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ABSTRACT

A study explored the implications of a rhetorical approach to professional education in business--specifically, how a social constructivist view of language might change how students learn concepts and theories of business. It focused on undergraduate education in management, with data drawn from a case study of a student in a pilot version of an advanced writing course which introduced some basic rhetorical concepts to be applied to undergraduate majors and areas of professional study. Data sources include instructional materials, reading materials the student selected, multiple drafts of the papers submitted, written comments by the instructor and by an outside reader, and written reflections by the student. In the first assignment students read samples of professional discourse and wrote analytical papers discussing coherence. The second assignment asked students to undertake original investigations of a person, situation, or event that would serve to test or illustrate a theory in their major--for the student in question, "participative management." The expert reader proposed several changes in wording in the student's paper, wording which qualified the unambiguous conception of management theory. The view of language as a transparent medium strongly shapes students' educational experience, leading them to unwarranted confidence in the theories they are taught. These misconceptions can be confronted head on by introducing explicitly rhetorical perspectives on language in professional education. Findings generally support the claim that linguistic assumptions influence students' understanding of theories and have a significant impact on their professional acculturation. (Contains notes and 11 references.) (NKA)

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Constructivist Views of Language in Professional Education

Introduction

Most modern professions have been dominated by a view of language promoted by philosophers of science at the beginning of this century.[1] This view may be summed up by the metaphor of a window pane. Language is viewed as a transparent medium through which, ideally, a thought is conveyed undistorted from one mind to others. Words are, or ought to be, unambiguous and stable in meaning. Properly employed, language represents things simply as they *are*, rather than as speakers or writers, either individually or as members of a social group, have chosen to represent them.

The window-pane image is not just a vision of language. It is also implies a vision of education. The metaphor encapsulates a way of thinking about how students learn. If a concept explained in a lecture or textbook turns out to be equivalent to an image seen through a window pane, then constructivist accounts of learning that undergird contemporary educational reforms are mistaken. Learning is a form of reception rather than a process of construction or interpretation. What is seen through a window pane is seen whole; reconstructing or interpreting it is unnecessary and likely to lead to distortion.

This account of learning as reception has been widely challenged. A wide range of reform programs based on constructivist principles have been initiated in professional schools. Prominent examples include problem-based learning in medical education, volunteer legal service and role-playing in law schools, and design projects in engineering. With few exceptions, however, these pedagogical innovations have not directly challenged

[1]The logical empiricists, as they are now referred to, held that the meaning of a statement lay in its verification. The propositions that constitute scientific knowledge are thus reducible to statements about the evidence that can be produced to support them. The problem with this view, as pointed out by ordinary language philosophers (Wittgenstein and Austin) and historians of science (Kuhn), is that it rules out human purposes and values as constitutive of meaning. If these aspects of language are excluded from consideration, many scientific discoveries and controversies turn out to be unintelligible. For the dominance of scientific thinking in the professions, see Glazer (1974) and Schön (1983), especially Schön's second chapter.

the conventional view of professional language.[2] This neglect is particularly surprising, since studies of professional communication richly document the rhetorical aspects of discourse in a variety of fields.[3] Rhetorical inquiry, moreover, is not limited to empirical study of professional practice: philosophical studies of fields ranging from law to economics and decision science have demonstrated that professional knowledge rests on rhetorical foundations.[4] Professional understanding, in short, cannot be reduced to a series of statements about facts and theories. A full description requires an account of linguistic practices. The window-pane model leaves out a critical dimension of professional knowledge.

The present study explores the implications of a rhetorical approach to professional education in business. How would a social-constructivist view of language change how students learn concepts and theories of business? In principle, the effect ought to be substantial. Viewed as a social construct, the language of business reflects the purposes, interests, and outlooks of the social group by which it is employed. To learn terms and how they are used is to learn a set of values and a way of looking at the world. Meanings and usage may be relatively stable within a group, but an outsider (an undergraduate student, for instance) cannot fully grasp what they mean or how they are used without joining the group, sharing its interests, and adopting its practices.

No college curriculum, of course, could hope to meet these criteria. Yet there are steps that can be taken, and which in fact are taken, to make classroom instruction in professional fields more realistic. Instructors can point out that professional competence is the result of a process of acculturation, not just the end-point of a set of exams and textbook exercises. They can emphasize that learning definitions of concepts and terms is a preliminary stage in a longer-term process of learning professional language as it is actually spoken and understood in context. Exercises could be devised through which students

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[2]There are, however, exceptions, the most notable of which is critical legal studies. For a rhetorical approach to writing in the field of engineering, see Howell (1995).

[3]See, for example, Ann Harleman Stewart's (1990) study of narrative structure in case studies used in management education. B. A. Sauer's (1993) rhetorical study of mine safety reports suggests the depth that can be achieved by introducing a rhetorical perspective on the language of bureaucracy. Rentz's (1992) treatment of narrative in business writing suggests the importance of contextual issues and the evocative dimensions of language. Feminist scholarship offers rich insights in this area. Lay (1994) and Allen (1992) provide overviews of gender issues in professional communication.

[4]For example, James Boyd White's (1989) reflection on legal rhetoric and Donald McCloskey's (1983) work in economics.

would discover what more is to be learned, and what sort of relation the formal structure of knowledge taught in classrooms bears to the texture of professional experience.

To some extent, instructors in professional fields have already grasped the need for realism. They emphasize the incompleteness of propositional knowledge. They make an effort to present theories as hypotheses, rather than as factual statements of what students will actually see in the world. They point out the ambiguity of concepts. They encourage critical thinking. Such efforts already imply a rhetorical understanding of language. Making this understanding explicit would reinforce what is already taught. For teachers concerned about the realism of professional education, the approach proposed here would thus amount to a refinement: a way of bridging the gap between the teacher's instinct for realism, on the one hand, and textbooks, exams, and other unrealistic features of the instructional setting on the other.

