of the fifties and sixties, the Frankfurt theorist Herbert Marcuse grew cynical over the accomplishments of American culture. He argued that "functionalization of language helps to repel non-conformist elements from the structure and movement of speech" and establishes instead an "anti-critical and anti-dialectical language," in which "operational and behavioral rationality absorbs the transcendent, negative, oppositional elements of Reason" (86, 97). Marcuse understood instrumental discourse as a threat to both individual creativity and social change, a reductively imperative "closed language" that "does not demonstrate and explain" but rather "communicates decision, dictum, command" (101).

So conceived, instrumental discourse supports and depends upon faith in the rationality of an authority, a technical expert, or a self-perpetuating and all-encompassing managerial system whose chief competence is to establish and communicate a series of definite, specific steps that, if invariably followed, will produce a given result in the most efficient manner possible. It is against such "instrumental action," that the latter-day Frankfurt School social theorist Jürgen Habermas posits his theory of "communicative action" in an effort to rescue a humanistically inspired version of rationality from the iron cage of instrumental action. Communicative action frees rationality, as a form of goal-oriented thought and behavior, from the absolute commitment to efficiency and hierarchical structure. The theory of
communicative action may be seen as an attempt, as it were, to redistribute the capacity for rational action to a wider range of people with a more diverse set of goals and patterns of thought and behavior.

In the words of the American social theorist Mark Poster, "Instrumental rationality [as conceived by Habermas] characterizes practices in what he calls 'the system,' that is in institutions like the bureaucratic state and the economy, which achieve social solidarity through 'steering mechanisms'" (23). Documents motivated by instrumental rationality have as their sole purpose control of the document's readers. Clearly, such instrumental writings as old-fashioned policies and procedures manuals and military operations manuals create, for the purpose of maintaining the system, a narrow path of action that has been chosen or created in advance of the document's production by hierarchically arranged powers. This kind of writing manifests neither the interest in persuasion and identification that characterize rhetorical writing, nor the interpretative and theoretical verve that characterizes scientific writing, nor the interest in craft and intersubjectivity that characterize poetic discourse. And, though this kind of narrow instrumental document may draw upon the conventions of a democratic discourse open to information from diverse sources, it will never treat deviant discourses with respect, but will merely note their presence, record them, and ultimately label them as "noise" in the system which needs to be systematically ignored or expunged.¹

Communicative rationality, on the other hand, "characterizes actions in what [Habermas] calls the lifeworld, that is, in areas of social action where socialization and cultural reproduction are at issue" (Poster 23). According to Habermas, "communicative rationality carries with it connotations based ultimately on the central experience of the unconstrained, unifying, consensus-bringing force of argumentative speech, in which different participants overcome their merely subjective views and, owing to the mutuality of rationally motivated conviction, assure themselves of both the unity of the objective world and the intersubjectivity of their lifeworld" (Communicative Action 1.10). Both forms of rationality are concerned with what sociologists Peter Berger and Thomas Luckmann call "social construction of reality"; the difference lies in the means by which each form allows people to shape and intervene in the world. Instrumental rationality tends to treat people as objects, as parts of the world; communicative rationality treats people as subjects, as participants in the certification of the objective world and the construction of their lifeworld. The systems of instrumental rationality are construed as a hierarchy, with experts steering other people along designated paths—the great dream of Frederick Taylor the efficiency expert, the great nightmare of George Orwell the libertarian—but the lifeworlds of the subjects of communicative action are construed as the interlocking nodes of a network or the interconnecting bubbles of a very complex Venn diagram. Where the interests and aspirations of social subjects overlap—encouraged
by shared belief systems, historical events, good arguments, and other means of cultural identification—a space for action supported by “intersubjective” consensus is created. Since Habermas' theory of communicative action is rooted in classical Greek political theory, it is no wonder that documents conceived in the mold of communicative rationality would bear the marks of classical rhetoric, especially as portrayed by Aristotle, the first great exponent of praxis philosophy or “practical reasoning.” But Habermas also looks to avant garde art for its capacity to scout the margins of discourse for new sources of energy by which communicative action may be extended and renewed; and he looks to modern science as a powerful model of rational consensus-formation.

In technological societies, the liberal love of democracy, with its preference for communicative action, is corrupted by the desire for efficiency, the great goal of instrumental action. The dilemma is nearly overwhelming in social situations where cultural diversity is great and increasing, as in the United States. Communicative rationality insists that out of this Babel of perspectives a reasonable course of action will emerge. But instrumental rationality objects that the costs of communicative action in time, money, and energy are too high, that people are confused about their own real needs, that impulses and emotions override rationality in public debate, and that good action depends upon expert guidance. Thus, it happens that the system is allowed to intrude upon the lifeworld, with the result that communicative concerns over mutual understanding and consensus are replaced by “hierarchically distorted verbal exchanges in which each party instrumentally manipulates the other, with the state, for example, having a considerable advantage in the manipulation game over a welfare mother” (Poster 23). In the concept of instrumental action, as Habermas suggests, “the rationality of self-regulating systems” creates “imperatives [that] override the consciousness of the members integrated into them” and thus “appears in the shape of a totalized purposive rationality” (CommunicativeAction 2.333). The role of the citizen is restructured so that the citizen becomes a client of the system. No doubt, the client’s material needs are met by the government and his or her “rights” are ensured, but at a cost: “The establishment of basic political rights in the framework of mass democracy means, on the one hand, a universalization of the role of citizen and, on the other hand, a segmenting of this role from the decision-making process, a cleansing of political participation from any participatory content” (Communicative Action 2.350).

With the critique of instrumental reason in the background, and with a full acceptance of the desirability of a discourse that promotes communicative action, we may wonder about the place of instrumental discourse within communicative rationality. Certainly, the sample documents that Beale categorizes as instrumental—contracts, constitutions, laws, technical reports, and manuals of operation—may well provide the means by which individuals achieve the ends of what Habermas has called “the ideal commu-
nication community,” the means to break free from “the fetters of habitual, concrete conditions of life” (Communicative Action 2.97). Admittedly, such documents may also serve hierarchical systems of information management, may secure the locks of the bureaucratic trap, or may even advance the cause of totalitarianism, as Marcuse suggests. And yet, informed by humane ends and radical goals, instrumental discourse may supply the realistic means by which change is accomplished. What the social theorist Ivan Illich has suggested about technology itself is no less true of technological discourse: it can be used in two opposite ways: “The first leads to specialization of function, instrumentation of values, and centralization of power and turns people into the accessories of bureaucracies or machines. The second enlarges the range of each person’s competence, control, and initiative, limited only by other individuals’ claims to an equal range of power and freedom” (vii).

Habermas allows so much himself. In his introduction to The Theory of Communicative Action, he begins by following the tradition established by the Frankfurt School in dividing “instrumental mastery” with its “realistic” approach from “communicative understanding” with its “phenomenological approach.” But, after showing how both approaches contain the seeds of rationality, that both depend upon “the reliability of the knowledge contained” in their characteristic expressions, Habermas departs from his predecessors in arguing that “The concept of cognitive-instrumental rationality can be fit into [the] more comprehensive concept of communicative rationality developed from the phenomenological approach” (1.8-14). Since phenomenology posits the need for an intersubjectivity beyond mere subjectivity, one avenue to agreement or consensus may well be that staked out by the realism of instrumental rationality. (The dialectic could be summarized thus: the conjunction of the thesis “subjectivity” with its antithesis “instrumental rationality” produces the synthesis “intersubjective or communicative rationality.”)

