The recent addition of a writing performance assessment to the Graduate Management Admission Test (GMAT) means that many students now enter business school with a writing assessment score and perhaps even a heightened awareness that writing matters in some way to the successful completion of an MBA degree. This situation presents teachers of business and managerial writing with a new opportunity and pressure to provide students with writing tools that are directly relevant to their business studies and professional careers. The Analysis of Argument Measure and the Persuasive Adaptiveness Measure introduced here are assessment tools that may be used to explain holistic assessment scores (which students receive on the GMAT writing component) and may assist students in understanding and evaluating their writing, both in school and in the workplace. Designed to evaluate managerial documents that are persuasive and directorial in nature, these measures were developed through a series of pilots and used to assess a selected sample of managerial memorandums that were also scored holistically. Correlating the holistic and analytic scores revealed a positive association, and interrater reliability achieved good agreement beyond chance. These results suggest that the measures may be reliably employed to assess characteristics valued in managerial writing. Examples of how these analytic measures may be employed for teaching and research are also described.

Analytic Measures for Evaluating Managerial Writing

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Manager to supervisor: What do you mean the proposal should be more persuasive? Don't the facts speak for themselves?

Student to MBA writing consultant: How can you say I've got to take a managerial writing course based on this assessment score? I've always done well in English. Show me what's so seriously wrong here.

The responses given to these queries are consequential for all the participants. Those administering judgment must demonstrate that they know whereof they speak or risk losing credibility; those receiv-

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ing the judgment face personal and professional costs—the student may be required to add a writing course to an already full two-year MBA program; and the manager faces the prospect of committing additional energy to a project that will rob time from other pressing responsibilities. How should these conversations proceed?

Traditionally, writing has been evaluated for grammatical and syntactical correctness with multiple-choice or objective tests of standard English serving as an important means for determining writing ability (e.g., Test of Standard Written English). However, research suggests that a writer's knowledge of standard English may matter less than once thought. In 1974, Diederich discovered that editors, lawyers, and business executives most appreciated the richness, soundness, clarity, development, and relevance of the *ideas* expressed. More recently, research on writing in business contexts reveals that the most important expectation for managerial writers is *communicative competence* rather than mastery of linguistic form (Brown and Herndl; Rogers; Suchan and Dulek; Janopoulos also made this observation in relationship to nonnative speakers). As Williamson expressed it, "*Communication* is fairly robust with respect to violations" (36). Indeed, it is not error-free writing but rather the effectiveness of the persuasive content that is at issue in the manager's question at the beginning of this article.

Holistic evaluation emerged in the 1970s as a means for examining the effectiveness of texts as whole discourse. Rather than evaluating writing based on what White characterized as the ability to produce correct editing answers (*Teaching*), holistic evaluation assigns a single score to a text based on specified criteria that may range from audience focus to language control (Appendix E). Today, holistic evaluation is employed for writing assessments directly associated with management education; namely, the MBA writing assessments given at business schools since the 1980s (e.g., New York University Stern School of Business; University of Michigan School of Business Administration) and the Graduate Management Admission Test (GMAT) writing component introduced in the fall of 1994. However, despite its wide and efficient use, even in business education, holistic evaluation is admittedly limited (Camp; White, "Holistic Scoring";

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Williamson). For one thing, the global scores derived via holistic evaluation do not identify features that privilege one piece of writing over another. And although we know from research that raters using holistic evaluation regard *content* and secondly *organization* as most important, we do not know what content and organizational characteristics impact raters' judgments about writing quality (Breland and Jones; Huot, "Influence"; Pula and Huot). As suggested in the interchange between the student and MBA writing consultant, a single holistic score received on a GMAT writing performance assessment or MBA writing assessment tells students nothing about specific strengths and weaknesses in their writing. Holistic scores do not identify or characterize features that contribute to the quality of a piece of writing. Consequently, as White (*Teaching*) concluded, we can *test* writing holistically, but we cannot *teach* writing holistically.

The need for assessment tools also extends to research. As Hoetker observed, we do not have evaluative instruments for quantifying ratings of document quality that are fine-grained enough for statistical research, and holistic assessment, although useful for evaluating general writing ability, is inadequate because it yields only a single nondescriptive score. Experimental and ethnographic studies in which the assessment of document quality plays a central role require more data than holistic scoring can provide. For example, for an experimental study comparing the quality of documents produced by groups writing both with and without computers, we needed assessment tools that would provide a variety of scores on a number of document features so that we could associate those features with our observations of group decision making during the writing process (see Horton, Rogers, McCormick, and Austin). For this kind of research, holistic scoring alone was inadequate.

To address the need for assessment tools for teaching and research, this study presents two analytic measures for evaluating managerial writing: The Analysis of Argument Measure and the Persuasive Adaptiveness Measure. As is characteristic of analytic measures (Purves, Gorman, and Takala), these new instruments provide a means for identifying and scoring select features of texts: The Analysis of Argument Measure is a tool for scoring the elements of an argument; the Persuasive Adaptiveness Measure is an adaptiveness scale for scoring the extent to which content addresses reader concerns. Inspired by measures employed by Connor to evaluate the English essays of international students, both of the measures presented here were developed to assess managerial documents of a deliberately persuasive or directorial nature, based on the belief that managers frequently write documents to produce cooperation, approval, compliance, and sales (Driskill; Northey; Paradis, Dobrin, and Miller). Overall, the intent was to originate what Connor characterized as "discourse-structuring" measures (5) that can be used to explain holistic scores and to complement traditional observations regarding spelling, punctuation, and grammar.

