# Decision-Making in a Quasi-Rational World: Teaching Technical, Narratological, and Rhetorical Discourse in Report Writing

## **Tutorial**

—Feature by Ken Baake

**Abstract**—This tutorial on how to teach report writing is based on the premise that decision-making is a complex process that derives from both rational and quasi-rational ways of knowing the world. The author defines quasi-rational to include consideration of hunches, intuition, and tacit knowledge often embodied in stories that have meaning to the decision-maker. Thus, report writing can be approached as a systematic evaluation of options available given goals and constraints, but also as an uncovering of the narratives that decision-makers see surrounding their own lives. The tutorial explains a course curriculum structured in three sections with the following goals and strategies: (1) helping students face personal or family decisions through a traditional decision-matrix process that also incorporates elements of rhetorical stasis theory, (2) using big case studies to reveal the interplay between rational and quasi-rational thought in decision-making, and (3) finding case studies in the students' local geographic regions in order to further explore this interplay. The paper concludes with a brief assessment of how the author's students responded to such a course.

*Index Terms*—Decision-science, economics, narrative, public policy, quasi-rationality, recommendation reports, report writing, stasis theory.

 $\mathbf{S}_{\mathrm{cholarship}}$  and instructional texts addressing the recommendation report often present this genre as a means of structuring an uncertain world to permit logical decisions. We read that such a report entails a systematic method of identifying a problem, investigating it, evaluating options or alternatives according to criteria, and making recommendations [1]. This approach can be found in various technical communication textbooks, suggesting that the recommendation report offers a path by which the researcher can navigate large amounts of information to make the best choice from among several options. Similarly, scholars of business communication pedagogy envision the report as a means of efficiently delivering carefully researched and organized facts. As Spinks and Wells write

Perhaps most essential to management decision making, however, is information or data.... Business reporting, then, transmits the information from those who gather it to those who use it as a basis for decision making. [2, p. 30]

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As the previous quotation implies, the report genre as taught in technical and professional writing college classes is a process for gathering data and transmitting it clearly, such that navigating challenging decisions becomes a matter of following a step-wise system of thought. Miller's 1990 essay on the rhetoric of decision-science describes a well-hewn process:

Decision science, the social-scientific approach to decision making, aims to formalize the elements of complex decision problems so that a set of logical axioms can be used to analyze and compare alternatives, one of which will, it is presumed, emerge as an 'obvious' choice. [3, p. 164]

This process is grounded in the economic theories of consumer preferences, whereby individuals make decisions on what they wish to acquire based upon rules or axioms of behavior; for example, they will be able to rank preferences, make choices consistent with that ranking, and consistently aim to reach the preferred state [4]. Because humans cannot know or evaluate all possible options, however, decision-science accepts a relaxed version of rationality, known as "bounded rationality," which essentially means that we make the best of what we can know.

The underlying premise of rational reporting is that information can be systematically acquired, divided, and presented in a way that leads to the best choice among options. Reality is properly segmented into units that can be measured. As Riordan writes,

To make data meaningful, analyze or evaluate them according to criteria. Selecting logical criteria is crucial to the entire recommendation report because you will make your recommendation on the basis of those criteria and because your choice of the "right" criteria establishes your credibility. [5, p. 382–383]

Recommendation reports, therefore, offer reasoned courses of action by evaluating options and rendering recommendations, such as what types of fonts and background colors an agency might choose for its webpage. Typographical options involving webpage design, for example, can be evaluated through a combination of empirical studies (perhaps a survey of possible users) and a review of existing literature about webpage design and user preference. Time is likewise divided into units that can be evaluated against an established goal; thus, the progress report (or status report) attempts to capture objectively the state of reality at a specific time for some ongoing activity, such as a company's new product development.

In this article, I refer to this decision-science system as "rational," which also encompasses the bounded-rational corollary, realizing that a full-blown discussion of rationality invites debate that must dig deep into philosophy and psychology-indeed, into all fields that consider issues of knowledge-making among humans. It is not within the scope of this tutorial to enter that debate, but merely to employ the term "rational" in describing the decision-science approach to choice problems and contrast it with decision processes that are not explicitly objective and systematic. The problem with teaching report writing exclusively as a systematic and rational process is that human beings do not make most decisions this way. Thus, I offer the term **QUASI-RATIONAL** to describe a decision process that accepts and even invites hunches, intuition, and tacit knowledge alongside the more scientific means of addressing choice.