Consider scientific discourse, for example. Drawing upon several modes of discourse, a scientific paper is usually divided into four parts: Introduction, Methods, Results, and Discussion. The ultimate aim of the author is to sustain and advance the research/theoretical paradigm of one branch of the sciences. The precise nature of the paper’s contribution to that paradigm is usually established in the introduction, which includes a review of the relevant literature and which suggests how the paper will falsify or substantiate previous claims. This rhetorical device establishes points of valance whereby the work of other researchers may be connected with that which is reported. The results section of the paper is largely a matter of technical description, and the interpretation of those results in the discussion (or conclusion) section of the paper is mostly a rhetorical performance whose goal is to clinch the argument set forth in the introduction. The work of clinching the argument, however, is partly accomplished by the instrumen-
tally-oriented section that intervenes between the introduction and the results: the methods section. Since the rules of the scientific language game demand that validity rest in part upon the reproducibility of results, then the methods section is a crucial element of the argument. Though it is usually narrative in structure ("substance X was exposed to Y waves for a period of Z"), the instrumental concern of "governance, guidance, control, or execution of human activities" is foremost. If, as scientific readers, we want to reproduce the experiment, we can convert the indicative sentences to imperatives with only the slightest mental effort. Moreover, the narrative of procedures should conform to a "normal science" template for standard laboratory procedure so that the results of the writer could be easily compared with results that readers have achieved in similar experiments. The discourse and the represented actions have therefore an instrumental structure. But this structure does not inhibit the communicative goals of the scientific community. As Habermas asserts, against the objections of other critical theorists (Poster 24), modern science is "governed by ideals of an objectivity and impartiality secured through unrestricted discussion" (Communicative Action 2.91). The objectivity and impartiality he praises, however, are not positivistic in origin, for, as he has suggested from his earliest work, "What ultimately produces a scientific culture is not the information content of theories but the formation among theorists of a thoughtful and enlightened mode of life. . . . The empirical-analytic sciences develop their theories in a self-understanding that automatically generates continuity with the beginnings of philosophical thought." The "theoretical attitude" that, according to Habermas, science shares with philosophy and that allows these disciplines to free themselves from "dogmatic association with the natural interests of life and their irritating influence" derives in large part, from the instrumentalizing of logic and method and the clarifying function of realist discourse within interpretive communities (Knowledge 302-03).

Instrumental discourse, though ideally conditioned by normative interchanges within the communication community, emerges again and again in discourses that, like modern science, are built upon the model of communicative action. Its contribution nearly always involves a realist effort to fill the gap between mental goals (theory, consciousness) and action in the physical world (praxis, intervention). It may therefore be viewed humanistically as a kind of writing that authors use to empower readers by preparing them for and moving them toward effective action, the ends of which have been established by rhetorical, scientific, and mythic interplay in an open social context. A theoretical grounding for this understanding of the instrumental aim is available in the pragmatic conception of realism, to which I now turn.

Grounding Instrumental Discourse in Pragmatic Realism
Philosophical realism is the basis for pragmatic thinking as first outlined by Charles Sanders Peirce and as interpreted by contemporary philosophers
like Hilary Putnam and Ian Hacking. Since this version of pragmatism is essentially opposed to the nominalist strain that runs from William James down to Richard Rorty, I have chosen to focus not on pragmatism per se but on the concept of realism, which was a favorite of Peirce's because of his interest in scholastic philosophy and which has been taken up by Putnam and Hacking. "The real" was also a major concern of Karl Marx, who, like Peirce, felt that meaning was a function of practical outcome (in his case, revolution) and who saw the purpose of science to be the stripping away of ideological masks to expose the real needs of real men and women. The connection between Peircean pragmatism and Marxian historical materialism, a connection founded on the common ground of praxis, is an important one. Keeping it in mind can help us avoid the cash-value ideology of James's interpreters, especially Rorty: the notion that if something works and endures, then it must be good; if it happens to be liberal bourgeois social and political practice, all the better. This is a reading of James that politically sensitive commentators from John Dewey to Frank Lentricchia have debunked (Lentricchia 103-33; Hacking 62-63). But it is nevertheless a frequent impression gleaned from the canon of Jamesian pragmatism, an impression of a way of thought that Rorty seems blithely to accept in such statements as this: "We should be more willing than we are to celebrate bourgeois capitalist society as the best polity actualized so far, while regretting that it is irrelevant to most of the problems of most of the population of the planet" (Consequences 210). And this: "Having admitted that [American society is] a racist, sexist, imperialist society, it seems to me it's still the best thing on offer" ("Social" 9). A realist version of pragmatism would recognize that the presence of racism, sexism, and imperialism within a seemingly efficient system represents far more than some troublesome noise that has begun to compete with the celebratory music of liberalism; it represents instead real inefficiencies and contradictions that foretell the inability of the system (or political paradigm) to deliver what it has promised or predicted.

Despite this shared interest in praxis and "the real," however, the connection between pragmatism and Marxism cannot be pushed too far. The problem with Marx's analysis of the relation of people to their world lies, as Habermas keenly notes, in the failure to "explicate the interrelationship of interaction and labor," which results in an analysis that "under the unspecific title of social praxis, reduces the one to the other, namely: communicative action to instrumental action" (Theory 169). As a corrective to this tendency toward reductiveness in orthodox Marxism, Habermas preserved in his early work an Hegelian orientation to the relation of knowledge and action: "The only knowledge that can truly orient action is knowledge that frees itself from mere human interests and is based on Ideas—in other words, knowledge that has taken a theoretical attitude" (Knowledge 301). Habermas differed from Hegel in his ideas on how to achieve the liberation from mere subjective interest, however. His inquiry into this question turned him away from Marx
and Hegel and toward the Anglo-American tradition of praxis philosophy. In Peirce's theory of scientific inquiry, Habermas discovered a form of reasoning more to his liking. It is based essentially on the notion that meaning consists in a recognition of the practical outcomes toward which our thinking proceeds. The designation of outcomes, the methods by which we arrive at them, and their overall value are judged not by universal criteria, but by rules established within the community of inquirers in which we work. More than the emphasis on action, it was this emphasis on the normative function of a community of investigators (an emphasis all but ignored by James) that drew Habermas to Peirce's work. The community thus mediates the interaction of the individual mind and the real world and thus sets the pace and purpose of inquiry.