Whether such a refinement is practicable or desirable remains an open question, and it is this issue that the present study addresses. Would the study of professional rhetoric be useful to students? Does lack of such study inhibit students' professional development or diminish their understanding of the concepts and practices they are being taught? Professional training, like other forms of education, is organized around a series of heuristic simplifications. The window-pane model of language may be regarded as one of those simplifications. In some respects, it is undoubtedly useful. Whether a more realistic view of language and learning in professional fields would be an improvement is therefore a question that must be settled by empirical study.

Methods and Techniques

The present inquiry focuses on undergraduate education in management. The bulk of data is drawn from a case study of Debra Parsons, a junior-level student in a pilot version of an advanced writing course designed and taught by the author of this study. In this course, students were introduced to some basic concepts of rhetoric and asked to apply them to their undergraduate majors and areas of professional study.[5] While other students' work is referred to briefly, Parsons' work was selected for study in depth because it highlighted issues of rhetorical understanding.

The study covers two major assignments, which comprised about three-quarters of the work of the course. Data sources include instructional materials, such as assignments and teaching notes; reading materials selected by the student; multiple drafts of the papers

[5]The student's name, her father's name, and certain details of her employment have been altered for reasons which will become evident later.

she submitted; written comments by the instructor and by a reader outside the course; and written reflections by the student at the conclusion of each assignment.

The structure of the assignments was a significant element of the research design. The first assignment required students to choose samples of professional discourse and write papers discussing their coherence. For the second assignment, students were supposed to undertake original investigations of a person, situation, or event that would serve to test or illustrate a theory in their major field of study.

Two common characteristics of these assignments deserve attention. First, they were open-ended. Students chose their own topics of study. Requiring this choice was a way of adapting instruction to the student's actual level of professional development. The content of the exercises depended on what they knew, what they were interested in, and how they conceived of the profession to which they were being introduced. Thus, while the study focused primarily on the relevance of certain rhetorical concepts, it also probed students' professional commitment and acculturation. Given the initial hypothesis about the social nature of language, one could not be studied without the other.

The second common characteristic of the two assignments was their dialectical structure. The projects were conceived in several stages, each of which called into question the conclusions of the preceding stages. This approach, a familiar feature of critical pedagogy in general and composition in particular, is well suited to a social-constructivist view of language, since it requires students to explore different perspectives and coordinate conflicting interpretations. It poses difficulties for an empirical study, however, in that it depends on ad hoc adjustments to the needs of individual students. Indeed, given social-constructivist premises, this ad hoc quality may be a necessary feature of language-related research and instruction. Whether such an approach can be accommodated within the present curricular structure of professional fields is left as an open question.

Results of the First Project

In the first major assignment for the course, students read samples of professional discourse and wrote analytical papers discussing their coherence. The purpose of this exercise was twofold. First, it was designed to probe the extent of students' acquaintance with professional discourse and to assess their ability to find suitable samples, read them, and relate them to what they were learning in their other course work. Such an assessment is an important step in deciding whether and how to introduce a rhetorical perspective into professional study. If students' experience of professional language is confined to lectures and textbooks, they may lack access to the social context within which professionals actually operate. Without access, they may be unable to find suitable professional texts or

may be unable to make sense of what they do find. Under these circumstances, rhetorical theory will do little to enhance professional education. If, on the other hand, they both have access to professional discourse and can read it with ease, one might conclude that rhetorical study is unnecessary. The students already understand the social context of their profession well enough that explicit attention to this area will simply restate what is already obvious.

This first purpose was fulfilled easily: with limited guidance, the students were able to find suitable examples of professional discourse. A biology major, for example, chose a report of a survey of hospital records from which the researchers constructed an etiology of prolonged fever in children. An economics major selected an article which proposed modifications to Ricardo's theory of comparative advantage in light of the Japanese practice of government-sponsored targeting of export markets. An accounting student chose an article explaining revised accounting standards that had been introduced in order to clarify auditors' reservations about the accuracy of their conclusions. A journalism student found a Supreme Court decision reversing a lower ruling on the immunity of reporters who protect confidential sources. Debra Parsons, the subject of the study, chose a speech delivered by a bank executive to a convention of information systems analysts.

These sample texts amply illustrate the rhetorical issues that had been proposed as a subject of study. Each depended on a social context, with its characteristic assumptions, textual structures, and patterns of reasoning. They appeared, moreover, to satisfy the experiential criteria: the students knew how to find them and recognized their relevance to professional goals, but they read them only with difficulty. Their reading strategy, in fact, closely resembled the patterns of simplification found in lectures and textbooks. They tended to focus on material that could be viewed as unambiguous—facts, conclusions, and definitions of terms. They de-emphasized methodology and reasoning or skipped them altogether. In consequence, they often failed to understand crucial aspects of the texts they had chosen, and often were unable even to state why the text was written and what claim the author advanced. The economics student, for example, hadn't realized that Japanese industrial policy was not among the factors covered by Ricardo's theory of comparative advantage, and thus did not understand the basis for the author's argument for an extension of the theory. The journalism student couldn't identify the facts of the case on which the court based its ruling, and therefore was at a loss to explain on what basis the ruling differed from established legal principle and thus constituted precedent. The pre-med student had accurately summarized the etiology of fever patients, but had given no account of the questions left open by the study or its implications for further research. In short, the students' restricted focus on facts and conclusions and neglect of context clearly limited

their understanding of what they read. This limitation appeared to provide strong support for instruction in rhetorical theory.

The second purpose of the exercise was to introduce, on an experimental basis, a major concept of contemporary rhetorical theory and see if students gained any insight from applying it to a professional text. If they could do so for the text they chose in the advanced writing course, it seemed reasonable to suppose that similar rhetorical and social constructivist principles might have wider applications in other phases of their professional education.