Quasi-rational as a term already has currency in the field of economics, having been proposed by Russell and Thaler in their 1985 paper, "The Relevance of Quasi Rationality in Competitive Markets." They argue that current economic theory does not account for "mistakes" among consumers who are choosing how to spend their money

among different purchase options [6]. For example, theory would suggest that consumers buying dish detergent would select the brand that cleans the most dishes per squirt; research shows, however, that consumers often wrongly select the cheapest bottle of detergent even though it may not offer the greatest cleaning bang for the buck [6, p. 1078]. More recent research from the new field of neuroeconomics is reported in a 2006 edition of the journal Nature. Researchers pondering consumers' preferences for soft drinks observed that people often choose brand-name recognition over flavor. Thus, the author shows that in a showdown between calculated decision-making and more quasi-rational systems, "emotions usually win" [7, p. 503].

Russell and Thaler borrow a term from psychology, "framing effects," to explain why consumers may make inconsistent and quasi-rational purchasing decisions. What this term suggests is that consumers will make decisions, in part, by how choices are presented to them, including how the options are worded. Thus, the authors write:

There is no shortage of evidence documenting human judgments which fail to satisfy rational objective standards. In many cases (see Kahneman, Paul Slovic, and Tversky, 1982) these lapses seem to be associated with the use of a rule of thumb (i.e., the representativeness heuristic, and the available heuristic) in which the decision maker sometimes focuses on irrelevant aspects of the information set in constructing his budget set. [6, p. 1073]

Building from this argument, I hope to show that rules of thumb for students can include various quasi-rational ways of knowing, including family lore, religious beliefs, and other sources of guiding narratives. For purposes of discussion, I offer the following aspects of a quasi-rational decision processes:

- haphazard or serendipitous, as opposed to systematic;
- following an intuition that perhaps is derived from little explicit evidence, as opposed to following a preponderance of evidence;
- passionate and subjective at times as opposed to logical and detached;
- indeterminate as opposed to measurable;
- appealing as much to personal or culture-specific beliefs (e.g., the poor will enter heaven before the rich do) as to universal economic truths (e.g., more money is better than less money);

- persuading by an inseparable idea (the story of *X*, which invites imitation), as opposed to separate components (criteria 1, 2, 3, etc.);
- having more narratological aspects than data.

I explore a teaching method that does not replace the rational with the quasi-rational, but instead incorporates both ways of knowing into the traditional reports class-thereby showing how quasi-rational and rational elements of human thought interact in the decision process. The first part of the article outlines the steps that students walk through in producing a report derived from their individual challenges and their personal narratives. I make the argument that the options and criteria model of decision-making can be recast as a model of rhetorical situation and **stasis**; this alternative to decision-science terminology better accommodates the less rational ways of knowing the world. I follow with a discussion of some high-profile case studies that can be used to show how the forces of rationality and quasi-rationality (specifically narrative and myth) interact in decision-making. Finally, I offer examples of how combinations of rational and quasi-rational modes of thinking appear in various texts, including reports that address a regional environmental debate.

#### **BACKGROUND ON THE COURSES**

I teach two report writing classes in the English Department at Texas Tech: an upper-level undergraduate class that goes by the name Professional Report Writing (English 3365) and a similar graduate class, Technical Reports (English 5372). Both classes cover the rhetorical analysis of reports that are nationally and locally significant along with the production of much smaller projects that address decisions faced by the students. The classes also address the related genre of proposals. These two genres at Texas Tech and other universities often occupy a large part of the curriculum of introductory technical communication classes for nonmajors (the "service course," as it is often known in technical communication pedagogy); they also can be the sole subjects of specialized advanced undergraduate and graduate technical communication classes and business communication classes.

Early in the semester, I offer the following definitions either formally in lecture notes or informally in class discussion:

• A professional report is the gathering and compiling of information that is useful and/or

persuasive to an audience in the workplace, or one that deals objectively with matters related to the workplace.