The concept that practice and its outcomes are conditioned and limited by a shared world of inquirers establishes Peircean pragmatism as a form of realism. The pragmatic realist begins by rejecting both the simplistic materialism that claims that the world makes up the mind and the simplistic idealism that claims that the mind makes up the world. Neither of these outlooks has much social potential: the materialist insists that meaning resides in the physical and can be mined out as well by an individual as by a community; the idealist likewise reduces the role of community by enclosing the process of meaning-making within the mind of each individual person. The realist, as Putnam suggests, prefers an interactive model: "the mind and the world jointly make up the mind and the world" (1). Practice becomes the crucial concept in this proposition. Since the mind and the world are both subject and object, we are justified in temporarily bracketing them and moving them aside, turning our attention instead to the verb that connects them: "make up." We thereby indulge in a kind of methodological nominalism, gently using what might be called "Occam's eraser" on entities that tautologically replicate one another's presence in the subject and predicate. This is more or less the strategy of Ian Hacking. Instead of dwelling upon mind and world as a central dichotomy, he substitutes an interest in the tension between thinking and doing, both of which are versions of Putnam's "making up." In his introductory book on the philosophy of science, Hacking writes: "Science is said to have two aims: Theory and experiment. Theories try to say how the world is. Experiment and subsequent technology change the world. We represent and we intervene. We represent in order to intervene, and we intervene in light of representations" (31). In Hacking's view, the debate over scientific realism has been indecisive because it has focused on theory rather than practice, representation rather than intervention, and has thus produced arguments "infected with intractable metaphysics." Suspecting that "there can be no final argument for or against realism at the level of representation," he turns to intervention. "The final arbitrator in philosophy is not how we think but what we do," he concludes, and he thus develops this central maxim: "We shall count as real what we can use to
intervene in the world to affect something else, or what the world can use to affect us” (31, 146). Whereas thinking is usually construed as an individual pursuit (and is in fact denigrated as “ideology” or “groupthink” when produced in a communal context), doing depends upon interactions with nature and with other people (doing to, doing with).

How does discourse work when it is developed according to this model of pragmatic realism? Realist discourse must be interventional and action-centered, or instrumental. It must enable action, often cooperative action between the sender and the receiver of discourse engaged in a mutual effort to effect some change in the world as they have come to know it. Consider an example from ordinary language and behavior. I may or may not give an accurate representation of reality when I say, “The cat is on the mat.” But, if I say to you, “Kick the cat on the mat,” and you are able to do so, with the predictable outcome, then we might be able to agree on the reality of the mat, the kick, and the screeching cat. Moreover, we could say that you and I are real, and that my statement had instrumental power over the reality that we shared. In the realist view, discourse is a tool used by real human agents to impose designs upon a real world. The world resists thought and discourse; it is a world of fact, not necessarily fact as defined by the positivist (the empirically verifiable entity prior to and separate from all thought) but fact as defined by Ludwig Fleck, “a stylized signal of resistance in thinking” (98; see Bazerman 61-62). Insofar as this resistance can be accounted for and then overcome, the world can be designed, controlled, and shaped by the forces of human desire, thinking, discourse, and physical conduct. This realist world is to some degree pliant, then, as are human agents themselves who in the process of shaping the world are also reshaped. Discourse is the medium of these changes, but is also part and parcel of the world and the selves of the sender and receiver.

A moving act of discourse is generally regarded as having a strong effect on the emotions rather than the actions of the receiver. How do such discourse acts affect behavior? Can behavioral outcomes be predicted and controlled through discourse? Charles Bazerman has noted that, even though recent studies “have demonstrated that scientific language [for example] is designed to move readers and derives from the various forces moving the authors,” these studies nevertheless retain the notion of a “rift between language and the natural world”: “they do not take the second step to see that mental motions influence behavior that occurs in the physical world” even though it is upon this step that “the project of empirical science is founded” (189-90). Even Bazerman’s own study of scientific writing stops short of demonstrating this premise, except insofar as it applies to the further production of discourse: the chief behavioral consequence that he is able to derive from scientific discourse is more discourse. One paper begets another. A similar case is found in speech act theory. Its effort to show that “a theory of language is part of a theory of action” (Searle 17) began with Austin’s
attempts to account for “performatives,” utterances like “I promise” or “I bequeath” that have direct effects on the world. But early speech act theory, as developed in the writing of both Austin and Searle, retreated into a series of reflections on meaning and reference, focusing on what happens on the front end of the speech act and stopping short of considering its outcomes. Ostensibly drawing on speech act theory, Michael McGee can thus write: “The only actions that consist in discourse are performed on discourse itself. Speech will not fell a tree, and one cannot write a house to dwell in” (122). While no one would be silly enough to suggest that an utterance could fell a tree, we can argue, however, that a manual for wood-cutting represents a virtual action in its mediation of a conscious goal and an act that would accomplish that goal.

Recent developments in the branch of speech act theory known as pragmatics have encouraged this way of thinking, which is common sense to any writer of technical manuals and which has been treated in a number of highly suggestive articles on composition and professional writing. Geoffrey Leech, in his general introduction to pragmatics, provides a model for speech acts that are goal-oriented, that involve problem-solving from both the speaker’s and hearer’s point of view; which is to say that these speech acts are concerned with an accurate representation of reality but are also directed outward in an effort to intervene in that reality. Figure 1 (based on Leech 37) shows a relation of mental, linguistic, and physical action that sums up the aim of goal-directed speech in a way that is particularly applicable to the manual. The figure is a simple diagram of a speech act situation involving a speaker who is cold and wants the heat turned on and a hearer who is in the position to fulfill that goal. The speaker asks to have the heat turned on, and the hearer complies:

![Figure 1](image.png)
From the speaker's perspective, as Leech indicates, "the problem is one of planning": What can I say to the hearer that is most likely to achieve the result I want? From the hearer's point of view, "the problem is an interpretive one": What result is the speaker trying to achieve by speaking to me in this way (36)? The overall image of the communication situation that arises in this model is one of cooperative empowerment of agents aligned against a resisting reality.

Rhetoric that neglects the instrumental needs of readers may be viewed as a product of what John Dewey called the "spectator theory of knowledge" (23). Though Dewey's critique of spectatorism and his action-oriented philosophy may rely on a weak estimation of the power of ideas to spawn change, his radical instrumentalism nonetheless provides an extreme against which we can measure the defects of theories cut adrift from practice. He argues that, while "the realm of the practical is the region of change," spectator epistemology has tried to create a world devoid of change and its attendant contingency (19). Fixing the world in a gaze, the spectator prefers discourses that universalize, that transcend change. "The depreciation of action, of doing and making," writes Dewey, "has ever been cultivated by philosophers." Similarly, in the world of discourse, the essayist's act of thesis-making often becomes a search for the universal, the timeless, the unchanging in the contingency of everyday life. Like Dewey's philosopher, the generalizing essayist is a privileged figure removed from work and living in the leisurely world of ideas. In this vein, Dewey continues:

But while philosophers have perpetuated the derogation [of practical activity] by formulating and justifying [that derogation], they did not originate it. They glorified their own office without doubt by placing theory so much above practice. But independently of their attitude, many things conspired to the same effect. Work has been onerous, toilsome, associated with a primeval curse. It has been done under compulsion and the pressure of necessity, while intellectual activity is associated with leisure. On account of the unpleasantness of practical activity, as much of it as possible has been put on slaves and serfs. Thus the social dishonor in which this class was held extended to the work they do. . . . For work is done with the body, by means of mechanical devices and is directed upon material things. The disrepute that has attended to the thought of material things in comparison with immaterial thought has been transferred to everything associated with practice. (4-5)