The descriptions of the Analysis of Argument Measure and the Persuasive Adaptiveness Measure begin with a review of the method by which each was developed. Subsequently, each measure is explained with reference to the theoretical construct upon which it is based. Also provided are training exercises using each of the measures. Statistical analyses follow, including findings from the application of the measures to a selected sample of documents, which had also been scored holistically. Throughout the discussion, excerpts from the sample documents serve as illustrative material. Although the discussion centers around the measures as they apply to management communication teaching and research, it is believed that the measures may be employed in other fields as well.

METHODOLOGY

Developing an analytic measure involves several steps: (a) determining desirable characteristics to be evaluated; (b) devising a scoring scale with low, middle, and high rankings for each characteristic; (c) perfecting the scoring scale via pilots; and (d) testing the measure (Cooper and Odell; Perkins; White, *Teaching*). Characteristics and scoring scales for the Analysis of Argument Measure and the Persuasive Adaptiveness Measure are derived from Connor's work on evaluation and from Delia, Kline, and Burleson's research on persuasive adaptiveness.

Pilots to develop the Analysis of Argument Measure and the Persuasive Adaptiveness Measure involved scoring a variety of persuasive documents written by managers and MBA students in response to several management communication cases from our Michigan School of Business repertoire. Senior writing consultants at the University of Michigan School of Business Administration served as raters (see author's note). The pilots followed the basic procedure outlined by Perkins: Raters gathered in a room, reviewed the measure to be employed, and then individually used that measure to evaluate 5 to 15 documents. Subsequently, raters compared scores, discussed the workability of the measure, and refined the scoring levels and corresponding descriptions. We repeated this process until the raters were satisfied with the measure and could apply it with at least 95% agreement.

Two of the three pilots were completed during the 1989-1990 school year. The following year, Michigan School of Business writing consultants used the measures for consulting sessions with students. Discussions about the usefulness of the measures for these consultations prompted additional revisions. A third pilot, in the summer of 1991, resulted in the analytic measures presented here.

To test the validity of the measures, we used them to evaluate a selected sample of persuasive memorandums written in response to the Crown Regent Case (Appendix A), one of the cases used for the MBA writing assessment at Michigan School of Business School. Two hundred seventy entering MBA students took this assessment. Their assessment memorandums were scored holistically and filed according to scoring level. To compile the sample for this study, we pulled every fifth memorandum and removed identifying names and holistic scores. These documents constituted a sample of 54 memorandums with an appropriate number of the documents at each holistic scoring level. Subsequently, two raters independently scored each memorandum. If raters' scores differed, a third rater independently scored the memorandum (see Smith). If two matching scores could not be obtained via the blind review of a third rater, then additional raters scored the document and discussions were employed as a means to reach a consensus. Data from this document evaluation procedure allowed correlations to be drawn between the holistic and analytic scores, thereby testing the adequacy of the analytic measures as predictors of holistic scores and vice versa.

THE ANALYSIS OF ARGUMENT MEASURE

The renowned rhetorician Stephen E. Toulmin is credited with dissecting "the argument" in his definitive 1958 book *The Uses of Argument*. According to Toulmin, arguments consist of three irreducible attributes: claims, data, and warrants. Claims, Toulmin explained, are conclusions whose merits one is seeking to establish, data are the facts appealed to as a foundation for a claim, and warrants are connectors that justify or register the legitimacy of the step from the data to the claim.

In 1988, Connor employed Toulmin's elements to construct a scale for scoring the claims, data, and warrants in student essays. According to Connor's scale, an essay lacking a specific topic statement and consistent viewpoint receives a low claim score of 1; whereas an essay with a specific topic statement, several well-developed supporting statements, and possessing a consistent point of view receives a high claim score of 3. Connor scored data and warrants similarly: An essay containing no or very little data receives a low data score of 1; whereas an essay containing well-developed and varied data receives a high score of 3.

The Analysis of Argument Measure presented here works somewhat differently, largely because it was designed for evaluating persuasive managerial documents, that is, documents intended to promote or defend managerial conclusions or recommendations regarding an idea, object, or action (e.g., a proposal for a new product marketing strategy, a letter presenting reasons why a loan has been denied, a memorandum encouraging sales representatives to promote a particular product, or a press release defending company procedures during a crisis). Using the Analysis of Argument Measure, raters assign scores ranging from a low of 1 to a high of 4 on each of the following: claims in the form of conclusions or recommendations, data supporting those conclusions or recommendations, and warrants or explanations of the connection between the claims and the data. A document lacking conclusions or recommendations and with no consistent point of view receives a low claim score of 1; a document with clear recommendations or conclusions that are interrelated and highly relevant receives a high score of 4. Scoring for data and warrants works in kind, as seen in Figure 1.

When introducing the Analysis of Argument Measure, explaining how claims, data, and warrants may appear in management texts is sometimes helpful, particularly to those without writing expertise. During the pilots of the Analysis of Argument Measure, we found that claims frequently appeared as propositional or declarative statements, as in the following samples from Crown Regent memorandums:

> Our occupancy rate is worse than previously determined.
>
> Our analysis of our situation has led us to the conclusion that we are losing market share.

Directions: To administer the Analysis of Argument Measure, an evaluator must identify the claims, data, and data in the document. These elements appear in various arrangements—sometimes warrants come before claims, data before warrants, and so on. Not every document includes all three. Some evaluators find it useful to identify the claims first, then to locate the data supporting those claims, and finally to look for the warrants. Sometimes evaluators also find that labeling the claims, data, and warrants (C, D, W) when reviewing a document facilitates final scoring. Ultimately, the evaluator's task is to find the scoring-level description for claim, for data, and for warrant that is most representative of how each is employed in the document under review.

Claim (C): Conclusions or recommendations the writer wants believed, followed, or adopted. Claims may also take the form of assertions or propositions.

C1: Conclusions/recommendations not stated.
No consistent point of view.