- A professional report might be called a **technical** report if it meets the above criteria, but also deals in some way with reporting on technology. So if you worked as an agricultural economist and wrote a report on the costs and benefits of certain farm machinery on behalf of the local extension office, you would be writing a technical report.
- A professional report researched and written on behalf of government agencies typically is designed to evaluate a problem that has faced society (or continues to face society), to analyze the causes of that problem, and to recommend policies for dealing with that problem.
- A proposal is a cousin to the report in that it offers the audience a plan for solving a problem; it goes a step beyond making recommendations. Hence, a proposal will usually summarize the problem by means of a mini-report before proposing a solution.

The phrase **professional** report forms the general heading for a variety of sub-genres touched on in the course; these can include everything from a memorandum to the boss to a police report to a scientific laboratory report. Quickly, however, we narrow the focus to recommendation reports and to research proposals that could lead to such reports. The recommendation report is a systematic analysis of options that address a challenge or problem and a recommendation of action; hence, they are often also referred to as **analytical** reports. Sometimes such reports evaluate just one option, in which case they are known as **feasibility** studies. Riordan's succinct distinction of terminology in his textbook *Technical Report Writing Today* is helpful:

Feasibility studies and recommendations present a position based on credible criteria and facts. **Feasibility studies** use criteria to investigate an item in order to tell the reader whether or not to accept the item. **Recommendations** use criteria to compare item A to item B in order to tell the reader which one to choose. To decide whether or not to air condition your house is a feasibility issue; to decide which air conditioning system to purchase is a recommendation issue. [5, p. 381]

For the production side of my course, students follow this approach as they research and write reports to deal with decisions they face as individuals. Typically, they compare options in the recommendation model, such as which college to pursue for graduate school. Some, however, may take the feasibility approach, such as asking whether they can afford to go to graduate school. They apply the practice of research and writing reports with recommendations to answer questions such as, "Should I pursue a master's degree in business administration when I graduate or take a job with one of the big four accounting firms?" or "What are the advantages and disadvantages of various weight-loss programs?" This approach is a variation of Mizrahi's curriculum for teaching technical writing, where students research diseases and other medical conditions they may face [8].

But even as they are organizing their own thoughts into a systematic strategy, I have students read government reports about well-known global historical events, such as the prelude to the 2003 invasion of Iraq, and lesser known regional historical events, such as the reintroduction of wolves in the 1990s to the American West. By encountering reports with historical significance along with literary stories, musical ballads, and even biblical scriptures that have relevance for the same events, students gain appreciation of the full spectrum of epistemologies that govern human decision-making. Reports centered in these historical situations reveal the decision process to be murkier than decision-science would suggest.

Thoughtful scholarship from various fields warns us that results not demonstrated by scientific experiment—in other words, most activities involving human beings-cannot be derived solely by a rational process of evaluating options against criteria. Thus, Miller reported that even scientists and economists acknowledge "the shortcomings of Olympian rationality in actual decision making" [3, p. 173]. Rude succinctly wrote that the method and structure of reports for decision-making "are arguments more than they are algorithms" [9, p. 194]. Rentz explained that seeing beyond the instrumentalism of technical writing to the driving narratives helps students appreciate the reasoning process as a complex result of different ways of knowing [10]. Therefore, instead of casting the rational decision-making process and, by extension, technical writing as an alternative to literary ways of thinking, I use my reports class to show both rational and quasi-rational thought intertwined in a complex human epistemic system.

## AN UNSTATED GOAL: SEEING THE COMPLEXITY OF DECISION-MAKING

The goals for what students should accomplish in these courses as stated in the syllabus are typical for any undergraduate or graduate course that covers reports and proposals:

- display skills in writing and reading reports and proposals;
- summarize reports and proposals in short abstracts and oral presentations;
- display understanding of the theoretical choices we make as practitioners of this kind of writing;
- display an understanding of how reports and proposals contribute to the discourse of a company or a region.