The concept of coherence was a convenient choice, since it had been extensively discussed in recent literature on written composition.[6] It also illustrates a sharp contrast between traditional and constructivist views of language. In the traditional view, coherence is treated as internal structure—a stable property residing entirely within the text. In the constructivist approach, by contrast, coherence is viewed as a variable property resulting from interaction between an author and readers. According to this view, an author attempts to control how a text will be read by implanting cues (rhetorical pointers and other organizational devices) to which a reader responds unpredictably and idiosyncratically, reassembling ideas, images, and themes from the text in a distinctive pattern, the meaning of which derives in part from the reader's prior experience. The assignment was introduced and structured in such a way as to highlight these idiosyncratic readings and to discourage students from focusing on coherence as a purely internal structure.

Whether or not they could actually use the concepts of rhetorical theory proved a more difficult question. It had been explained that coherence was not just a property inherent in texts; it was also an activity readers engage in when they make meanings of the texts. The concept was demonstrated in a two-stage exercise. First, students were first asked to pick out passages that struck them as disorganized or confusing and to explain what made them seem so. Next, they were instructed to reconsider the confusing or disorganized passages and to try to discern how the author might have intended the reader to make sense of them. The first part of the exercise turned out to be relatively straightforward; the second was more difficult.

The work of Debra Parsons, the subject of the case study, illustrates both aspects of the undertaking. Currently enrolled in a course in Management Information Systems, Parsons was working with the text of a speech delivered to a group of experts in that field by a non-expert, William Norby, an executive at a Chicago investment bank (Norby, 1966). Norby's speech, a rambling account of his encounters with advanced information

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[6]Witte and Faigley (1981), Phelps (1984), and Grimes (1975) offer a representative sampling of relevant work.

technology over the four decades of his executive career, was very different from the kinds of texts Parsons was used to reading for her classes in computer science. She had no difficulty at all, even in the first draft of her paper, in discovering the confusing or disorganized passages students had been asked to look for. The very fact that Norby admitted lack of expertise led Parsons to expect "a confusing and uninteresting essay." Already skeptical, she went on to object to the style and arrangement of the speech:

> This is not a good writing style to begin with because when a person speaks, he often jumps around to many different topics. This was very prominent in this paper. The introduction was much too long and full of too many topics. An introduction should be a precise over view [sic] of what is coming up in the paper. Some of the topics that the author discussed in the paper were not even elaborated on in the paper. Also, he jumps from topic to topic in the introduction. For example, he discusses his position as financial analyst. Than he talks about General Motors. Of course everything relates to the main topic of Management Information Systems, but the transition to the narrower topics is very difficult to understand. Also, Management Information Systems is just too broad a topic to discuss in a few pages.

This account of the text's disjointed quality is not inaccurate, but Parsons' criticism of its structure, like her disapproval of the speaker's admission of ignorance about management information systems, reveals her unfamiliarity with the professional context of the speech. A reader with even limited professional experience could have constructed at least a crude background picture of business executives, computer technology, and systems analysts. The story of a generalist's encounters with a specialized subject is bound to reflect a certain degree of perplexity, especially when it is designed for an audience of specialists. Parsons, however, didn't bring this level of background knowledge to bear in her initial reading. Because she doesn't pause to reflect on the social context of Norby's speech, she doesn't pick up clues from which a reader with even very slight professional experience might make an informed guess about Norby's purpose.

This difficulty is thrown into even sharper relief by Parsons' description of the parts of the speech that she found coherent and meaningful:

> After the introduction, the author talks about how an "integrated information system should be developed around the planning concept." I started to enjoy these paragraphs because they were easy to understand and very informative. For example, at the end of one paragraph he discusses the bottom of the information and management pyramid. The next paragraph continues to move up the pyramid. This idea of the management pyramid was a concept that I had already learned. Therefore, I found it to be an excellent refresher on it.

Parsons' satisfaction with the passage in question reveals much about how she sought to make sense of the text. Here Norby appears to be providing an overview of how managers

use information very similar to the description might be presented in a course on this subject. The concepts are treated as abstract entities independent of human experience. They appear to be explicit, straightforward, independent of context, precisely the way they would be presented in a textbook or reproduced on an exam. The fact that Parsons has already been introduced to the concept of a management pyramid is also instructive: familiarity is a crucial factor in understanding. Terms like "informative," "refresher," and "easy to understand" suggest that she views the text as coherent just insofar as it fits the academic model with which she is already acquainted.

Given this approach to the text, it was understandable that Parsons' success in the second part of the assignment had been extremely limited, at least in this first draft. Students had been asked not only to identify features of the text that worked against coherence, but also to speculate about how the author might have intended readers to make sense of them. Parsons had found many examples of incoherence, but she had entirely overlooked the speculative portion of the assignment. In conference, she reported frustration with this section of the project, precisely because it required her to shift perspectives. Having gone to the trouble to point out incoherent passages in the speech, she had had great difficulty reconsidering these passages from the point of view of the author. Given the fact that she had found the text muddled in certain places, it made no sense to her to ask how Norby might have intended those passages to be understood.

When she was asked to try to reconstruct the social setting of the conference at which the speech was delivered, however, this part of the assignment began to seem less unreasonable. As a college junior, she knew enough about information systems to predict the difficulties of explaining how they worked to a nonspecialist. During her summer work experience, she had both given and received explanations of this sort. Suitably prompted, she had no difficulty reconstructing Norby's mental state in addressing the experts. In short, she turned out to have rather extensive tacit knowledge of the social context of computer technology. What she had not known how to do was bring that knowledge to bear in reading a professional text.

Parsons' final draft, written after these issues had been explored extensively in a discussion with the instructor, reflects closer engagement with the text and a better understanding of Norby's purpose. While not entirely relinquishing her earlier criticism, she complicates it with discussions of Norby's rhetorical strategy. Still skeptical of Norby's acknowledged lack of expertise, she grants nevertheless "that the author was trying to convey his incoherence of Management Information Systems through the incoherence of his commentary." Noting several distracting references to topics Norby either postponed or announced he was leaving out of the speech altogether, she suggests

the purpose of such interruptions might have been "to ensure that the reader was giving the article his full attention." Norby's presentation of examples, which seems disjointed, may be "an underlying tactic to have the reader understand how difficult Management Information Systems may be to a user." Having previously complained of the diffuse quality of the essay, she now suggests Norby may be "trying to express how broad a topic Management Information Systems is by incorporating a variety of topics." These observations do not amount to a reversal of her earlier condemnation, but they do indicate a shift in perspective, and they provide clear evidence of the tacit knowledge and intellectual flexibility on which the success of this exercise depended.