C2: Conclusions/recommendations clearly stated but general rather than concrete.
Conclusions/recommendations may be difficult to actually apply. What they mean may not be absolutely clear.
Conclusions/recommendations may not be relevant or may not relate to the key issues.
May be multiple unrelated conclusions/recommendations.
No consistent point of view.

C3: Conclusions/recommendations stated and somewhat relevant. They address some of the key issues.
Conclusions/recommendations are somewhat specific and useful.
Some relationship between conclusions/recommendations.
Document somewhat focused around the conclusions/recommendations.
Conclusions/recommendations begin to have organizational force in the document.
Somewhat consistent point of view.

C4: Conclusions/recommendations are specific, highly relevant, and useful.
Conclusions/recommendations address key issues.
Conclusions/recommendations are related and compatible.
Document focused around the conclusions/recommendations.
Conclusions/recommendations have organizational force in the document.
Consistent point of view.

Data (D): Evidence for the claim in the form of facts, statistics, examples, quotations or opinions of experts, comparisons, and so on. Evidence is not a procedure but rather is justification or support for conclusions/recommendations.

D1: Data is not used.
No facts, statistics, examples, quotations, comparisons, or data of other kinds.

D2: Data used minimally.
Amount and/or quality of data insufficient to support conclusions/recommendations.

Data may not directly relate to major recommendations/conclusions.
Data may be general or "everyone knows" type.

D3: Data used to some extent.

Amount and/or quality of data somewhat sufficient to support some of the conclusions/ recommendations.
Data generally related to major conclusions/recommendations.
Some variety of data types.

D4: Data used extensively.

Specific, well-developed data to support every conclusion/recommendation.
Data explicitly relates to each major conclusion/recommendation.
Variety of data types.

Warrant (W): Explanation of the relationship/connection between claim and data; bridge from the data to the claim (rather than new information). Answers the question: How do the data support the claim? Warrants indicate explicitly or implicitly that the data supports the claim "because of" or "since" or "given that" such explanation is the case.

W1: Logical gaps and warrants not used.
No attempt to relate data to conclusions/recommendations.
Relationship between data and conclusions/recommendations is not clear.

W2: Warrants minimally used.
No deliberate attempt to relate data to conclusions/recommendations.
Connection between conclusions/recommendations and data is more intuitive than obvious.
May have to hunt for warrants.
May include logical fallacies.
Warrants not always used when needed.
Warrants included, but because of a lack of data, they do not function as connectors.
Arguments are not complete claim-data-warrant units.

W3: Warrants used to some extent.
Somewhat deliberate attempt to relate data to conclusions/recommendations.
Specific connection between the data and conclusions/recommendations not always clear.
May include one claim-data-warrant unit, which demonstrates some deliberate argumentation.

W4: Warrants used when needed.
Relationship between data and conclusions/recommendations consistently clear and obvious.
Deliberate connecting of data and conclusions/recommendations.
Individual arguments are claim-data-warrant units.

Figure 1. Analysis of Argument Measure for Managerial Writing

> There is a communication problem between department heads and their staffs.
>
> We should become more of a customer-focused hotel.
>
> I recommend that we immediately begin a staff education program.

Implied claims occurred as explanations or plans such as: "We will establish a nationwide toll-free hotline to receive customer feedback and complaints.... The hotline will be staffed by every employee, on a rotating basis" (Appendix D). In this excerpt, the writer is clearly recommending, or claiming, that the hotel establish a nationwide hotline to be operated by the staff.

We found data (e.g., facts obtained from surveys or interviews, statistics, examples, quotations, and comparisons) inherently obvious. At the same time, writers sometimes also accented data via introductions, as in these phrases from Crown Regent memorandums:

> The results of the questionnaire...
>
> Earlier this month, my department conducted a lengthy survey of customer satisfaction...
>
> I reviewed all the guest complaints and found that...
>
> After analyzing our current occupancy position, I discussed our situation with...

In contrast to claims and data, warrants proved more difficult to find, in part because they are not always necessary. Toulmin characterized warrants as "general, hypothetical statements, which can act as bridges, and authorize the sort of step to which our particular argument commits us" (98). Therefore, when the connection between the claim and the data is apparent, a warrant is not needed. As Toulmin explained it, "The warrant is, in a sense, *incidental* and explanatory, its task being simply to register explicitly the legitimacy of the step involved" (100). Toulmin suggested that warrants service or connect claims and data as needed; therefore, warrants may be completely unnecessary or intentionally obscured so as not to detract from the claims and data. (Locker provides a useful checklist for determining when warrants are desirable in chapter 11 of *Business and Administrative Communication*.)

When warrants are employed, they appear in a variety of forms. Toulmin provided the following example: " 'Data such as D entitle one to draw conclusions, or make claims, such as C,' or 'alternatively Given data D, one may take it that C' " (98). Finding Toulmin's example rather esoteric, the writing consultants involved in the first pilot for this study decided to mark the warrants in the documents they were evaluating. When their marked documents were compared, we discovered they had uniformly regarded the following textual features as warrants: (a) transitional phrases linking claims and data; (b) passages in which either "because of" or "since" appeared or was implied; (c) infinitives suggesting the purpose of the claims or serving to rationalize, justify, or explain the claims; and (d) explanations justifying or solidifying the claims.

Training Exercise Using the Analysis of Argument Measure

When participants in our MBA courses and Executive Communication Program score their documents using the Analysis of Argument Measure, they frequently discover unfocused paragraphs that are packed with claims but are entirely data free. The typical MBA job application letter is an apt example. Collective wisdom from business communication textbooks suggests that job application letters are written with one major objective in mind: to persuade the reader to offer the writer a position (see Locker; Murphy and Hildebrandt). Given this persuasive goal, we would expect such letters to include claims (conclusions) and data asserting particular qualities or competencies that qualify the writer for the available position, as suggested in Figure 2.