In addition to these stated goals is one other-unstated but equally important: students display an understanding of the complex ways in which decisions are made in government, business, society, and even their own families. The rational approach of weighing options against criteria is always accompanied by the decision-maker's comparison of his situation to similar situations others have faced—that is, the decision-maker asks how his story compares to other stories. A story or "narrative" is a type of discourse whose purpose is "to recount an event or a series of events" [11, p. 335–336]. When those stories inspire us to imitate the behavior of the protagonist, they have a persuasive function that is as powerful as the persuasive function of amassed data in a decision matrix. Stories help us to understand the world by illustrating larger truths or recurrent patterns of events in the world. For example, in my class, a student trying to decide what career to pursue will invariably draw upon family narratives of her grandparents, parents, and siblings for inspiration. Thus, in addition to telling that student to provide a matrix of salaries, benefits, and other quantifiable criteria, I would also encourage her to summarize family stories and how they have influenced her thought process.

When narratives lead to supernatural explanations that are part of a common cultural heritage in order to explain natural events, we refer to them as "myths" [11, p. 333–335]. In his book *William Blake*, Schorer defines myth as "a large controlling image that gives philosophical meaning to the facts of ordinary life..." as cited in [12, p. 57–58]. So a student who is considering a career in agriculture might reflect upon pastoral narratives from the Judeo-Christian Bible—thus helping make sense of his place in the world through mythic stories.

Stories and myths rumble underneath all seemingly settled cultural settings, including the very bedrock of free market economic systems—the firm or corporation. Thus, in addition to cost-benefit analysis, decision-makers in business must also consider a company's history, its defining narrative (e.g., a maverick start-up, in contrast to a venerable community corporate citizen), and its corporate image. At the personal student level, deciding what job one should seek after college involves imagining the role that a student might play in a daily workplace drama and about the nature of work in that student's family heritage and beliefs.

#### Step 1: Helping Students Face Personal or

**Family Decisions** I tell them not to choose a problem or challenge that is so private they would be unwilling to present it to the class or have me read it, or one that cannot be researched because it would depend **entirely** on emotions or hunches (e.g., Should I break up with my partner and start dating someone else?). Students must include some primary and secondary research. Their reports can take any of the various forms of reports for decision-making that we study. The stages of writing this report are adapted from material from the chapter "Reports for Decision-Making" in Lay et al. [13, p. 503]. These adapted stages include:

- defining the problem;
- brainstorming;
- posing the problem as research questions;
- setting criteria for evaluating those questions;
- conducting the research;
- writing and arranging the report and its recommendations.

In the first part of the project, students write a proposal memorandum to me suggesting their project and justifying it. In the second part, midway through the semester, they write progress reports that describe what they have learned so far (secondary research is summarized in an annotated bibliography), any problems they have encountered or changes they expect in the scope of the final report, and plans for completion. The final report then follows the typical model for such reports, moving through the executive summary and introduction through the discussion of research methods, findings, and recommendations [13].

Many of the students in our upper level undergraduate reports class are business and accounting majors who are trying to decide what career path to follow after college and in which location across the country to do it. Hence, we have several brainstorming sessions in class when students decide which criteria to explore and rank as they evaluate options. Obvious choices for location include cost of living, availability of housing, property tax rates, availability of outdoor and indoor recreation, quality of schools for those who plan to have children, etc. I tell students to use the report as a way of fully exploring all options. Students research each criterion by reading reputable internet sites, magazines, and other sources of secondary information and by making telephone calls to experts, conducting surveys, and similar primary information gathering techniques. The recommendations should flow from the report, but not direct it. I caution students not to write a report simply to justify what they already believe.

To help students formulate their research into a ranking of options for the recommendation section of the report, I show them how to develop a decision matrix in which criteria are weighted. At this point in the course, I focus heavily on the rational processes of decision-making. Variations on this process are a staple of course work in business and information science programs. Galotti, a scholar in cognitive psychology, provided an extensive explanation of this process, which she also referred to as "decision mapping." She wrote, "Good decision making requires making use of information, somehow relating it back to one's goals, values, and principles" [14, p. 47]. Galloti cited other research suggesting that humans typically cannot process more than seven criteria in any one decision process; hence, I have my students restrict their options and criteria to a manageable number.