In contrast to essays built on the spectator model, the technical manual and its sister genres, the revolutionist manifesto and the political tract, have the smell of work and the material world. They represent the instrumentalizing of narrative. To use the words of a manual writer from IBM, they make the reader "the hero of a how-to story" (Dean). Not only the manual, the proposal, the recommendation report, and the manifesto, however, but even the essay, though it is largely a speculative or contemplative genre, might draw upon instrumentalist discourse and thereby assert itself in the world of practical activity. How is this possible?
Instead of thinking about the classification of the different kinds of writing as something established once and for all, it is useful to take the more dynamic view recommended in Beale's *Pragmatic Theory of Discourse*, to think of genres, aims, and modes of writing invading one another's territory, staking new claims, and threatening to take over entirely. Thus, for example, "To the extent that [scientific discourse] attempts to influence human action and opinion, or relies for verification upon communal values, it moves in the direction of rhetoric" (96). Likewise, "The classical and Enlightenment conceptions of poetic art as a medium of 'instruction and delight' provide one set of terms for observing the continuum of poetic and rhetoric" (96). But the closest relationship of all is found between rhetorical and instrumental discourse: "To the extent that [rhetoric] takes on the capability of directing human activities . . . it becomes instrumental," and "to the extent that [instrumental] discourses amount to recommendations of . . . activities . . . or recommendations of procedures in competition with other procedures, they move in the direction of rhetoric" (95-96).

The theory rests on a semiotic concept that Beale calls the "motivational axes." Here is a diagram based on Beale's (11):

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Contemplation:
utterance as reflection-on-experience

Reference:
designation-of-experience

SCIENTIFIC        POETIC

INSTRUMENTAL

Rhetorical

Action:
utterance as participant-in-experience

Nonreference:
symbolization-of-experience
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Beale's model denies that any of the four aims of discourse identified in the model (scientific, instrumental, rhetorical, or poetic) can ever be anything other than *performative*. Beale thus offers a radical critique of the concept of referential discourse. For example: "The view of meaning-as-reference tends to obscure the fact that discourse is meaningful and successful not merely to the extent that it refers to realities correctly or effectively but also to the extent that it performs actions in an appropriate and satisfactory way" (91). As Rorty suggests in a similar application of Dewey's pragmatism, "the notion of 'accurate representation' is simply an automatic and empty compliment which we pay to those beliefs which are successful in helping us do what we want to do" *(Philosophy* 10; emphasis added).
Like other pragmatists, Beale has a special understanding of the idea of aim: "the aims constitute identifiable norms of activity, inevitably involving not merely psychological and linguistic norms but also the values of community"; moreover, the aims must be understood as "very much historical products, developing and changing in time" (88; emphasis added). To some extent, then, in the spirit of Dewey and despite a central allegiance to rhetoric, Beale posits an instrumentalism at the heart of all discourse. Instrumental writing is merely the prototype for the instrumental aim in all communication. In his closely related theory of pragmatics, Leech confronts this possibility squarely:

There is likely to be one dissatisfaction with the... interpretation of linguistic behavior in terms of means-end analysis. It is that such analysis appears to regard all uses of language as having an instrumental function. Surely, it might be argued, we cannot treat all discourse as motivated by the goal of bringing about some result in the mental or physical condition of the addressee? While one cannot, of course, rule out the occurrence of non-communicative uses of language (e.g. purely expressive speech), it is indeed my contention that, broadly interpreted, the means-end analysis applies to communicative uses of language in general. (40)

The instrumentalizing of discourse suggests that the manual, whose overt goal is either to control or to empower readers by altering their behavior, is a kind of discourse to which others aspire to some degree. The success of rhetorical, poetic, and scientific discourse may well be determined by the degree to which they make their influence felt instrumentally in the world.

Another way of understanding the relationship of the aims is provided by Beale's mapping of the characteristic epistemologies of each aim as they fall along the motivational axes. Figure 2 (based on Beale 67) shows that the instrumentalist aim occupies the space between realism, a boundary shared with scientific discourse, and empiricism, a boundary shared with rhetoric:

**Figure 2**  
Constructions of Reality Mapped along the Motivational Axes
Much of our teaching and theory in the field of composition has involved approaches to genres that favor formalistic and relativistic epistemologies. But in technical writing, the production of manuals, proposals, recommendation reports, and other action-oriented documents forces our attention to what is present “down here” and “out there” and how we can bring that into relation with what is “in here” and “up there.” In the pragmatic realism that is likely to result from this broadening and re-focusing of our attention, the instrumental aim invades the territory of the other aims, or is appropriated by the other aims when the need arises for down-to-earth action.

The Instrumental Aim and the Literature of Personal Empowerment
The entry of humanist scholars into the field of technical writing has coincided with a refashioning of the technical manual that accommodates aims usually associated with rhetorical and poetic texts—above all, a concern with audience-conscious and intersubjective communication. Several authors have advocated a new personalism in the production of the technical manual (a reliance on a strong persona or on the cultivation of an ethos of helpful encouragement) as a means of meeting the needs of contemporary users of home technologies like the microcomputer (Bradford; Rubens); other commentators, drawing upon late structuralist theory, have sought to shift the interest to the process by which readers and writers are textualized in the production and use of technical manuals (Killingsworth and Waller). Both approaches have in common an interest in the empowerment of readers, extending the range of a technology’s usefulness, making tools “convivial,” which is the great goal of the interaction of democracy with “human-scale technology” as envisioned by writers like E.F. Schumacher, Lewis Mumford, and Ivan Illich. Having brought their discipline to bear on technical communication, however, rhetorical scholars would do well to trace the presence of the technical impulse, or instrumental aim, in documents whose primary goals are artistic or rhetorical. A full dialogue between the technical and the humanistic, between means-oriented and ends-oriented discourses, could prepare the way for an expanded and refreshed version of communicative action in the humanistic disciplines in general and in English departments in particular.

Consider a few examples of how the instrumental aim may be discovered as a structural and thematic force in the rhetorical and poetic discourses of democratic culture in America. The first comes from the writing of a mid-nineteenth-century journeyman carpenter and printer from Brooklyn: Walt Whitman. The work in question is a poem, but, if we omit the exclamation points, these lines could be mistaken as instructions from a carpentry manual:

Unscrew the locks from the doors!
Unscrew the doors themselves from their jambs!
Of course, most readers do not begin dismantling their doorways upon reading these lines. But, if the aim of the poem is to move the reader toward some kind of action (albeit an action not altogether clear in the poem itself, a "protopolitical" action), then my bringing together of "Song of Myself" and the technical manual is not as gratuitous as it may seem. Whitman's "Song" is not about being a self but about becoming a self, and it is as much about the reader as about the persona. Scholars in technical writing have drawn upon poetic art in suggesting that the presence of a strong persona enhances instrumental documents by providing the reader with the illusion of a reliable personal guide to help with the task at hand (Bradford; Whitburn). The immediate context of the lines just quoted reveals that Whitman would agree with this approach to discourse. In fact, he coined the term personalism to describe his approach to writing:

Walt Whitman, an American, one of the roughs, a kosmos,  
Disorderly fleshy and sensual ... eating drinking and breeding,  
No sentimentalist ... no stander above men and women or apart from them ... no more modest than immodest.