In the conclusion to her paper, Parsons summarized what she had learned from the text. This discussion, though brief, is clearer and more definite than in the earlier version of the paper. She connects the planning concept to the management pyramid:

> This [idea of the management pyramid] relates to the original planning concept in that in order to have planning control, a manager must start at the operational level, which would be the bottom of the pyramid and move up to the executive control.

She lists what Norby views as the advantages of management information systems—"automated decision rules, lower costs, and simultaneous availability to all parts of management." She clearly indicates that the text has not only reinforced her knowledge, but also extended it; as an example, she cites Norby's explanation of "teller simulation":

> This is a technique to discover the number of tellers needed during certain business hours. I never realized that Management Information Systems could be used for this.

Explaining how the text has extended her understanding leads to reflection on the limitations of her knowledge:

> I really did not know as much as I thought I did on Management Information Systems. I never realized that it involved planning and controlling by each manager. Also, I did not know that it was expensive. Finally, I did not think it was as complex as the users portrayed it to be.

Given the broader purpose of the assignment, this acknowledgment is highly significant. A rhetorical approach to language is justified precisely insofar as it can be shown to fill some gap left by conventional pedagogy. The contrast in Parsons' level of understanding in the first and second versions of her paper represents just such a gap.

That this gap is an important one is demonstrated by an observation she makes about Norby's conclusion, in which he warns that information systems might grow to unmanageable levels of complexity. For Parsons, this parting shot encapsulates the

rhetorical pattern of the entire speech: "I think that the commentary expresses how complex information systems has (sic) already become." The rhetorical approach to language required by this assignment has enabled her to make sense in a new way, not only of the text, but of the entire professional field of which it serves as an illustration. This interpretive enterprise aptly illustrates the process of education as represented in the constructivist model.

Whether or not students themselves see the usefulness of a rhetorical approach remains an open question. Parson's direct testimony on this subject is relevant, though not necessarily dispositive. A brief reflection she wrote before turning in this final draft of her paper suggests her sense of the worth of this project and its implications for other aspects of her schooling:

> I was forced to read this article very carefully. I was looking for specific areas in which I did not understand what the author was trying to express. In another class, if I did not understand something, I probably would have just skipped over it. Usually, I don't read as well as I did for this paper. I learned a lot more about Management Information Systems though because I read very carefully.

This passage describes the assignment as an exercise in close reading, a somewhat simplistic representation. Nonetheless, it draws a clear contrast between the approach taken here and the student's normal habits of study. A rhetorical view of language had enabled the student to learn something she had not learned in conventional classes; that supplementary learning corresponds closely with the constructivist model that is widely accepted in most educational theory and research. Rhetorical inquiry is clearly one way (though not the only way) to exploit constructivist insights in professional education.

How rhetorical inquiry is to be introduced into professional education is a more difficult question, but the coherence assignment offers limited insights in this area as well. First, the assignment described here has a dialectical structure, designed to force shifts in perspective and to permit ad hoc adjustments to student needs and interests. Professional curricula are often cumulative and hierarchical in structure. Whether these disparate patterns can be successfully coordinated remains an open question. Second, since this study focuses on a single student, the success of the assignment may be partly dependent on the characteristics of that student. Parsons was a junior, and had already taken several courses in her major field of study. She knew enough about the subject to recognize and understand major concepts. She knew her way around the library well enough to find sources that repaid close reading. Having worked in her field during the summer, she had enough tacit knowledge of the professional context to be able to visualize Norby's interaction with systems analysts. Even at junior level, not all students had had that experience. These

characteristics are not necessarily preconditions to undertaking rhetorical inquiry, but they are undoubtedly relevant to its success in this instance.

Results of the Second Project

The second assignment was longer and more complex. Students were asked to undertake original investigations of a person, situation, or event that would serve to test or illustrate a theory in their major field of study. This project made greater demands on the inventiveness and flexibility of the instructor, and depended more heavily on the student's background knowledge and degree of professional acculturation.

For Parsons, the project seemed simple at first, precisely because she had already had an opportunity to work in her profession. The summer before, she had been employed by a company which will be referred to here as General Data Systems. Her father, Jim Parsons, worked as a regional manager at General Data and had helped her get the job; it turned out that he had been given responsibility for implementing a scheme for participative management which will be referred to here as "Peer Leadership." Peer Leadership closely resembled a theory of participative management Parsons had studied in one of her courses. For her second project, she decided to study its implementation. With her father's help, she quickly collected a fairly wide array of information about how the theory of participative management had worked at General Data.

The collection phase of the project, then, proved to be fairly straightforward—much more so, in fact, than turned out to be the case for students without a clear idea of their topic or professional experience to draw on. Once Parsons had assembled her sources, however, difficulties arose. The assignment called for data that tested or illustrated the theory. Parsons had found both theory and data, but neither of the proposed relationships between the two was clearly laid out in the material she had collected. Some documents, for example, did not fall exclusively into either category. The general directives received by her father provided both a general rationale for the new management system, and specific guidelines for its implementation. The rationale clearly amounted to a restatement of the theory of participative management. But should the guidelines also count as part of the theory? If they were data, could they be counted as support for the theory? They indicated that upper-level executives believed the theory was true. Could their confidence be cited as evidence in the theory's favor?

In a conference with the instructor, Parsons articulated her understanding of theory and empirical evidence more fully. It was apparent that she grasped the hypothetical nature of theories and the requirement of empirical verification. She acknowledged that the theory of participative management was a hypothesis, rather than a simple statement of facts or a

record of observed behavior. Because of the popularity of the theory, however, she assumed that empirical support for it was so strong as to leave little room for uncertainty. She had not inquired what this support consisted in. Given the broad coverage of management courses and the number of theories presented in them, independent assessment seemed impracticable. Students were never asked to discuss the empirical support for theories in papers or on exams.