First, students as decision-makers decide how important each criterion is in their lives-the weight of the criteria. For example, housing costs may matter to one person more than recreation because that person likes to stay home. That person might weight housing costs with an importance factor of 8 out of 10, while another person who is willing to live in an apartment and travel more would be less concerned with housing costs. Someone else may have a health condition that precludes certain climates; others may decide that a short commute time is important. Then they fill in values for each city according to how they interpret the research, perhaps also using a range of 1–10, with 10 being the best. So a person considering New York as a place to live might determine that housing costs are so high they would warrant a low score—perhaps just 4 out of 10. Dallas might score better in this example—6 out of 10. A similar process would continue for other criteria, such as weather, recreation, and average commute time.

TABLE I Typical Weighted Decision Matrix

City	Housing costs (Weighted 8 out of 10)	Moderate weather (Weighted 10 out of 10)	Recreation (Weighted 5 out of 10)	Average commute time (Weighted 6 out of 10)	Total Score
New York <sup>1</sup>	4	4	10	6	
New York totals <sup>2</sup>	32	40	50	36	158
Dallas <sup>3</sup>	6	7	7	6	
Dallas totals⁴	48	70	35	36	189

<sup>1</sup> Score out of 10

<sup>2</sup> Score multiplied by weight for each category

<sup>3</sup> Score out of 10

<sup>4</sup> Score multiplied by weight for each category

A simple weighted decision matrix for the problem of where to live after college could look like Table I.

A student who came up with such a decision matrix in her recommendation section would choose Dallas, with a score of 189. We discuss, however, how a recommendation is only as good as the research. Perhaps the student did not carefully specify housing costs for the neighborhood of Dallas where she would likely move. Or, she could have been careless in arriving at the best criteria. Perhaps she plans to be a mother, but did not consider the quality of schools. She would be missing an important decision variable.

Many teachers of writing could find this matrix process to be overly objectifying. An alternative to calculation can be found in Miller's critique of the decision-science, where she essentially asks us to see the formal process not in economic terms, but in rhetorical terms. Miller argues that the process of decision-making involves various steps towards articulating a problem and its possible solutions. Decision criteria cannot be reduced to numbers, but instead are best seen as points of rhetorical stasis in the decision [3].

I offer students a brief summary of stasis theory from the rhetorical canon, starting with Aristotle's forensic questions of whether something happened (fact) and whether it was legal (law) [15]. The STASES are points of agreement among all stakeholders participating in a decision process; hence, they can be taken as given or resolved, allowing research and recommendations to extend to points in dispute (e.g., My parents, my fiancé, and I all agree that I should get an accounting job when I finish school, but we disagree about which city I should seek work in.) The stases become more abstract once the basic questions are resolved, just as a student's choices and criteria become more complicated once she has ascertained, for example, that working as an accountant in a small town is her goal. Even if the student is the only stakeholder in the decision, he or she will still have points of certainty and points unresolved.

For the classical rhetoricians, the basic questions of fact led to questions of **quality**, determining the value, justice, and importance of possible actions [15]. Thus, when students determine that an outdoor lifestyle is important to them and allocate such a lifestyle to a cell in the decision matrix, they are attempting to resolve a stasis of life quality. Putting a number in a matrix helps a student make explicit her goals and values; identifying it as a point of stasis helps her to recognize that even though she is quantifying her values, the process is still subjective and uncertain—in other words, rhetorical, where rhetoric functions as a bridge between the rational and intuitive processes of thinking.

Step 2: Using Big Case Studies to Reveal the Interplay Between Rational and Guasi-Rational Thought While showing students how to research and write personal recommendation reports and related genres, instructors can introduce the interplay of rational and quasi-rational thought processes through various reports and case studies derived from the workplace, government, or civic arenas. For example, corporate annual reports are always intriguing to students as they explore the interplay of precise accounting statements, the flashy image-enhancing photographs of company directors, and the stories of how the lives of average people are enhanced through the company's products.

Equally interesting are government reports and news accounts of well-known events, such the two space shuttle disasters, where "the rhetorical situation for the case is almost wholly contained within the assignment itself" [16, p. 21]. Johnson Sheehan and Flood have referred to these events as "closed cases" because they have already occurred; students then are asked to analyze how they unfolded rhetorically or perhaps to put themselves into the situation of one of the players. The reports for these studies can be broken down to three parts: **what it is** or **what happened** (the current state of reality), **why it is** or **why it happened**, and **what should be done** (the desired state of reality). Through this study, students come to understand that however messy the world may be, such messiness can be rendered understandable and even manageable by the moving from description to analysis to recommendation. If nothing else, the report can help us to contain our problems.