Unscrew the locks from the doors!  
Unscrew the doors themselves from their jambs! (50; ellipses in original)

"Song of Myself" is a manual of selfhood devoted to the empowerment of the reader. Just before the lines just quoted appears this passage:

I am less the reminder of property or qualities, and more the reminder of life,  
And go square for my own sake and for others' sake,  
And make short account of neuters and geldings, and favor men and women fully equipped,  
And beat the gong of revolt, and stop with fugitives and them that plot and conspire. (49-50)

Written in the early 1850s, in the period of exhilaration following the revolutions of 1848, "Song of Myself" is a celebration of revolutionary hope. But it is more than a celebration, a backward looking end-in-itself; it is an active effort to extend the French and American Revolutions, to bang the gong of revolt until freedom is a realization rather than an ideal. Much like the most popular American novel of the day, Harriet Beecher Stowe's Uncle Tom's Cabin—which, in the estimation of Abraham Lincoln, may be credited with starting the war against slavery—"Song of Myself" aims toward an active intervention in the lives of real people. The poem is designed to move people to action. Not satisfied with making art, Whitman wanted to make history (Killingsworth, Whitman's).

Most of our readings of "Song of Myself" are based on an idealist metaphysic, which focuses on agent rather than act (Burke). The primary effects of the poem are located in the life or mind of the author, as the genetic
schools of criticism would have it; or the effects are located in the poem itself or in the world of discourse, as the textualists would have it, substituting text or "intertextual space" for poet or persona but remaining faithful to the idealist privileging of agent. The person or the mind or the text is empowered, but what of the reader? A realist metaphysic would shift our attention to the effects of the words and the person on the world of action and vice-versa. It would ask, "How does reading the poem affect the ability and the inclination of the reader to intervene in history?" Insofar as the poem affects the inclination to act, it is rhetorically effective; insofar as it affects the ability to act or the kind and quality of the action, it is instrumentally effective. Just as Uncle Tom's Cabin may be said to have "started the Civil War," Whitman's poems, to the author's professed surprise, inspired the earliest advocates of gay liberation. Not only did Leaves of Grass (consciously or unconsciously) encourage the formation of the gay community as a political force, it also outlined aspects of the homosexual character that were instrumentally effective; British admirers of the poems affected a Whitmanesque lingo (calling each other "comrade" and "camarado") and a lifestyle that mingled the sensibility of the upper middle class with the physicality of the working classes, thus shaping the historical development of the public character of homosexual behavior (Killingsworth, Whitman's; Robert Martin).

This shift in critical interest away from effects in the mind and work of the author and toward effects in the world and action of the reader, a shift toward pragmatic realism, is not only characteristic of ideological, new historicist, and reader response criticism, but also of the aesthetic favored by American black writers, of whom Reginald Martin writes, "Certainly, to critically appraise a book as to whether it 'helped' anyone live a better life would repel Formalist, New Critic, and Structuralist critics alike. Yet motivating others to begin thinking toward a better, humane way of living is one of the initial aims of Western humanism, and this motive is also clearly the aim of the new black aesthetic criticism" ("New" 380). Martin rightly seeks the origins of the new black aesthetic not in any particular poetic movement, but in the work of the social reformer Martin Luther King, Jr. He focuses particularly on King's famous letter from the Birmingham jail (374-75). It is unlikely that this letter, often included in rhetoric readers, has been read in our classrooms as an intensely instrumentalist document. But King's words are nothing if they are not "moving"; and instrumentalism, I would argue, secretly informs the popular notion of what constitutes a moving discourse. Here, for example, is King's critique of "the strangely irrational notion that there is something in the very flow of time that will inevitably cure all ills":

Actually, time itself is neutral; it can be used either constructively or destructively. More and more I feel that the people of ill will have used time more effectively than have the people of good will. We will have to repent in this generation not merely for the hateful words and actions of the bad people, but for the appalling silence of the good people. Human progress never rolls in on wheels of inevitability; it comes through the tireless
efforts of men willing to be co-workers with God, and without this hard work, time itself becomes an ally of the forces of social stagnation. We must use time creatively, in the knowledge that the time is always ripe to do right. Now is the time to make real the promise of democracy and transform our pending national elegy into a creative psalm of brotherhood. Now is the time to lift our national policy from the quicksand of racial injustice to the solid rock of human dignity (859-60).

In this passage we find the artful amplification of basic instrumental imperatives, a recipe for altering consciousness and action: use time as an instrument for good, repent of your silence, work hard, open the doors of democracy, recognize the dignity of all human beings, put an end to racism in America. History has shown how such words mobilized a real community of real suffering people and real sympathizers; such words intervened in and altered the reality of the writer and his readers. Moreover, King's ends-oriented discourses were accompanied by workshops on the techniques of nonviolent protest, a methodology that the Civil Rights movement established as an effective means of change. The very success of King and his movement may be attributed to this powerful synthesis of means and ends, which corresponds to the synthesis of form and content in the literary efforts of Whitman (free verse about the freedom of the autonomous self) and in the works of African-American poets and novelists in twentieth-century America (strong words for strong themes), who carry forward the literary tradition of Stowe, Whitman, Frederick Douglass, and King, all writers interested in intervening in social and political history as well as literary history.

If not the intensity, then certainly the concreteness of a moving discourse derives from an instrumentalist foundation with surprising frequency. The concreteness and the intensity partly arise from the tendency of certain genres to favor a specific orientation in time. In technical writing, the report deals with the past and the proposal deals with the future; though both of these are deeply instrumental kinds of discourse, the manual is the genre with special claims on the present activity of the reader (Killingsworth and Gilbertson). It is therefore the dominant genre of Homo faber, the human doer or maker, the active technologist. When R. Buckminster Fuller, the controversial speculative philosopher of contemporary technology, put his ideas into a short form for mass consumption, he chose to call his book neither An Essay on Saving the Earth, nor A Report on My Thought Experiments, nor even A Proposal for Our Planet (though the latter would perhaps most closely represent what was contained in the book); he chose instead the title Operation Manual for Spaceship Earth. In doing so, he struck a resonant note among readers and spawned a phrase that has been enshrined as a cliche in the mass media of a real community bedazzled (rightly or wrongly) by technology.

