

Exploring Liberal Applications for Decision Analysis

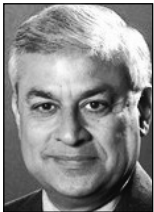
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Not long ago, a prestigious college in New York, renowned for its outstanding liberal arts curriculum, was searching for a suitable candidate to lead its business administration program. It had never awarded tenure to a business faculty member, and was engaged in a lively debate on the role of the business administration program in a liberal arts college. It would be fair to say that there was some hostility towards the business program when it was initiated a few years earlier. The predominantly liberal arts faculty was not fully reconciled to the presence of a professional program of study amidst them, and did not consider business administration to be a legitimate academic discipline. In the course of the search, the short-listed candidates were invited to the campus to meet with various constituencies, and they were also asked to make a presentation on a topic of their choice to the entire faculty community. One such candidate came prepared to speak on the issues of quality improvement leading to accreditation of the business administration program. However, as he rose to speak, a philosophy professor from the back of the room stood up and shouted a question: "Sir, why do you think that a business administration curriculum belongs in a liberal arts college?" The candidate paused, and asked, "How would you describe liberal arts?" The faculty member gave a precise response, "Life relevant!"

The candidate put away the notes he had prepared on the business accreditation because he felt a need to describe the humanity of business, if possible, in the language of liberal arts. He was going to speak extempore and from the heart. He proceeded to describe

business activity as 'life relevant.' He described the conditions that created and guided the evolution of the corporation throughout the past four centuries, making it the youngest but still an important constituent institution of the modern society alongside those that have existed since pre-recorded history such as the family, government, church, and academe. He described the role of business in the shaping of American experience, history, and way of life, from the establishment of Jamestown to the exploration of space. He reminded his audience that in 1853, a decade before the Civil War, Melville had already written *Bartleby, the Scrivener*, placing it among the early literary works in America about business. With a subsidiary title, *A Story of Wall Street*, it addressed the darker, dehumanizing aspects of the emerging American financial district.

Then he spoke about the important role business has played in improving human condition, producing food and shelter, improving health, and extending life. He described business leaders as modern philosophers, who decentralize the political power of governance and define the course of our social system. He spoke of decision making as a human experience, quoting from Robert Frost's *The Road Not Taken* to illustrate the relevancy of the process to living a life well and making a difference. Also, he commended to the audience William Dean Howell's *The Rise of Silas Lapham*, another early work and a uniquely American fiction about business, written in 1885, that featured a rags-to-riches entrepreneurship, financial emergence, and decent good sense of propriety and prudence—today we have a word for this, *ethics*—that was



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much desired in a country recovering from the trauma of its Civil War. Some in the audience seemed persuaded. Others remained skeptical. The candidate was offered the job. However, dismayed by the collective failure of a liberal arts faculty to recognize business as an essential ingredient of the American way of life, he turned down the offer.

Whose Decision Is It, Anyway?

Both Melville and Howell, along with other 19th century writers in America, were writing about decision making. Henry Wadsworth Longfellow, for instance, described purposeful, decisive action as the very essence of human existence in *A Psalm of Life*, published in 1838. However, the context of works by both Melville and Howell was the administration of business. Melville's *Bartleby, the Scrivener* is a study of how individuals cope with painfully repetitive tasks that are routine, stunt creativity, and require no decisions. A stifled Bartleby insists on his right to make decisions and actively declares that he *prefers* inactivity. Howell, too, weaves his fiction to take Silas Lapham, a self-made Boston entrepreneur, and his family through a series of difficult, complex situations that tested him, his ethics, and his values. Lapham measures up to the challenges, makes difficult decisions, and stays true and honest. His rise as an ethical individual, however, spells the downfall of his business and brings an uncertain future to his family. Eventually, both Bartleby and Lapham, in their respective fictions, come to sad endings. Unfortunately, neither of them had the benefit of decision analysts, who specialize in aiding decision makers with an analysis of complex decision problems.

In our times, decision analysts thrive in their practice. But all is not well. It has been said that decision sciences, management science, and operations research have lost their way in the U.S. On the other side of the ocean, our British friends feel that the English language is not the only thing we haven't used for a long time. They also lament that what we in the U.S. call operations

research, is not what they refer to as operational research. Their criticism of our practice lies, among other things, in the absence of an element deemed by them as essential to operational research, that being the involvement of the decision maker who is to be the beneficiary of operations research in the first place. They say so in no uncertain terms (Ackoff, 1979; Pidd, 2001). One would infer from this argument that the exercise of applied mathematics as a discipline is deemed an aspect of mathematics separate and distinct from operations research, and analysis of hypothesized problems represented in the sophisticated mathematical language of high complexity brings little life to operations research as a discipline. It is demanded that the decision maker be invited by the analyst to participate in the process of analysis, and the gap between the decision maker and the decision analyst be minimized (Churchman & Schainblatt, 1965; Dhir, 2001). Whatever the merits of the British pronouncement on the status of operations research in the U.S., it is easy to accept that the inclusion of the decision maker in the problem-solving team would make for exciting operation research. At the very least, cooperation and knowledge sharing enhances the efficiency of problem solving. In a problem-solving team, the knowledge regarding the definition of the decision problem resides in the individual seeking to make a decision. The issue is that of relevance to the decision problem as perceived by the decision maker, not the analyst.