This difficulty was not unique to Parsons. Students from other disciplines had trouble articulating the speculative nature of theory and distinguishing a theory from evidence that was supposed to test or illustrate it. The internal structure of the assignment, in fact, had been designed to anticipate just such a difficulty. At several stages, students were asked to pay special attention to evidence that did not clearly support the theory they were investigating, and especially to evidence that could give rise to conflicting interpretations. It was hoped that focusing on ambiguous data would help them clarify the speculative nature of a theory and develop the linguistic skills needed to articulate limits of confidence and uncertainties in application. The students would demonstrate these skills by explaining why a given piece of evidence was ambiguous and articulating and evaluating several different plausible but conflicting interpretations of it.

This assignment, it should be noted, differed from the first project in its angle of attack on theories of language. In this case, the students were not being introduced to a specific rhetorical concept, as they were in the coherence exercise; instead, they were given a practical problem which required them to engage in an unfamiliar form of discourse. It was expected that being able to discuss and criticize theories, rather than merely to recite them, would foster a deeper and subtler appreciation of theories they learned in professional classes. Having probed the limitations of one theory, discovered the uncertainties in its application, and examined the rhetoric of interpretation, they ought in principle to do the same with others.

This project turned out to be more difficult to manage than the coherence exercise. Students had difficulty selecting an appropriate theory and often lacked access to suitable evidence. The assignment might have fit better in a management class, in which all students shared a common knowledge base and the instructor was better equipped to discuss the ambiguity of theories and point students toward illustrative applications. Yet despite these obstacles, the project proved to be highly enlightening about how students think and write about theories presented in their professional courses, and about the potential advantages of introducing them to the problems of interpreting and applying theories in context.

These insights are particularly vivid in the case of Parsons, the case study subject. As pointed out earlier, the choice of a single student to represent the outcome of an

experimental pedagogy poses obvious problems of generalizability. If characteristics specific to Parsons, not widely represented in other students, account for her performance, then it might be concluded that there is little warrant for broader application of the principles on which the exercise depends. Yet it could also be argued that, to the extent the Parsons' work is successful, management educators might try to reproduce the relevant characteristics among a wider group of students.

As it turns out, the relevant characteristics are already viewed as desirable by educators in the field. First, Parsons had significant professional experience, which gave her access to real-life situations in which management theories are applied. Second, she knew someone in the field—her father—with whom she could talk informally and who could provide help, insight, and guidance. Third, she displayed commitment to the field. She not only believed that the theory of participative management was true, she thought of it as important, and she was eager to show evidence of its success.

These three characteristics—work experience, access to a mentor, and intellectual commitment—are already represented in the goals of a number of reform projects in management education. Thus, the innovations proposed in this study can be seen as supplementing and supporting work that is already in progress. The difficulties encountered by Parsons and other students represent issues that must be dealt with by a wide range of pedagogical reforms. The linguistic focus of this exercise is one way in which these issues can be addressed.

In conference with the instructor, Parsons was able to articulate the concept of participative management more fully and to see in what respect it might be considered tentative and subject to confirmation. She did not yet see, however, that there might be any uncertainty about the details of implementation. It did not occur to her that the distribution of authority within an organization might be ambiguous or that how much authority a given employee possessed might depend on subjective factors and therefore be difficult to measure. Neither formal instruction nor practical experience in a setting in which the theory had been applied had led her to suspect there might be any difficulty of interpretation. Her restatement of the theory, in fact, might have reflected the desire of a lecturer or textbook author to avoid problems of interpretation. It was the goal of the case study exercise to make her confront these problems.

Requiring students to examine evidence introduced the problem of interpretation, but a good deal more work was required before they were able to handle them successfully. In dealing with evidence, Parsons' first instinct was to try to explain away any ambiguity or uncertainty of measurement. This approach is clearly illustrated in her discussion of employee empowerment. The general effect of Peer Leadership, according to the official

account, was that the employees were empowered to make suggestions that improved the performance of the organization. "Empowerment" is not specifically defined in company materials, but appears to refer to a psychological change that employees are supposed to experience when they are consulted, included on committees, and generally treated as serious participants in processes of planning and decision-making. Empowered employees respond enthusiastically, increasing output and offering suggestions to increase efficiency.

The evidence that was supposed to support this claim, however, seemed highly ambiguous. Parsons' first response to this difficulty was to try to refine and elaborate the account of empowerment. Unfortunately, this approach sometimes led to inconsistency. The problems with it can be seen in the following anecdote, which Parsons offers in one of her early drafts as an example of the empowerment that Peer Leadership made possible:

> An equipment-repair technician suggested allowing the technicians to reside in the clean rooms so that they did not have to go through the process of getting all the dust off each time they switched rooms. Also, he thought all the parts should be in the clean rooms so that the technicians did not have to leave to get a part. There were two parts to this man's empowerment. The first is that this suggestion saved time and money for General Data. Originally, his group members were angry with him because they lost their freedom to move about. The second part and the key to the empowerment is the technician asked them one simple question, "What would you do if it was your business?" Then the team members understood why he had done it because it is their business and he was saving money for everyone.

The version of empowerment proposed here is inconsistent with the original formulation. According to the theory, empowerment is a mental state that reflects employees' sense of involvement, which has been strengthened by a management strategy of consultation and shared decision-making. Increased output is supposed to be a consequence of empowerment, rather than its substance. In this passage, however, what was proposed as a consequence is now empowerment itself.