However, student success in following this outline varies dramatically, as seen in sample paragraphs A, B, and C from actual letters (Figure 3). Under the scrutiny of the Analysis of Argument Measure, paragraphs A and B receive low claim and data scores of one or two, as they contain unfocused claims and little data. Paragraphs A and B contain few or no names, dates, and numbers that bring authority to the text and credibility to the writer. By contrast, paragraph C contains interrelated claims and substantial data, scoring high in all areas on the Analysis of Argument scale.

"The simplicity, completeness, and heuristic power of Toulmin logic," wrote Locker and Keene, "make it especially valuable for courses in business and technical writing" (104). In our experience, Locker and Keene's observation is relevant to the Analysis of Argument Measure, particularly because the measure provides users with a specific scoring tool for Toulmin's major components, a tool that facilitates discussions about persuasive document content. In the case of job application letters, the Analysis of Argument Measure illus-

First Paragraph
Reason for the letter: "I would like a job interview with you."
Identification with reader:
"We met at. . . ."
"Your name was given to me by . . ."
"Your job ad appeared in . . ."
Personal introduction: "I am a second-year MBA student at X majoring in X ."

Second Paragraph
Claim # 1: "I have a thorough knowledge of accounting procedures for . . ."
Data: "I managed a $X budget for company X . . ."
Data/warrant: "I developed a cost-savings program which saved $ . . ."
Warrant: "This experience is directly related to the job requirements at X."

Third Paragraph
Data: "I was promoted to X . . ."
Data: "I received the X opportunity to direct the . . ."
Warrant: "These responsibilities, I believe, resulted from . . ."
Claim #2: ". . . my ability to manage teams . . ."

Fourth Paragraph
Specific request: "Please include me in your interviewing schedule."
Action writer will take: "I will call you next week to discuss this possibility."

Figure 2. Possible Content Outline for a Job Application Letter

trates the need for data that may ultimately recommend one job candidate over another, for in the data, one discovers the unique experiences and personal differences that distinguish an applicant. Applying the Analysis of Argument Measure to persuasive documents of this kind reveals the presence or absence of data and checks the adequacy of all the basic components required.

THE PERSUASIVE ADAPTIVENESS MEASURE

The Persuasive Adaptiveness Measure is a tool for evaluating the extent to which a document addresses key reader concerns. Writers are routinely instructed to compose documents that answer two basic reader questions: Why are you sending me this message? and What does this message have to do with me? (Connor). Managerial writers, who use documents as a means to get work done, often want their readers to ask a third question: What must I do in response to this message? In fact, persuading readers to act as directed may be the manager's primary motivation for writing.

Paragraph A

Please be kind enough to consider me for a position in your firm. My strengths are: a depth of cultural background, an ability to lead projects (or be a team member), and a facility in conferencing. Having considerable maturity and a good knowledge of New York, I am comfortable entertaining groups of visiting clients. My diverse background helps me develop working relationships with a wide variety of people on many levels.

Claims	*Data to Support Claims*
I have a deep cultural background.	None
I have the ability to lead projects.	None
I have the ability to work in a team.	None
I can facilitate conferencing.	None
I am mature.	None
I know my way around New York.	None
I am comfortable entertaining groups.	None
I have the ability to develop good working relationships with all kinds of people.	None

Paragraph B

Dow Corning's leadership in the silicone industry, recent sales achievement, continued emphasis on growth, and marketing focus are reasons why I would like to work for the company. As a second-year MBA student at the University of Michigan School of Business, I believe that my qualifications for a summer position with Dow Corning include a good base of business and marketing knowledge, as well as analytical and interpersonal skills, which will enable me to work effectively in a team-oriented environment.

Claims	*Data to Support Claims*
I have a good base of business knowledge.	Completed one year of MBA studies
I have a good marketing knowledge.	Completed one year of MBA studies
I have analytical skills.	Completed one year of MBA studies
I have interpersonal skills.	None
I can work well in a team-oriented environment.	Completed one year of MBA studies

Paragraph C

I am currently a second-year MBA student at the University of Michigan School of Business. Before returning to school I worked for the innovative retailer R. H. Macy. During my two years at Macy's I managed a $1.6 million domestics (sheets, towels, blankets, pillows) business. I was subsequently promoted to the Assistant Buyer for Macy's $20 million bed linens business. Both positions involved a great deal of responsibility, including a sense of urgency and an ability to prioritize. These are important attributes needed to effectively participate in brand management at your company.

Claims	*Data to Support Claims*
I can handle a lot of responsibility.	Manager for two years at Macy's
I can handle urgent tasks.	Managed Macy's $1.6 million domestics
I can prioritize.	Promoted to Assistant Buyer for Macy's $20 million linen business

Figure 3. Sample Second Paragraphs from Job Application Letters

Recognizing the merits of considering the receiver's perspective, Clark and Delia originated a hierarchical ranking system to score what they characterized as the degree of social perspective taking in *oral* messages. Delia, Kline, and Burleson expanded this prototypic ranking system into a hierarchy with a low score of 0, for messages with "no discernible recognition of the target's perspective," to a high score of 8 for messages with "explicit recognition and adaptation to the target's perspective" (249). Subsequent empirical studies (e.g., Shepherd and O'Keefe) confirmed the validity of the Delia, Kline, and Burleson instrument by demonstrating a relationship between messages receiving high scores on the social perspective-taking scale and messages that were effective.

Delia, Kline, and Burleson devised their instrument to score the extent of adaptation to the listener in oral, interpersonal interchanges; however, Connor later illustrated the applicability of their instrument for written messages by successfully using it to score student essays. Connor's work suggested the potential of the Delia, Kline, and Burleson instrument for evaluating managerial documents.