Closed case examples are abundant in the professional and technical report genre; several reports that we can draw upon are spectacular and globally significant. An instructor who wants to show that reports are central to the development and critique of current public policy, for example, can look to the British government's 2002 report on Iraq's alleged weapons of mass destruction, which justified the United States and Britain's subsequent invasion of Iraq [17]. Exemplary reports following industrial accidents also are available, such as the US Chemical Safety and Hazard Investigation Board's report on the 2001 B.P. Amoco Polymers accident in Georgia, which killed three workers [18].

It quickly becomes obvious that rational thinking as found in reports for decision-making is reshaped and redirected by other quasi-rational thought processes. One such process is the human tendency to see the world against a background of powerful narratives and myths. For example, the British government report that categorized the levels of threat from Saddam Hussein's Iraq lost its veneer of factual truth when subsequent events (and United Nations weapons inspectors) proved that no such threat was present. Perhaps other unquantifiable factors contributed to the war-factors association with myths and their narratives. Operating alongside studies of Iraq's weapons were fundamentalist Christian narratives proclaiming Saddam or the United Nations to be the biblical Antichrist, terrorism to be foretold by biblical prophecy, and a strong state of Israel to be a precondition for the Rapture [19]. It is not a stretch to suggest that a rational report quantifying alleged nerve gas canisters and missile silos persuaded US and British leadership in tandem with less rational, but equally powerful mythological, religious ways of understanding the world.

**Step 3: Bringing the Case Study Home** Students can explore regional examples alongside global case studies and their own decision-making research to appreciate the range of reports in business and society, along with the interplay of rational and

quasi-rational modes of thinking. In addition to looking at the Iraq report, for example, we study reports about drought and arid land use; these are problems of equal significance, but closer to home for students in rural West Texas. This strategy of looking locally for examples of reports in action can be adopted for any region. For example, instructors teaching in coastal areas could consider reports dealing with water pollution, fishing regulations, or hurricane preparedness. Every university will have its own regional land-use controversies, natural resource management challenges, urban policy issues, and similar challenges that will be the subject of proposals, reports, and other kinds of written discourse.

Often the best way to introduce a regional issue to students is through literature, where questions of good science, policy, and human nature unfold and mix in a narrative of conflict and resolution. Such a narrative can be found in the work of Texas writer Elmer Kelton; in 1973, he wrote what may be the definitive drought novel—portions of which I have worked into the curriculum to present a narratological counterpart to the reports genre [20]. The hero in *The Time it Never Rained* is Charlie Flagg, a rancher living near Kelton's hometown of San Angelo, Texas, during the parched 1950s. This tenacious rancher embodies all the complexities of reason and emotion that typify people with ties to the land. As the drought tightens its hold, Charlie is forced to negotiate with a banker for new loans and to switch from cattle ranching to less thirsty goats. He shows sympathy to illegal immigrant farm workers driven north from Mexico by the drought, but animosity toward federal government bailout programs that he finds to be an affront to a rancher's individualism. Charlie's emotions are those that often clash with the logical insights of arid land sciences—a logic that would suggest that he had no hope of making a success out of such harsh conditions.

Nearly every subplot of Charlie's saga has its counterpart in regional reports. In addition to drought, Charlie is plagued with a pair of coyotes who prey on his weakened sheep. This complex relationship between humans and nature in the wild becomes strikingly obvious when Charlie organizes a hunt to rid his ranch of the coyotes. This hunting story leads us to read a government environmental impact statement (a kind of feasibility study with recommendations) concerning the US Department of the Interior Fish and Wildlife Service proposal to reintroduce wolves to the Southwestern United States. The proposal puts forth the values of modern environmentalism and eco-pluralism, which imply that not only humans have rights over the land. The 1996 report, *Reintroduction of the Mexican Wolf within Its Historic Range in the Southwestern United States*, graphs various alternatives for wolf reintroduction into forested areas and suggests minimal impact on ranchers' livestock and hunters' deer and other game. Students find it interesting to contrast the technical language of the report as it logically calculates the "reduction in hunter days due to wolf reintroduction" with the emotions of Charlie Flagg's coyote hunt [21, p. 4].