This is an obvious mistake, but one that Parsons had considerable difficulty recognizing. She believed that she had made it sufficiently clear why the evidence supported the theory. Readers were presumably expected to understand that the employee's suggestion was evidence of empowerment, because according to the theory this was the response expected from an employee who felt empowered, and because company policy was designed to create just such an attitude. But even if this line of reasoning had been fully stated, it would have provided only very weak support for the claim that the employee did feel empowered. His willingness to make the suggestion about the clean room could easily have been explained by other factors, such as a desire for a promotion or an improved performance rating. Parsons, however, did not consider either of these criticisms

of her analysis legitimate; they seemed to her to reflect an unreasonably suspicious attitude toward the theory.

A somewhat similar difficulty occurs in the account of the second part of empowerment. The argument is clearer but it is also more clearly inconsistent with the theory. The empowered employee has come to see that in some sense the business belongs to him and his peers, and he is able to make the peers see that too. The problem here is that the theory implies that there is no conflict between the company's interests and those of the employees. In this case, however, the money-saving suggestion appears to be detrimental to the workers' interests. Empowerment of one worker causes the *dis*empowerment of others. Eyo (1992) has noted a similar phenomenon in quality circles, leading to what he calls a "rhetorical vision of victimage" that reflects workers' belief that they are being manipulated to act against their own interests.

Such a conflict of interest is not predicted by the theory of participative management. Yet according to Parsons, the theory can handle this situation. The resentful workers are won over by an assertion that the company's interests are in fact their own interests, and the assertion is offered as evidence of the speaker's empowerment. This claim, however, is quite different from what the theory actually proposes. Participative management may encourage workers to feel that they have a stake in the company's success, but it does not rest on a direct claim that the two sets of interests are identical.

This clean-room example illustrates not only the problems that confronted the student, but the difficulty of the instructional task as well. In conference with the instructor, the student saw that the anecdote did not straightforwardly support the claims that were being made on behalf of participative management, but she was not able to suggest an alternate interpretation, and neither she nor the instructor knew of Eyo's proposal at the time. The difficulty was compounded by her skepticism about the instructor's view of the incident. How could an outsider, who happened also to be unversed in theories of management, criticize an interpretation of a manager who was intimately familiar with all the details of the situation?

The fact that the instructor tried to avoid an authoritative role and declined to offer an alternate interpretation increased her frustration. If her interpretation was inadequate, then it seemed reasonable to expect the instructor to supply a better one. This frustration was not just a reflection of an interpersonal dynamic between student and instructor; it grew out of the structure of the assignment. In developing their case studies, students had been asked to focus attention on evidence that could be interpreted in several different ways. In one of the short intermediate assignments that were designed to contribute to the larger project, they had been asked to articulate several different interpretations of a piece of

evidence, and explain the disparity. The clean-room anecdote was ideally suited for this exercise, but the prospect of writing out two different interpretations confounded Parsons. She simply could not see that it was in any way relevant to management theory that two people could come up with different but valid interpretations of a single situation.

It might be suggested that the problem in this case was simply that, as a prospective manager, Parsons was ill situated to understand the perspective of a rank-and-file employee. Her difficulty with the exercise would then not demonstrate the faults of the window-pane view of language; it could be explained more simply in terms of the social position for which students were being prepared. In this view, an alternate approach to language would not ameliorate the difficulty, since resistance to the point of view of employees would be inherent in the career path students had chosen.

In a limited sense, this objection is valid. In the field of management, as in other professional programs, students are indeed being educated to step into a specific social role, and to form the allegiances that that role requires. To expect them to question those allegiances just as they are in the process of forming them would indeed invite resistance. The problem with this line of argument is that it is not just among employees that different perspectives about management theories are represented. A diversity of views can be found among managers as well. Eyo makes this clear when he points out that the "victimage," though not universal, extends through all ranks of employees; mid-level managers who feel their personal authority threatened by the new system are the most ardent exponents of this rhetorical vision.

Parsons' own evidence supports the truth of this claim, and she seemed no better able to articulate the perspective of managers who resisted participative management than she had in the case of lower-level employees. Her difficulty is illustrated in an anecdote which is supposed to show the change in management style brought about by Peer Leadership:

> One of the biggest changes occurring within General Data is the fact that the company is becoming more relaxed. For example, the General Data Vice President for Programming, a very formal executive, rode a Harley-Davidson into a meeting and up a ramp to the stage. The meeting consisted of a group of 250 managers at a resort in Orlando. At first, everyone thought it was a joke because he had his helmet on. When he removed his helmet and they realized that was this Vice President, he received a standing ovation. Before the idea of Peer Leadership, a person in a top position would never let his employees see him joking around. Peer Leadership has allowed managers to interface with their employees in a friendly supportive way.

This anecdote is recounted without any suggestion of irony, as if it demonstrated the motorcyclist's enthusiasm for the new program, and genuinely represented the "friendly supportive" attitude managers had now adopted toward employees. A very little probing

from the instructor, however, revealed that there might be more to this story, and that Parsons herself recognized that it did not unequivocally support the success of Peer Leadership. By no stretch of the imagination would the riding of motorcycles count as one of the managerial strategies called for by the new program. True, it might have been just an ice-breaker, a prelude to a session of particularly intense consultation and shared decision-making, but Parsons had no evidence that this was the case, and in fact regarded it as highly unlikely. She acknowledged, to the contrary, that as far as Peer Leadership was concerned, the Vice President for Programming was widely known to be one of the chief skeptics in the regional organization, and that many of the 250 managers who stood to applaud him shared his doubts about the new program.

Parsons' willingness to rethink the motorcycle episode stands in striking contrast to her resistance to criticism in the case of the clean-room suggestion. It might be suggested that the greater open-mindedness in this case could be explained by a difference in the rank of employees involved. Since Parsons is being trained for a managerial position, she might find it easier to appreciate the nuances and ambiguities in the behavior of an executive, than in that of lower-level employees whom she was in effect being trained to supervise. It may indeed be true that the motives of subordinates, actual or potential, are more obscure to a manager than the motives of colleagues or supervisors. But in this case, there is another explanation which is simpler and therefore more compelling. The clean-room suggestion better represents the predicted results of participative management; in the case of the motorcycle stunt, the connection is at best speculative. Parsons had greater difficulty criticizing her source material when it more closely fit the theory.