The Persuasive Adaptiveness Measure presented here is distinct from the Delia, Kline, and Burleson instrument in several significant ways. For one thing, our piloting process allowed us to collapse the original scale consisting of three levels and nine scores ranging from a low of 0 to a high of 8 (Level I: 0-2; Level II: 3-5; Level III: 6-8). By contrast, the Persuasive Adaptiveness Measure is a six-score hierarchical scale with two (rather than three) major levels as shown in Figure 4.

To begin, Delia, Kline, and Burleson's "Level II: *Implicit* Recognition of and Adaptation to the Target's Perspective" (248) was removed. Raters found this level inappropriate given our intent to create a measure for scoring managerial documents in which deliberate, or explicit, directives are desirable. The zero and five scoring categories used by Delia, Kline, and Burleson were also eliminated during the course of the pilots. None of the documents evaluated for the initial pilots received a zero score, and raters found the zero score confusing because the original scale consists of nine possible scores; yet the highest possible score is only 8. (Perhaps the zero scoring category was appropriate for Delia, Kline, and Burleson because their intent was to examine the development of persuasive communication strategies, used by children as well as adults.) For our purposes, the zero score proved unnecessary.

Directions: To apply the Persuasive Adaptiveness Measure, read the document with the scoring scale in mind. Look for expressions of need, desirability, and usefulness. You might write *need* or other key words in the margin of the document. Finally, assign the document a score on the scale from one to six.

Level I: Not reader focused. No discernible adaptation of writer conclusion/recommendation to reader's perspective.

1. Writer's conclusion/recommendation not apparent or deliberately stated.
2. Writer's conclusion/recommendation stated but not explained.
3. Writer's conclusion/recommendation stated with some elaboration.

Level II: Reader focused to some extent. Adaptation of writer conclusion/recommendation to reader's perspective.

4. Writer *suggests* the necessity, desirability, or usefulness of the conclusion/recommendation for the reader.

5. Writer *focuses* on the necessity, desirability or usefulness of the conclusion/recommendation. This may include one or some combination of the following:
   — some dealing with reader objections/concerns regarding the conclusion/recommendation.
   — some suggestions for implementing the conclusion/recommendation.
   — some effort to demonstrate how the reader benefits by accepting the conclusion/recommendation.

6. Writer takes the reader's perspective in articulating the necessity, desirability, or usefulness of the conclusion/recommendation. This may include one or some combination of the following:
   — dealing with reader objections/concerns regarding the conclusion/recommendation.
   — explaining how to implement the conclusion/recommendation.
   — demonstrating how the reader benefits by accepting the conclusion/recommendation.

Figure 4. Persuasive Adaptiveness Measure for Managerial Writing

Findings from previous communication research indicated the appropriateness of removing Delia, Kline, and Burleson's scoring category five, which was intended to assess the extent to which the message deals with anticipated receiver counterarguments. When empirically testing the Delia, Kline, and Burleson scoring scheme, Shepherd and O'Keefe found no correlation between effective documents and documents containing counterarguments. They accounted for this result by suggesting that counterarguing may be "intrinsically face-threatening" to the receiver of a message because it denies the legitimacy of the receiver's objections (148-49), a conclusion recalling

TABLE 1
Number of High, Medium, and Low Quality Scores Given to Each Memorandum

Memorandum Identification Number	*33*	*35*	*52*
High quality	12	1	5
Medium quality	5	3	10
Low quality	1	14	3

Brown and Levinson's work on politeness, which suggests that requests are intrinsically face-threatening acts involving some imposition on the receiver. Expanding upon this notion, Shepherd and O'Keefe concluded that "counterarguing . . . adds insult to imposition, since in counterarguing a message producer denies the legitimacy of the objections the target may have and does so preemptively" (149). The Shepherd and O'Keefe analysis and the fact that this counterargument scoring category did not add value or clarity to the assessment of documents we were evaluating prompted us to drop it.

Training Exercise Using the Persuasive Adaptiveness Measure

The Persuasive Adaptiveness Measure works well for training exercises involving comparative analysis. For example, 18 managers in our March 1992 Executive Communication Program were asked to evaluate three of the Crown Regent memorandums written in response to the Crown Regent Case (see Appendixes A, B, C, and D). These memorandums had received a range of high, middle, and low holistic and adaptiveness scores when they were previously evaluated for this research (memorandum #33: holistic score of 4, adaptiveness score of 4; memorandum #35: holistic score of 1, adaptiveness score of 3; and memorandum #52: holistic score of 3, adaptiveness score of 6). Unaware of these scores, the managers were asked to rank order the Crown Regent memorandums in terms of overall quality. Twelve managers selected memorandum #33 as high in overall quality, 14 ranked memorandum #35 low, and memorandum #52 received mixed reviews with just over half of the managers ranking it medium quality, as shown in Table 1.

Next the managers learned the Persuasive Adaptiveness Measure, which they practiced using by scoring a diverse set of persua-

TABLE 2
Number of High, Medium, and Low Adaptiveness Scores Given to Each Memorandum

Memorandum Identification Number	*33*	*35*	*52*
High adaptiveness score	8	1	9
Medium adaptiveness score	9	1	8
Low adaptiveness score	0	16	2

TABLE 3
Comparison of Managers' Quality Choices and Adaptiveness Scores

Memorandum Identification Number	*33*	*35*	*52*
High quality	12	1	5
High adaptiveness score	8	1	9
Medium quality	5	3	10
Medium adaptiveness score	9	1	8
Low quality	1	14	3
Low adaptiveness score	0	16	2

sive memorandums, letters, and short proposals. When it was apparent that the managers felt comfortable applying the measure, they were asked to score the Crown Regent memorandums. As shown in Table 2, the managers split their votes for highest adaptiveness between memorandum #33 and memorandum #52. Discussion revealed that the managers thought neither document was entirely satisfactory from the readers' point of view, but both memorandums did contain some useful bits of information. All but two of the managers awarded low adaptiveness scores to memorandum #35.