Many essays draw upon instrumentalist discourse in an effort either to intervene directly into the present actions of the reader or to give the impression of instrumental realism, to give the reader something to do as well
as something to think about. Consider the frequently anthologized “Politics and the English Language” by George Orwell. A mixture of social activism and a rhetoric derived from the general semantics movement, the essay mounts an attack on the prevailing powers of Anglo-American culture as represented in the language of the marketplace, the academy, the government bureau. The controversial claim of the essay is that “If you simplify your English, you are freed from the worst follies of orthodoxy” (380). For Orwell, language had in itself the almost magical power to corrupt, to restore, to liberate, to make up the mind and the world. This critique of language practice concludes with what amounts to a manual, a set of instructions for the writer who wishes to avoid cant and corruption:

(i) Never use a metaphor, simile or other figure which you are used to seeing in print.
(ii) Never use a long word where a short one will do.
(iii) If it is possible to cut a word out, always cut it out.
(iv) Never use the passive where you can use the active.
(v) Never use a foreign phrase, a scientific word or a jargon word if you can think of an everyday English equivalent.
(vi) Break any of these rules sooner than say anything outright barbarous. (379)

In an utterly unsystematic survey of my colleagues and students, I have found that readers of “Politics and the English Language” tend to remember the list of instructions for writing more frequently than they recall the political motives given for it. It may be that, because of our conditioning in the liberal academy, we remember the advice on writing as somehow distinct from the political message, and we forget the latter as irrelevant to our practice of writing. Or, just maybe, the instrumental form speaks louder to a technologically-oriented culture. If this is true, then the technical manual becomes the model genre for the rhetoric of change in contemporary America. But, we may well ask, is it enough to get readers busy? Can an undue emphasis on technique lead to unreflective action that in no way fulfills the ends of a discourse? The reader would do well to doubt, for example, Orwell’s (ironic?) implication that a writer can avoid political corruption merely by using active-voice verbs and choosing words well.

With the growing popularity of the environmentalist viewpoint in the last few years, instrumental discourse has flourished in writings directed to a mass audience of increasingly activist citizens. We can see in this movement both the encouraging and the disappointing aspects of instrumentalism. Grassroots support for environmentalism in America has tended to shift away from an exclusive reliance on resistance politics (the not-in-my-backyard mentality) to an open commitment to small-scale positive actions like recycling and community education projects that focus on such issues as environmentally conscious shopping, energy conservation in the home, and organic gardening and lawn care. This distinctively middle-class, suburban version of environmentalism was supported by a flurry of publishing activity
timed to coincide with the twenty-year anniversary celebration of Earth Day in 1990. New editions of rhetorical classics like *A Sand County Almanac* and *Silent Spring*, as well as new versions of old writings by such well-known environmentalists as Paul Ehrlich and Barry Commoner, were featured at local bookstores across the country. But a new genre of environmentalist writing was more evident than any other: the green how-to manual. Offering ten or fifty or one-hundred-one ways to "save the world" or "live green" or "keep the environment healthy," these books focused on actions that could be practiced by ordinary Americans in their own daily activities. Even *Reader's Digest*, that dependable index of middle-class interest, featured an article on "Simple Ways You Can Help Save the Earth," urging readers not to let "news reports about enormous environmental problems overwhelm and paralyze you": "The 1990s are ushering in a new understanding that government and business can't repair the waste and pollution damage that come from the actions of millions of people." The article announces, "But remember: as much as we are the source of the problem, we are also the beginning of the solution" (EarthWorks 135). Never claiming that grassroots action will in itself solve global problems, this article and others like it advance, if nothing else, the growth of environmental consciousness by suggesting simple practices in a nonthreatening "Hints from Heloise" format: "tune up your furnace," "subdue your water heater," "monitor your appliances," "don't waste water," "beware of toxic wastes," "recycle, recycle, recycle," and "spread the word" (EarthWorks 136-38).

Radicals will no doubt look with suspicion upon this turn in the history of environmental politics. They may rightly worry that interest in small-scale actions will function ideologically, blinding the general public to the need for massive shifts in government policy and curtailments of large-scale industrial activity. Consider, for example, a recent television advertisement for plastic garbage bags, a non-biodegradable and petroleum-based product that has been widely criticized in environmentalist pamphlets for consumers. The ad offers a free guide to "living better in the environment," another contribution to the emerging genre of the green how-to manual. The video for the ad shows boy scouts filling plastic garbage bags with aluminum cans to be recycled. Ghosts of Indians in buckskin and dressy feathers smile approvingly in the background. And, in an overt attempt to displace radical resistance with small-scale consumer actions, the voiceover says, "Don't get mad, get moving!"

Radical environmentalists must perceive the need, therefore, to keep up, perhaps even increase, the intensity of their resistance to industries and projects that make insignificant allowances to public environmentalist consciousness as a screen for maintaining business as usual. The radicals must encourage reflective, critical discourse and they must effectively model alternative actions. These have been the consistent goals of Earth First!—one environmental resistance group whose history presents an interesting case of
how instrumentally-oriented rhetoric has become entwined with the history of environmentalist action. Earth First! came to the attention of the public for the first time in a rally held at the controversial Glen Canyon Dam on March 21, 1981:

On that morning, seventy-five members of Earth First! lined the walkway of the Colorado River Bridge 700 feet above the once free river and watched five compatriots at work with an awkward black bundle on the massive dam just upstream. Those on the bridge carried placards reading “Damn Watt, Not Rivers,” “Free the Colorado,” and “Let It Flow.” The four men and one woman on the dam attached ropes to a grill on the dam, shouted “Earth First!” and let 300 feet of black plastic unfurl down the side of the dam, creating the impression of a growing crack. Those on the bridge returned the cheer.

(Foreman 42)

As the organizers were being questioned by the local sheriff, the crowd of demonstrators was addressed by Edward Abbey, who had mythologized the Glen Canyon Dam as the big symbol of all that blocked freedom in the interests of civilized progress in his popular novel The Monkey Wrench Gang. Abbey’s fictional heroes shared the ambition of destroying the dam and freeing the Colorado River from the confines of Lake Powell. On the day that Earth First! “cracked” Glen Canyon Dam in their act of guerilla theatre inspired by his novel, Abbey looked beyond symbolic “ecotage” toward the possibility of the real thing: “Oppose. Oppose the destruction of our homeland by these alien forces from Houston, Tokyo, Manhattan, Washington, D.C., and the Pentagon. And if opposition is not enough, we must resist. And if resistance is not enough, then subvert” (qtd. in Foreman 42). The FBI was impressed enough with the performance to dust the black plastic banner for fingerprints, according to “reliable reports” (Foreman 42).

Earth First! has drawn upon Abbey’s inspiration not only in its theatrical displays, but also in condoning and perpetrating actual sabotage. According to one report, soon after Mike Roselle, one of the founders of Earth First!, read about the fictional Doc Sarvis’s exploits in The Monkey Wrench Gang, “billboards around Yellowstone” (where Roselle made his home) “started falling down” (Kane 100). Then, in another apparent effort to live out Oscar Wilde’s dictum that life imitates art, Earth First!er Howie Wolke followed the lead of Abbey’s character George Hayduke and pulled up for the third time the survey stakes of a Chevron Oil Company road-building project in Bridger-Teton National Forest, an action for which he was arrested “at hatchet-point” by a Chevron employee and taken promptly to jail (Malanowski 568). In 1985, Roselle and other ecoteurs assisted Dave Foreman in the production of a manual on how to “monkeywrench” and get away with it. Ecodefense: Ecodefence: A Field Guide to Monkeywrenching gives specific directions for many of the actions first suggested in Abbey’s novel: how to use spikes for giving flats to logging trucks or off-road vehicles, how to burn or “revise” billboards, and how to use tools, fire, and water to disable or destroy heavy machinery. Abbey wrote the “Forward!” [sic] to the manual and
endorsed many of the techniques described in print for the first time (though not unknown to monkeywrenchers like Abbey's Aunt Emma, who, he says “has been enjoying the pleasant exercise” of tree-spiking “for years” \[Ecodefense 5\]). Abbey had in fact taken considerable steps toward providing such a manual within the novel itself. At the risk of creating wooden dialogue (“How do you get that oil pan loose?” “Well, I'll tell you . . .”) and with little concern over clogging his narrative, Abbey included expansive passages of instrumentally-oriented prose, such as this prelude to the gang's demolition of an automated railroad:

First, they cut the fence. Then they dug out the rock ballast from beneath the crosstie nearest the bridge, on the side of the train's scheduled approach. When a hole was cleared the size of an apple box, [sic] Hayduke consulted his demolition card (GTA 5-10-9), handy little item, pocket-sized, sealed in plastic, which he liberated from Special Forces during his previous career [in the U.S. Army]. He reviewed the formula: one kilogram equals 2.20 pounds; we want there charges [sic] 1.25 kilograms each, let's say three pounds each charge, to be on the safe side.