I have given students a direct role-playing experience revealing the ways in which environmental policy in arid lands (or anywhere for that matter) becomes difficult when it confronts the emotions of landowners. Students enact characters (a hunter, an environmentalist, a rancher, a real-estate agent, etc.) and prepare arguments before a mock senate committee considering the wolf reintroduction proposal. By taking the same data and delivering it in a way that is consistent with their characters' belief systems, students learn how emotions modulate logical arguments. They realize that attitudes toward the outer world are complicated by a sometimes-discordant blend of emotion, beliefs, and reasoned thought.

## CONCLUSION: REFLECTING ON MULTIPLE WAYS OF KNOWING AND RESOLVING PERSONAL AND REGIONAL CHALLENGES

Students who read government environmental reports and stories of a rancher's dilemma while also researching and contemplating their own decisions realize that, like Charlie Flagg, their goals are colored by quasi-quantifiable beliefs and aspirations, often borne out of stories of how they imagine their lives will unfold. For example, one student might be facing a decision of whether to return to the family farm in the Texas Panhandle or set forth for Houston to work as an oil and gas industry accountant. In addition to considering salaries, cost of housing, and other measurable countable criteria, he also must consider his family history as a repository of stories about farming the land. But instead of considering those stories and then dismissing them as outside the purview of the report process, he might include a section in his report recounting the stories and their impact on him. By looking at these decisions from all angles—both as an economist and as Charlie Flagg might—students learn that this kind of report is not flawless, but it can help organize one's values.

A course like this needs refining each time it is taught as the instructor gains insight from his students. I trimmed out some readings and specific lessons the second time I taught the course to undergraduates to avoid overwhelming them-a common problem when an instructor pilots his own course. Undergraduate evaluations of the instructor and course in Fall 2004 and Spring 2005 were similar to ratings in all professional report writing sections taught in the Texas Tech English Department for those semesters, with students rating the instructor and the course in the low-to-mid 4-range on a 1-5 scale. These ratings suggest that the course was no more or less successful than other versions taught by other instructors, and that trimming some of the lessons the second time around made little difference.

While disappointing to me, these average ratings are not surprising for an English course that is required for many non-English majors. Yet, written and verbal comments to the instructor were more affirming; students expressed appreciation for being taught practical decision-making skills that are applicable in their lives, but also for having been shown both the power and limitations of those skills. When students presented the results of their own decision-making research to the class at the end of the semester, they provided data-filled matrices in their Power Point slides as is appropriate in the academy and business. But they also readily acknowledged the quasi-rational element that influenced their recommendations—an element one student referred to in a presentation as "the X Factor." By making explicit these factors, students invited a productive discussion among their peers (acting as fellow stakeholders) about their recommendations.

Decision-making involves a complex blend of different ways of knowing. These multiple epistemologies form the mosaic of fragmented rationality that has been well articulated by postmodern theorists. As composition scholar Faigley noted:

Because the subject is the locus of overlapping and competing discourses, it is a temporary stitching together of a series of often contradictory subject positions. In other words, what [a] person does, thinks, says, and writes cannot be interpreted unambiguously because any human action does not rise out of a unified consciousness but rather from a momentary identity that is always multiple and in some respects incoherent. [22]

The pedagogy of accepting multiple and even incoherent modes of thinking as intrinsic to the decision-making process does not negate the goals of report writing as a tool for **managing** those epistemologies. Rather, such a class shows students that the report genre is a powerful tool for helping them understand and reason with their own criteria and beliefs in the personal decision-making process. This strategy of welcoming the quasi-rational and rational aspects of decision-making has applications beyond the college classroom, such as in the workplace, where employers often lament the quality of written reports. A report that incorporates all the ways its author knows the world-accepting the author's singular humanness—is likely to be better written and more effective than one where the author's knowledge is disarticulated from his own experiences. The plan I have outlined for teaching reports is based on a belief that people learn best when their studies relate to their own lives and when they accept that their own lives are constructed from different ways of knowing the world.

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