Openness to criticism, however, did not translate into deftness or ingenuity in proposing alternate interpretations. In the final draft of her paper, Parsons made only slight amendments to her account of the motorcycle stunt, noting the skepticism of the Vice President but leaving the impression that the stunt was evidence of a change of heart. Of course it is well known among teachers who require submissions of papers in multiple drafts that students tend to avoid the labor of extensive changes, especially when a key claim has been questioned, thus potentially requiring further changes at other points in an extended argument. An instructor's suggestions, intended to prompt very extensive changes, may elicit only the deletion of an offending passage or the insertion of a single phrase or sentence.

Parsons, however, did not appear to be looking for shortcuts in her preparation of her final draft. Comments about other passages elicited extensive revisions. The problem was that she seemed to regard the task as one of clarification rather than change in interpretation. Whenever an ambiguity was pointed out, it seemed, she responded not by

introducing a qualification of the theory or acknowledging uncertainty about the probative weight of the evidence, but rather reiterating her previous interpretation with greater force and precision.

The diligence with which she approached this task is illustrated in an explanation of a group project entitled "Results, Not Excuses," a phrase which was supposed to express a central theme of the new style of management at General Data. Faced with the instructor's skepticism, both about the characterization of Peer Leadership and her account of why the group project was assigned this title, she produced the following explanation:

> This means that although the following project proved to be a difficult one, it was accomplished and there was no need for excuses. Peer Leadership proves that work can be completed without having to make excuses. A team was set up to verify recovery points at which a system can be restored without error during functional processing. The group that was put together consisted of people with different levels of experience. The project brought them together as a team. The most important part was that each member had to take "ownership" of the project and commit to it. In other words, each member worked on a separate part of the whole project. Without one member, the project would not have worked. This project was completed due to team work and communication. It proved that projects need to be approached using the group perspective. A variety of experiences and willingness to get it done allows [sic] a complex project to be completed.

In some respects, what Parsons has done here is impressive: she has produced a moderately complex account of an organizational form and the task for which it is designed. There are a few minor mistakes—for example, dividing up a task doesn't ensure collective responsibility for its outcome, and the completion of this project doesn't prove that projects in general require a "group perspective." But these mistakes may be regarded as relatively inconsequential, when viewed in light of the effort she has made to explain the plan of the team and how it is supposed to function.

What she has not done, however, is explain the title and how it is related to Peer Leadership. She apparently intends to suggest that heterogeneous task-oriented teams are characteristic of organizational structures that emerge under participative management. But how does this organizational form translate into "Results, Not Excuses"? Given that the traditional hierarchical structure of management is itself designed to emphasize "results" and to eliminate "excuses," applying these terms to a new non-traditional structure implies that in some way the old system did not function according to plan. In this passage, however, there is no indication of how this could be so or how a system dedicated to producing results could generate excuses instead. No argument is presented for the superiority of collective responsibility over individual responsibility; it is simply taken as proven by the fact that company executives chose one form rather than another.

It is easy to imagine a skeptic, at this stage, pointing out that all of these criticisms, both in this passage and in the case of the motorcycle stunt and the clean-room incident, hinge on the details of language: on the meaning of terms or the distinction between presenting evidence for the truth of a theory and presenting examples of how it is applied. It might be claimed that these criticisms are essentially linguistic in nature, and do not bear on the adequacy of the professional education Parsons was receiving. Alternatively, it might be maintained that the points at issue are not primarily linguistic matters at all, but instead involve the degree of confidence with which theories are stated, or the degree of confidence ascribed to them by students. The source of the problem would then lie in the content of textbooks and lectures, rather than in anything students had been taught or not taught about language. Following either line of argument, one might conclude that a rhetorical perspective, though leading to interesting insights, has no important bearing on the professional curriculum, and that the simpler window-pane theory of language will suffice for the task of introducing college undergraduates to theories of management.

The final stage of the project directly addressed the issue of language to professional goals. The students had been instructed to prepare a summary of their project and to solicit criticism of it from someone knowledgeable in the field. Debra Parsons went to Jim Parsons, her father, a regional executive at General Data, who had had a share in the responsibility for implementing participative management. His response demonstrates that understanding and applying management theory entails not just learning and reciting concepts, but also rhetorical sensitivity and skill in argument.

The handout that was given to expert critics provided little guidance about the nature of the response that was expected. In particular, there was no mention of the rhetorical focus of the project. It was anticipated that expert readers could judge for themselves the level of understanding attained by the student and the kind of response that would be most useful. The quality of these responses, as might be expected, varied widely depending on the student's level of engagement and the relevance of their project to the particular interests of the respondent. As in other phases of this study, Jim Parsons' response is not intended to be representative of other expert responses; its relevance lies not in its typicality but rather in its focus on rhetorical issues and its demonstration of their role in professional acculturation.

Jim Parsons' criticisms, handwritten on Debra's typescript, fall into three main categories. First, he corrects a series of small inaccuracies in references to company meetings, executive titles, and names of organizational structures. Next, he makes many changes in wording that add complexity and nuance to Debra's explanation of Peer Leadership and how it functions. Finally, he makes several substantive additions,

emphasizing subjective aspects of the old and new systems of management. The second and third categories are most directly relevant to the rhetorical issues we have been considering.

Jim's proposed changes in wording suggest that Debra conceives of management theory as something more clear-cut and unambiguous than is in fact the case. In a number of passages she appears to have exaggerated the contrast between the old and new systems of management, oversimplifying both the defects of the former and the merits of the latter. Jim generally qualifies Debra's claims and emphasizes the subjective aspect of dissatisfaction with the old system. (Emphasis has been added to identify the word or phrase in Debra's text that Jim proposes to alter.) In the past, Debra Parsons claimed, "people had *no opportunity* to express their opinions." Jim Parsons' correction: "little or no opportunity." Debra explains, "The difference between a leader and a manager is that *the leader has a vision* and people will follow him in the quest for that vision." Jim Parsons' amendment: "the leader can inspire a shared vision." A manager, according to Debra, "controls status quo." Jim adds, "and their own limited new ideas." Debra: under the old system, "*threat* is used in order to gain productivity." Jim: "threats and controls." Debra: "*resistance* develops." Jim: "resistance and passiveness." Debra: the new system helps workers "make decisions and complete tasks *together*." Jim: "to their fullest potential."