"Okay, Seldom," he says, "that excavation's big enough; you dig another five ties down. I'll place the charge."

Hayduke steps off the railway, back to the sealed boxes waiting on the dune. He rips open the first case—Du Pont Straight, 60 percent nitroglycerin, velocity 18,200 feet per second, quick shattering action. He removes six cartridges, tube-shaped sticks eight inches long, eight ounces heavy, wrapped in parafined paper. He makes the primer by punching a hole in one cartridge with the handle (nonsparking) of his crimping tool, inserting a blasting cap (electrical) into the hole, and knotting the cap's leg wires. Next he tapes the six sticks together in a bundle, the primed cartridge in the center. The charge is ready. He sets it respectfully in the hole under the first crosstie, attaches a connecting wire to the leg wires (all wires insulated) and replaces the ballast, covering, concealing, and tamping the charge. Only the wires are exposed, coiled in their red and yellow jackets, shining on the railway bed. He tucks them under the rail for the time being, where only an observer on foot would be likely to see them. (176-77)

The frequent typos in such passages (those indicated by sic in the quotation, for example) are a kind of index of the impatience an ordinary novel reader would feel for such detail—a reader represented in the publisher's office by the copyeditors and proofreaders. Except in the passages on monkeywrenching techniques and field mapping, this kind of indulgence in realism is absent in the novel, which for the most part tends toward hip-expressionist and mock-epic descriptions. One commentator has, with some justification, compared The Monkey Wrench Gang to an "adventure comic book" (Malanowski 568). But the sections on operations are more like an army training manual with caricatures and photographs to make the reading easy for undereducated G.I.s (the precise graphical techniques used in Foreman's Ecodefense).

Abbey could hardly have been surprised, therefore, when Earth First! and other ecoteurs read his novel both as an instruction manual and an incitement to action. The interrelation of fictional and historical actions surrounding the practice of monkeywrenching is indeed complex, with influences doubling back upon influences, and with "life" and "art" ever exchanging places. Abbey was himself writing under the sign of the infamous
Ned Ludd, the worker who in 1779 smashed machinery in Leicestershire in protest of the mechanization of labor. *The Monkey Wrench Gang* is dedicated to Ludd and bears a satiric epigraph from Byron: “Down with all kings but King Ludd.” Abbey may have also been aware of the work of more recent Luddites such as “the Fox,” an ecoteur who, in the early seventies, plugged industrial drains, collected polluting effluents, and dumped them on the carpets of corporate offices in the Chicago area (Petersen 22). Earth First! claims that there is much more ecotage out in the world than ever gets reported, since the victimized companies and government bureaus do not want to inspire other potential monkeywrenchers or give them ideas about how to proceed. Abbey also hints that the practice is widespread. During one of their bulldozer-burning campaigns, the characters in *The Monkey Wrench Gang* are surprised to meet another ecoteur about the same business; and, in the spiritual climax of the novel, when George Hayduke compliments Doc Sarvis on the “job” he had done on a new bridge across the Colorado River, Doc has to confess that he had nothing to do with the massive explosion timed perfectly to correspond with the ribbon-cutting ceremonies. The copyright page of the novel offers this “disclaimer”: “This book, though fictional in form, is based strictly on historical fact. Everything in it is real and actually happened. And it all began just one year from today.”

In his haste to intervene in history, has Abbey violated the humanist ethical preference for means that reflect the ends which they are designed to bring about? Does the form of ecotage violate the substance of humane environmentalism? In technologizing protest, have Abbey and his followers in Earth First! submitted themselves to the law of the Machine, against which they protest? These questions take us back to many of the central issues taken up by the Frankfurt School, which more or less argued that a mechanistic structure can only serve mechanistic ends. Democracy cannot flourish within a bureaucratic hierarchy; the Machine can serve humanity only if humanity becomes machine-like. In arguing against the position that “the machinery of the technological universe is ‘as such’ indifferent toward political ends” and “can therefore revolutionize or retard a society,” Marcuse has suggested that the improper selection of means can corrupt the ends of moral practice: “This neutrality [of technology] is contested in Marx’s controversial statement that the ‘hand-mill gives you society with the feudal lord; the steam-mill with the industrial capitalist.’” Therefore, “when technics becomes the universal form of material production, it circumscribes an entire culture; it projects a historical totality—a world” (Marcuse 154). If this were true, the fictional exploits of the monkey wrench gang and the historical actions of Earth First! would have to be seen as contributing to the very institutions they are designed to resist. The opponents of Earth First! within the environmental movement have suggested as much. “I see no fundamental difference,” says Jay Hair of the National Wildlife Federation, “between destroying a river and destroying a bulldozer” (qtd. in Kane 102).
But Abbey's utopian efforts to write the future and his encouragements to sabotage are balanced by his exploration of the motives for monkeywrenching. For Abbey, as for other romantic personalists in the mold of Thoreau, Whitman, Martin Luther King, Jr., and the founders of the new black aesthetics, radicalism arises most directly from personal experience, not from ideology or formal theory. Abbey would agree with Berger and Luckmann's premise that "the theoretical formulations of reality, whether they be scientific or philosophical or even mythological, do not exhaust what is 'real' for members of a society" (15). If something in the lifestyle or language of the cowboy, the scientist, the construction worker, the citizen, the soldier, the hippie, the Marxist, the environmentalist rings true, then no ideological scruple would be able to keep it out of Abbey's expressivist life and literary corpus. Though Abbey is one of the foremost eccentrics of American literary culture, his depiction of the genesis of radicalism provides a rather close parallel to the public experience of environmentalism as interpreted by the historian Samuel Hays, who argues that the American search for an undefiled nature ("environmental amenities") is based less in ideology than in wide-ranging perceptions about the threats of industrial degradation (246-48). If Abbey never directly relates the adventures of the monkey wrench gang to the needs of ordinary citizens, neither does he take an ironic or superior attitude toward the public at large. For a writer as acerbic as Abbey, this indulgence amounts nearly to an appeal. He reserves his satire for those people with direct and immediate connections with the perpetrators of environmental destruction. He attacks the "oil companies, power companies, coal companies, road builders and land developers"—the traditional enemies of reform environmentalism—and, because of their compliance with industry and their inability to control developmentalist fervor, he attacks the government bureaus, especially "that limber reed that supple straw that trembling twig the U.S. Department of the Interior" (143). But he leaves the people out of it. Ordinary Americans stand on the margins of the action in _The Monkey Wrench Gang_, passive onlookers who watch in wary curiosity as the jack Mormon "Seldom Seen" Smith prays for an earthquake to destroy Glen Canyon Dam, or passive victims who go into surgery with Doc Sarvis, their lungs destroyed by the bad air of Albuquerque.