Finally, the managers compared their adaptiveness scores with their choices for overall quality, as shown in Table 3. Almost all the managers gave memorandum #35 low quality and low adaptiveness scores; whereas managers were inclined to select memorandums #33 and #52 as high on quality and adaptiveness. Interestingly, more than half of the managers selected memorandum #33 as their first choice on overall quality, yet less than half thought this memorandum was the highest on adaptiveness. This result prompted a lively discussion concerning the nature of functional writing and dramatically illustrated some of the complexities involved in crafting effective documents. Questions raised during this discussion included the following:

1. Can a document be well written and yet fail to provide the kind of information that the reader needs or fail to persuade the reader?
2. Can a document be poorly written in some respects and yet provide the reader with the needed information or prompt the reader to take the appropriate actions?
3. What is the relative importance of document quality and reader adaptation?
4. To what extent are overall document quality and reader adaptation related?

Comparing document quality and adaptiveness scores in this fashion can add spontaneity to the training sessions, particularly because no one (not even the training leader) can predict the outcome. Perhaps the documents chosen as best on quality will also be chosen as the best on adaptiveness; perhaps not.

STATISTICAL ANALYSES OF THE ANALYTIC MEASURES

Data from the analysis of the sample Crown Regent documents evaluated for this study suggest that both the Analysis of Argument Measure and the Persuasive Adaptiveness Measure are reliable and valid indicators of managerial document quality. As described in the methodology section, two raters used the analytic measures to independently score each document in the selected sample for this study, and additional raters provided blind reviews as needed. In every case, interrater reliability using Cohen's kappa resulted in "good" agreement beyond chance, as shown in Table 4. In *Statistical Methods for Rates and Proportions*, Fleiss specifies the use of Cohen's kappa for interrater reliability as follows:

> For most purposes, values greater than .75 or so may be taken to represent excellent agreement beyond chance, values below .40 or so may be taken to represent poor agreement beyond chance, and values between .40 and .75 may be taken to represent fair to good agreement beyond chance. (218)

As shown in Table 4, in applying the Analysis of Argument Measure, raters achieved an interrater reliability of .736 on claims, .656 on data, and .672 on warrants; in applying the Persuasive Adaptiveness Meas-

TABLE 4
Interrater Reliability Using Cohen's Kappa

	Value	*Asymptotic Standard Error*	t *Value*	p *Value*
Adpt R1 and Adpt R2	.806	.069	11.681	0
Clm R1 and Clm R2	.736	.086	8.558	0
Data R1 and Data R2	.656	.086	7.628	0
War R1 and War R2	.672	.086	7.814	0

NOTE: Adpt R1 = Adaptiveness Score Reader 1, Clm R1 = Claim Score Reader 1, Data R1 = Data Score Reader 1, War R1 = Warrant Score Reader 1.

ure, interrater reliability was .806, and there was only one case when the difference in score exceeded one scoring level.

Correlations between the holistic and analytic measures were determined using Stuart's tau-C, which is designed to calculate the degree of concordance as opposed to discordance, or, in this case, the degree of positive association between the holistic and analytic scores (Liebetrau). Stuart's tau-C was most appropriate for this study for several reasons: (a) the data are categorical rather than continuous, (b) the scoring scales are ordinal and impressionistic rather than exact, and (c) the holistic and analytic measures do not possess equal scoring levels. (Kendal's tau-B and regression analyses are sometimes used for studies of this kind, and when these instruments were applied to the data for this study the associations between holistic and analytic scores were stronger than the associations resulting from the application of Stuart's tau-C. However, it was determined that Kendal tau-B and regression analyses were inappropriate for this analysis because the holistic and analytic measures at issue have differing scoring levels and are categorical rather than continuous.)

As displayed in Table 5, Stuart's tau-C revealed a positive association between the holistic and analytic scores for claim, warrant, and adaptiveness but not for data, which exceeded the p value of .05, the typical cut-off point for analyses of this nature. The tau-C on data indicates that when raters scored Crown Regent memorandums using holistic evaluation, they awarded high holistic scores to documents that did not contain strong data as it is articulated in the Analysis of Argument Measure. One explanation for this finding may reside in the fact that the Crown Regent Case includes little data. To compose data-rich responses, writers had to fabricate data. Aware of this fact, our raters were not inclined to award low holistic scores simply for lack of data. Prompted in part by this finding, we now

TABLE 5
Correlations of Holistic and Analytic Scores Using Stuart's tau-C

	Stuart Tau-C Value	*Asymptotic Standard Error*	t *Value*	p *Value*
Holistic/adaptiveness	.340	.089	3.820	.0001
Holistic/claim	.238	.091	2.615	.0089
Holistic/data	.185	.099	1.869	.0616
Holistic/wsarant	.298	.114	2.614	.0089

include several types of data in our assessment cases and more deliberately regard it when applying holistic scoring.

There was a strong association between the adaptiveness and holistic scores, as evidenced by the Stuart's tau-C value of .340 and low *p* value of .0001. In other words, if a document received a high adaptiveness score, it almost always received a high holistic score. Explanation for this finding rests to some extent in the fact that "audience focus" made up one of the four main criteria for the holistic evaluation administered on these sample documents (Appendix E).