Debra's one-sided characterization of the old system and her uncritical stance toward participative management suggest excessive optimism about the ease with which management theories may be confirmed or falsified. If one theory supplants another, she seems to believe that the new one is right and the old one is wrong. This view and Jim's impulse to correct it are more clearly displayed in two additional passages. Debra states: the old system "results in not ordering tasks *correctly*." Jim: "optimally." Debra: "*General Data believes in a theory* called the inverted pyramid." Jim: "Peer Leadership introduced the theory. . ." Jim's distinction between "correct" and "optimal" ordering of tasks and between introducing a theory and believing in the theory suggest the importance of rhetorical distance between managers and the theories they employ.

In addition to these corrections in wording, Jim also suggests a number of more substantive additions to Debra's account. These amendments generally focus on the psychological effects of the old and new systems of management. The theory of participative management, we may recall, had a strong psychological component: productivity improves, not primarily because of administrative efficiency, but rather because workers feel more involved and are "empowered" to make suggestions. Yet this psychological aspect appeared to have eluded Debra: "empowerment" for the clean-room workers comes from recognition that "it is their company" and money-saving suggestions

will benefit themselves. Jim's proposed amendments restore the psychological dimension that had been missing in Debra's account. For example, Debra claims that under the old system, "the brain-power of 90% of the people was ignored." Jim adds: "In addition to the obvious loss of creativity and motivation, overall morale was declining." Debra: in a rigid management style, "*productivity* will decrease." Jim: "productivity, motivation, and morale." Debra: the new concept "develops *high productivity*." Jim: "high productivity, high motivation, and high morale." Jim's additions emphasize the subject nature of management systems. His stance toward the problems at General Data suggest that management systems function as they do not just because of a series of prescribed interactions or ordering of tasks, but in virtue of people's perception of how they are being treated. These perceptions may not be easily reduced to generalizations on which theories are founded, especially if the language of theories is thought of as unambiguous and free from uncertainty.

This implication is further reinforced by Jim's comment on an extended passage in which Debra sums up the differences between the old and new systems of management:

> In general, a management paradigm shows the executives on top and staff employees on the bottom. This management paradigm is based on a set of unwritten rules, which basically state that management is in control. . . . The other type of pyramid is the leadership paradigm, which is the inverted management pyramid. This shows the employees on top and the executives on the bottom. This paradigm is built on trust and support.

To this analysis of the differences between the old and new theories, Jim adds the following comment:

> Note: In the inverted pyramid the executives *have not* abdicated their ultimate accountability. They have simply realized that empowering the employees and supporting them is more productive in the long run. An executive in the Leadership Paradigm takes the position "How can I help you achieve your goals", not "do this or do that NOW!"

This comment suggests that the difference between the old and new systems of management is not as clear-cut as the theory of participative management proposes. Individual responsibility has not been eliminated, just deferred in recognition of the psychological needs of the employees. Executives still lead, but they do so not by direct command, but rather by reference to employees' own goals. This way of characterizing the theory, of course, would not rule out new organizational forms, but it does indicate that changes envisioned by the theory come about not through new administrative forms but rather through a change in managers' rhetorical stance.

Jim Parsons' comments, in short, generally confirm that understanding what a theory is and how it is applied depends on a certain kind of linguistic ability. A student who seeks a realistic view of management theory must be able to articulate the ambiguities in the theory and to ask questions about the evidence in which it is grounded. A full exploration of the scope of the relevant linguistic competencies is beyond the scope of this study; for the present it will suffice to note that they require rhetorical sensitivity, and that they are therefore incompatible with the window-pane view of language and the conception of scientific theory with which this view is associated.

How these results bear on the management curriculum and the curriculum of professional education in general is a more difficult question to answer. Parsons' progress was more limited here than in the case of the first project. Her work poses the linguistic problems of professional education very clearly and distinctly, but how the problems are to be solved remains an open question. The case-study assignment involves a number of logistical difficulties; its success depends on capacities and dispositions not found in all students, and on intellectual resources on the part of the instructor that may take a long time to develop. Furthermore, it is an open question whether this project's emphasis on realism, contextual understanding, and linguistic sensitivity coincide with the future course of management education. Some curriculum reforms already point that way, but others, such as the new emphasis on technology and mathematical approaches to control and decision-making, point in a quite different direction.

In the final analysis, what curricular innovations are possible in management education will depend on what sort of enterprise management is taken to be. If theories of participative management maintain their current ascendancy, it is reasonable to expect an academic climate hospitable to a rhetorical understanding of language. That this represents the future of management thought, however, is by no means a foregone conclusion.

Conclusion

The view of language as a transparent medium, through which ideas may pass unimpeded from one person to others, is deeply embedded in the scientific conception of professional knowledge. This view of language also encapsulates a view of education as a form of transmission, a view that is incompatible with the constructivist principles that undergird a number of current educational reforms. The window-pane view of language, as we have referred to it, strongly shapes students' educational experience, leading them to unwarranted confidence in the theories they are taught and to misunderstanding of the extent of ambiguity and uncertainty in the application of theories.

These misconceptions can be confronted head on by introducing explicitly rhetorical perspectives on language in professional education. This study offers examples of two exercises that employ these perspectives. Results of these exercises generally support the claim that linguistic assumptions influence students' understanding of theories and have a significant impact on their professional acculturation. The study leaves open the question of whether or not assignments like these can be incorporated into the present structure of professional curricula. The adaptability of these activities depends on the abilities and dispositions of the students, the resources available to teachers, the structure of the curriculum, and (most important) prevailing ideas about the nature of language and professional knowledge.

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