Instead of seeking to discover links between radical ecology and classical leftist ideologies, such as Marxism (Parson) or anarchism (Bookchin), discourses in which he had read deeply, Abbey develops a kind of existential radicalism that is reflected in his characters' tendency to act upon the slender threads of experience, their overwhelming consciousness of having been victimized and rendered powerless by a machine that controls and destroys their lifeworlds, rather than to drift into the passivity of self-reflective ideology. When, for example, Doc Sarvis and Bonnie Abzug buy a chain saw to help with their work in taking down billboards, the doctor pauses over "the ecological question, whatever that meant, of noise and pollution, the exces-
sive consumption of metal and energy." But he dismisses the "endless ramifications" of the question: "No," the doctor said. 'Forget all that. Our duty is to destroy billboards" (42-43). Foregoing elaborate rationalizations, the protagonists develop an informal framework for action based loosely on a romantic allegory: the Human Being versus the Machine. They rebel against the instrumentation, the rationalization, the bureaucratization of modern life as described by Weber. Indeed, Abbey would argue that, since Weber's time, the capacity and the range of the iron cage of instrumental rationality have increased to the point of encompassing the lives and minds of all living beings. Abbey writes in the introduction to Foremen's Ecodefense,

Such is the nature and structure of the megamachine (in Lewis Mumford's term) which is now attacking the American wilderness . . . the primordial homeland of all living creatures including the human, and the present final dwelling place of such noble beings as the grizzly bear, the mountain lion, the eagle and the condor, the moose and the elk and the pronghorn antelope, the redwood tree, the yellowpine, the bristlecone pine, even the aspen, and yes, why not say it?, the streams, waterfalls, rivers, the very bedrock itself of our hills, canyons, deserts, mountains. (4)

The heroes of The Monkey Wrench Gang are set against a force of global proportions. The nature of their very actions—the form of their rebellion, the monkeywrenching itself—is determined by the limits that the Machine sets. Even their ability to think in animal, organic terms is threatened—hence the urgency of their mission: to act while the mind is free. Consider, for example, the gang members' various states of imagination as they encounter a strip mine operation. Two of the heroes react with a tragically limited imaginative capability: Bonnie Abzug responds with images produced by the machine of the mass media, the stock images of science fiction; and Seldom Seen Smith merely reflects instrumentally on the size and similarity of the operation as compared to others he has seen: "Their view from the knoll would be difficult to describe in any known terrestrial language. Bonnie thought of the plain of fire and of the oligarchs and oligopoly beyond: Peabody Coal only one arm of Kennecott's open-pit mine ("world's largest") near Magna, Utah" (159). Only Doc Sarvis, twenty years older than the others, with broader experiences in life and literature, is able to size up the monster in terms of the organic imagination, drawing upon the Scandinavian myth of the Kraken, the creature that dwells at the bottom of the sea, rising only to herald the end of the world:

Dr. Sarvis thought of the plain of fire and of the oligarchs and oligopoly beyond: Peabody Coal only one arm of Kennecott Steel intertwined in incestuous embrace with the Pentagon, TVA, Standard Oil, General Dynamics, Dutch Shell, I.G. Farben-industries; the whole conglomerated cartel spread out upon half the planet Earth like a global Kraken, pan-tentacled, wall-eyed and parrot-beaked, its brain a bank of computer data centers, its blood the flow of money, its heart a radioactive dynamo, its language the technetronic monologue of number imprinted on magnetic tape. (159)
Against the monster, the protagonists are armed not only with their insight that the machine requires human compliance—the soft organic parts drive and control the hard metal—but also, ironically, with the skills provided by the mechanical culture in which they live. They have only to overcome the division of labor that makes them, as individuals, inadequate to fight the machine. Having once united through their unique form of communicative action—a mixture of difficult consensus formation, slow-rising but ultimately thorough trust, male-bonding where possible, and sexual sharing to fill the gaps—their talents are formidable; their motives, all the more so, for such motives are far from rare among Americans of their generation. Having survived as a prisoner of war in Vietnam by dreaming of his beloved canyonland, George Hayduke, discovering on his return the work of the Kraken in his own country, turns what he learned from the war machine against itself and fuels his action with pent-up hatred, frustration, drugs, and outright insanity. Seldom Seen Smith—having seen his hometown of Hite, Utah buried along with Glen Canyon under the green water of Lake Powell—contributes to the monkey wrench gang his skill as a riverman, learned on numerous forays in the local tourist trade. The bored ex-teenybopper, Bonnie Abzug, brings to monkeywrenching her considerable skill as a liar and sardonic irritant, which she picked up, we must assume, by taking a graduate degree in French literature and by working as a doctor's receptionist. And Doc Sarvis, the surgeon, provides the group's financing by sharing the monetary proceeds (and the analogies) of his work removing cancers from the bodies of the Machine's victims. The point is made quite clear, in Abbey's heavy-handed manner, that the monkeywrenchers are products of the Machine, cogs that have gone bad and threaten to wreck the global operation from within. If capitalistic growth mania is a cancer on the land, they are the cancers within the cancer. If they have been victimized by what P.M., the author of the utopian tract bolo bolo, calls the Planetary Work Machine, then they will direct its instrumental force back against the source. Their call to battle is "We've got work to do."

Like the monkey wrench gang (and The Monkey Wrench Gang), instrumental discourse aims to get work done. Regardless of the rational or rhetorical framework within which it operates, it embodies an overwhelming need to create an action agenda and to prepare readers to carry it out. Just as storytelling provides traditional communities with a vehicle for purveying time-honored truths, instrumental discourse performs a crucial function in communities that rely upon method as a means to establishing new truths. Though it has been heavily appropriated by the masters of the iron cage, it is also open to more convivial uses. This potential alone would justify its inclusion in the research program of the humanities. Even more significant for a literary culture, however, is the theoretical role played by the instrumental aim in fictions that, if taken on their own terms, must be read as radical
moments in history rather than as dead artifacts that appeal to the mind and taste of the passive spectator.  

Notes

1See Killingsworth and Palmer, chapter 5, for examples in government writing.
2See Dasenbrock; Haselkorn; Riley; and Limaye and Cherry.
3Also see Martin, Ishmael Reed 19-40.
4An early draft of this paper was presented at the CCCC convention in Seattle, March, 1989. I thank the many participants who offered suggestions and encouragement. I also thank my former colleague, Donald Cunningham, who provided the initial intellectual stimulus for my explorations into the meaning of the “real world,” a journey I have yet to complete. Reed Way Dasenbrock and Roger Cherry were kind enough to direct my attention to the important work of Geoffrey Leech.

Works Cited


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