CONCLUSION

In summary, positive associations suggest that the Analysis of Argument Measure and the Persuasive Adaptiveness Measure explain some but not all of the holistic scores. This is an appropriate outcome. Whereas holistic evaluation is inherently inclusive, designed to assess a broad range of features (Appendix E), the analytic measures are designed to evaluate particular rhetorical features. The Analysis of Argument Measure and the Persuasive Adaptiveness Measure should be employed with the knowledge that they do not tell the whole story. As Shepherd and O'Keefe noted, "Constructing an effective message is not a matter of generating just any message to fit some abstract pattern, but rather of exploiting the information available in the situation to construct the most effective specific appeal" (151). High scores on analytic measures do not insure success. As demonstrated by the Persuasive Adaptiveness training exercise, a document may address reader concerns yet perhaps contain enough mechanical errors that the reader is distracted. However, the analytic measures do sensitize writers to rhetorical considerations (e.g., selection, organization, and development of persuasive content) that are important in some situations. Used in conjunction with holistic evaluation and editing tools, the analytic measures provide writers with a fuller picture of features that contribute to document effectiveness.

The Analysis of Argument Measure and the Persuasive Adaptiveness Measure are intended as straightforward tools for writers, teachers, and researchers—tools that facilitate both the composition and evaluation of managerial documents that are deliberately persuasive and directorial in nature. The use of the measures for student consultations, classroom exercises, and experimental research suggests their heuristic value. For example, Michigan School of Business writing consultants employ the measures to explain students' holistic scores on the MBA writing assessment. The measures allow consultants to articulate and quantify holistic assessment scores in a way that our students seem to understand and appreciate. We attribute the consistently low number of student appeals for reassessment to the utility of the measures. In the classroom as well, the analytic measures have provided a unique way to introduce unfamiliar concepts and vocabulary. For example, comparative use of the measures illustrates how documents may succeed in one way yet fail in another, as suggested by the training exercise in which managers were asked to compare overall quality scores with Persuasive Adaptiveness scores. If, for instance, a document scores high on overall quality yet low on the Persuasive Adaptiveness Measure, it becomes apparent that writing is a complex enterprise.

We employed the Analysis of Argument Measure and the Persuasive Adaptiveness Measure to determine various features of document quality for an experimental study comparing collaborative writing with and without computer technology (Horton, Rogers, McCormick, and Austin). In the past, such studies have relied on holistic evaluation, which cannot provide the kind of incremental data that may be needed. The analytic measures might also be employed for research addressing what Huot has characterized as "the neglect of validity" in relationship to holistic assessment ("Reliability"). Such research could be informed by correlative data derived by comparing holistic and analytic scores, similar to the correlations drawn for this study.

APPENDIX A
Crown Regent Case

The Crown Regent is a 150-room, deluxe hotel on fashionable Michigan Avenue, in Chicago, Illinois. The hotel caters to business travelers and upscale tourists. Over the past six months, the hotel's occupancy has been down by 50%. This is a surprising drop given that it occurred during the peak season when the hotel normally operates at full capacity. The low occupancy, coupled with numerous guest complaints, lead General Manager Carolyn McDonnell to believe that service at the hotel is not what it has been in the past and certainly not what it should be to compete with the growing number of upscale hotels in the city.

You are director of Sales and Marketing at Crown Regent. Two weeks ago you met with Carolyn, who is your boss, to discuss the declining occupancy. Carolyn feels that although the staff is aware of the drop in business, they are not aware of the part they play in retaining and gaining customers. She wants the Crown Regent staff to become more aware of customer needs and to develop a new attitude about serving customers. Carolyn believes the Crown Regent staff should operate totally from a customer point of view.

Carolyn asked you to come up with recommendations for developing a strong sales and marketing orientation among the staff. Employees need to realize they have the opportunity within their own jobs to sell the hotel. With this in mind, she directed you to review and work with all hotel departments: Front Office (Reservations, Front Desk, Bell Staff, Concierge), Housekeeping, Food and Beverage, Maintenance, and Sales and Marketing. She wants your recommendations in writing.

Instructions

Write a persuasive memo to your boss, Carolyn McDonnell, recommending specific actions for improving customer service. Convince Carolyn that your recommendations are valid. Make up details not included in the case.

Your writing should be clear and direct as opposed to vague and official sounding. You have 50 minutes. Work for the entire 50 minutes. No time is allowed for recopying. Edit your memo for correctness. Don't worry about erasures or crossouts; however, illegible writing will impact your score.

Please return the Crown Regent Case with your memorandum.

APPENDIX B
Crown Regent Sample Memorandum #33

CROWN REGENT

TO: Carolyn McDonnell, General Manager
FROM: [writer name removed]
DATE: 9 Sept. 1989
SUBJECT: Staff Sales and Marketing Orientation—Recommendations for Action

After discussions with the supervisors concerned (Front Office, Housekeeping, Food and Beverage, Maintenance), plus discussions with selected employees, and our own internal review and audit, we have developed specific recommendations for a course of action to reverse our declining occupancy.

1) Re-establish the philosophies that *the customer is always right*, and *service with a smile*. Crown Regent is not a "No-Tell motel," but an up-market hotel. We must act like one; our clients expect it. If they want a 6-course meal at 4 am, so be it. If they want tickets to a sold-out opera, get them. If necessary, management should be called in, and their influence used, if not their tickets. We all must work to our philosophies from top to bottom.
2) Redesign staff uniforms. The last revision was in 1959. Our uniforms look dated, they are too hard to clean, and they are not exactly comfortable. We propose calling in a designer to review our design, and develop new uniforms which are stylish, compatible with our image, *easy to maintain and clean*, and *comfortable*. It's hard to smile in wool trousers during a Chicago summer when you're working the curb. As necessary, the company must subsidize the cost of uniforms for the staff.
3) Re-training of all staff, on a rotating basis. Staff members must be kept up to date on all our systems, and they must be fast and efficient with them. Nothing impresses clients more than fast, efficient service.
4) Perform a market survey, including sending our own people undercover to our competition, not only in Chicago, but in other selected cities in the U.S. This will give us ideas on how to improve our service, and give us a measure to compare ourselves against.
5) Profit-sharing for line employees. Our employees must be made to feel that they have a direct stake in this hotel. And that they, rather than management, will get the first cut of the pie.
6) Staff orientation meetings, on company time to the extent possible. Upper management *must* be at attendance at *all* meetings, even during the graveyard shift. If the hotel is not important enough for us to lose a little sleep for, it won't be important enough for our employees to expend

(continued)

APPENDIX B Continued

a little effort for. In this meeting, we must orient them to our situation, inform them of our plans for improvement, and tell them what we expect from them. We must not hold back how serious the situation is, but we must promise them to stay the course. Lay-offs must be our *last* resort.