History and the Telling of Stories

It is not unreasonable to expect of the decision analyst to ensure that the analysis presented to the decision maker carries relevance to the decision maker's situation. What are the criteria of relevance? Where would the analyst find these criteria? Clues to relevancy may indeed be obtained by exploring the story told by the decision maker. The criteria of relevance may also be gleaned from the history of the decision maker. It has been said that "storytelling is a relentless human urge, and its power

forges with memory to become the foundation of history." (Annenberg/CPB, 2000a). Clues to relevancy may be found in both the decision maker's internal history and external history. The internal history accounts for the decision maker's sentiments, motivations, psychology, and personal experiences and conditions. The external history presents a public and social accounting of what transpired, even if by a third party. The story told by a person whose eyesight is restored by a surgeon would differ markedly from the same story told by the surgeon (Dhir, 1990). The analysis of a problem described by a decision maker must consider these different histories. Niebuhr (1989) states:

Events may be regarded from the outside by a nonparticipating observer; then they belong to the history of things. They may be apprehended from within as items in the destiny of persons and communities; then they belong to a life-time and must be interpreted in a context of persons with their resolutions and devotions. (Niebuhr, 1989, p. 31)

It is noteworthy that, in general, the study of external history is impersonal. Such a study may deal with stories of objects, things, ideas, interests, movements, and human beings—but essentially as a thing or an element. The study of internal history, however, deals with stories of a personal nature. These are stories not of ideas or things, but of selves and of the soul itself.

In addition to enhancing the efficiency of problem solving, cooperation and knowledge sharing improves the relevancy of the decision analyst's work. However, the challenge is a formidable one. The character of the decision maker is ever changing, responsive to experiences encountered and utilities derived. The adaptability of the decision maker to the environment in which the decision problem resides also makes the decision maker supple. Therefore, the story told by him or her is subject to many interpretations. History, too, has its limitations. Professor Donald L. Miller of Lafayette College describes history as a "crippled discipline." According to him, history is "a discipline

that can't get at the truth." Storytelling, too, is flawed. As Professor Miller describes it, one's narrative is "a brain-washer" based on one's "own point of view and perspective" (Annenberg/CPB, 2000b). Yet, it is this personal point of view that defines the decision problem. Therefore, knowledge of the relevant history, crippled or otherwise, is essential to the analysis of the decision.

Decision Analysis with and for Liberal Arts

This brings us to the crux of the issue. The decision analyst has much to gain through the study of liberal arts. Also, the decision analyst has much to contribute to the liberal arts. Virginia Schraff, a historian at the University of New Mexico, stipulates that history must answer true/false questions all the time (Annenberg/CPB, 2000a). The same is true for decision analysis. The criteria of relevance require that throughout the process of analyzing a decision problem, the analyst copes with recurring true/false questions. The analyst must continually ascertain those facts that inform the decision maker's narrative, or the history that defines the decision problem as told by the decision maker. The analyst must do this to put flesh and blood on the bones. Decision analysis is more than computations with figures and statistics. The decision analyst, like the historian, must cope with "the realm of the undecidable" (Annenberg/CPB, 2000a), along with the associated ethical challenges. H. Richard Niebuhr offers us insights into how story and history provide meaning in our lives, actions and behavior, and information on the standards of behavior we refer to as morality, and on the standards of beliefs supporting a particular view of morality we refer to as ethics. In Niebuhr's own words:

It is one thing to perceive from a safe distance the occurrences in a stranger's life and quite a different thing to ponder the path of one's own destiny, to deal with the why and whence and whither of one's own existence. (Niebuhr, 1989, p.29)

Problems facing the decision maker usually transcend disciplines. Yet, we in the business of analyzing decision problems have been particularly inefficient in benefiting from a wide range of disciplines available to us. While increasing emphasis is being placed in our business schools on the assurance of cross-functionality in our curriculum, this crossing of the boundaries is generally limited to those of functional areas within business administration.

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The question is whether the analytic treatment of the decision-making process accounts for the broader consideration of human condition. There is much at stake. My colleagues in liberal arts tell me that narrating stories creates a culture. In operations research, the language we use is that of mathematics. It is seldom the language of the decision maker. If we were to use the language of the decision maker as well, applied mathematics would make for some good operations research and change the culture of our practice. Also, my liberal arts colleagues tell me that good drama results from well-conceived actions, executed in a timely fashion. Good actions result from good decisions. Applied mathematics with some drama could result in good operations research. With the knowledge of liberal arts, we could expand the realm of operations research application.

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