Upon your approval, my department will begin developing detailed plans for the above activities, with a goal of having the staff meeting 6 weeks from approval.

APPENDIX C
Crown Regent Sample Memorandum #35

TO: Carolyn McDonnell, General Manager
FROM: [writer name removed], Director of Sales and Marketing
SUBJECT: Recommendation to improving occupancy

In response to our previous talk about declining occupancy I asked my staff to scrutinize our operation and to find the reasons for our shrinking business. It was not easy for our staff to check all of our operations within the limited two-week's period, however, I recommend that services in the Reservations desk and restaurants should be improved.

With regard to our services in the Reservations desk, it has been said that our attitude toward an individual visitor is too cool. One reason for this reputation is our reservation system. Namely, the desk would not accept any reservation made by a new individual more than 30 days prior to the actual stay, and this desk is required to hold 50 rooms in order to meet one-week prior requirement from our loyal customers listed in our Repeaters' list.

I recommend that we should remove the former 30 days restriction and decrease the number of the latter reserved rooms for repeaters to 30 rooms. I also recommend that this decrease in number of rooms for loyal customers should be compensated.

APPENDIX D
Crown Regent Sample Memorandum #52

TO:	Carolyn McDonnell, General Manager
FROM:	[writer name removed] Director of Sales and Marketing
DATE:	08 September, 1989
SUBJECT:	Customer Satisfaction Awareness Proposals

As you requested in our meeting two weeks ago, I have given serious consideration to the subject of increasing customer satisfaction awareness amongst our employees. This memo outlines the programs I would like to implement in order to improve our customer service. A summary of the proposals is included at the end of this memo.

Customer Service Hotline

We will establish a nationwide toll-free hotline to receive customer feedback and complaints. I prefer a phone system over the current comment card system because it is frequently more convenient for customers to contact us after they have rushed out of the hotel on business. The comment cards will be retained, but they will no longer be processed by my staff.

The key elements of the hotline are training and staffing. Every full time employee will receive training from my staff on how to handle incoming calls. Quick reference cards will be provided for most "procedural" issues, to enhance employee memory and usability. The training will be approximately two hours for each employee.

The hotline will be staffed by every employee, on a rotating basis. The hotline will be open 24 hours, seven days per week. Based on a similar program at a comparably sized facility in Boston, this should require one employee for each shift. Overload on the first shift will be handled by the customer relations manager in my staff. He will also serve as the scheduling coordinator for the hotline and comment cards.

A key factor to the success of this program will be in departmental scheduling. Given our current staff, each employee will monitor the hotline only once per year. By careful schedule rotation, each department will get regular and continuous exposure to the program. This program association with peers and workmates will raise the entire organizations awareness on a continuous basis.

The operators will be empowered to offer discounts on future visits, thus giving us an opportunity to win back a discontent customer.

(continued)

APPENDIX D Continued

Comment Cards

The comment cards will be reviewed and entered to a database by hotline operators. This will allow my customer relations manager to concentrate on scheduling the hotline (a 10% job) and following up with customers. This additional follow-up will be a shared activity with the hotline operators. By coordinating the two activities, the operator benefits from a "training program" of one half day with our customer relations expert. He has agreed to begin working a split shift to maximize his in-house impact.

Staff Reaction

I have reviewed the elements of this proposal with all of the department heads. At first a concern was raised on the manpower required. Each staff head did agree that with the rotational schedule they could absorb the workload. After scheduling was addressed, each staff head seems to have warmly embraced the idea. Dave Clark, the head chef, has even expressed personal interest in helping to develop the training.

Competitive Programs

I previously mentioned a similar program in Boston. Steve Wertz, a long time associate of mine, developed the concept for the Hyatt Cambridge. Since its inception they have seen a 50% reduction in negative comments during a period when the occupancy rose from 57% to 89%. Also, they have an astounding 75% redemption rate on 35% (list price) discount coupons. Steve has already been asked to broaden the program to all Hyatt Northeastern Region facilities. Interestingly, the profit margin on the discount coupons alone pays for all system overhead and staffing for one and a half shifts.

Summary

A toll free hotline will provide increased customer satisfaction and by using existing staff on a rotational basis employee awareness will be tremendously improved. All current staff heads have agreed that, based on rotational scheduling, the workload can be absorbed without additional headcount. The Hyatt Cambridge has seen tremendous results with a similar program which is now being implemented in all Northeastern Region Hyatt facilities.

I look forward to our September 25 staff meeting where this proposal will be discussed with the entire staff present.

cc: All Staff Heads

APPENDIX E
Holistic Assessment Criteria

Audience Focus
- Structures and develops arguments that lead to the desired response
- Uses appropriate tone
- Recognizes and addresses audience concerns

Information Density
- Uses appropriate amount of detail
- Employs different levels of generality
- Develops three or more arguments which support his/her thesis
- Presents content which is not trivial

Organizational Approach
- Has a thesis (position statement) clearly stated (preferably in or close to the first paragraph)
- Does not digress; is not unduly repetitive
- Develops the memo beginning to end with a clear sense of introduction and conclusion
- Has paragraph-to-paragraph transitions; sentence-to-sentence transitions

Language Control
- Uses appropriate vocabulary
- Has overall mastery of correct sentence structure
- Manages grammar, spelling, mechanics in such a way that they do not interfere with comprehension

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