

## From the Editors...

L. Robin Keller

Operations and Decision Technologies, The Paul Merage School of Business, University of California, Irvine,  
Irvine, California 92697-3125, lrkeller@uci.edu

Kelly M. Kophazi

Institute for Operations Research and The Management Sciences, Hanover, Maryland 21076, kmkophazi@earthlink.net

For this *Decision Analysis* issue, our “From the Editors...” column is co-authored with Managing Editor Kelly M. Kophazi to highlight her contributions to the success of our journal. We report on our success in having *Decision Analysis* widely known throughout the world, as measured by the country locations of our published and submitting authors, and our associate editors’ affiliations. This issue begins with an article by Mort Webster on “Incorporating Path Dependency into Decision-Analytic Methods: An Application to Global Climate-Change Policy.” Next is an article on “Eliciting Subjective Probabilities Through Exchangeable Events: An Advantage and a Limitation,” by Aurélien Baillon. In our third article, Niklas Varemán provides a provocative philosophical analysis on “Norms and Descriptions.” Our final article, by Izack Cohen, is on “Improving Time-Critical Decision Making in Life-Threatening Situations: Observations and Insights.”

*Key words:* decision analysis; climate change policy; environment; applications: energy; applications: infrastructure decisions; path-dependency; probability: elicitation; source of uncertainty; support theory; event splitting effect; expert judgment; communication of decision analysis insights; decision analysis theory; descriptive methods; modeling; normative models; time pressure; applications: medical; applications: military; heuristics; editorial

*If a man will begin in certainties, he shall end in doubts,  
but if he will be content to begin with doubts, he shall end  
in certainties.*

Sir Francis Bacon (1605)

Sabine Bernotat-Danielowski shared this issue’s opening quote with the audience in her keynote speech at this year’s Decision Analysis Affinity Group<sup>1</sup> conference. Because of her role as the executive over the decision analysis efforts at Daiichi Sankyo Pharma Development, conference organizer Kazuo Ezawa invited her to open the conference with her talk on “Decision analysis from the executive level perspective: meaningful decision support or analysis paralysis?” We hope that Sir Francis Bacon would have been happy to discover that the decision-analysis process can aid in gaining certainty that the chosen path is the right one, despite uncertainties in the problem domain.

This issue’s “From the Editors...” column is co-authored with Managing Editor Kelly M. Kophazi. In

addition to describing the papers in this issue, we report on the recent pattern of submissions. We also report on the view of our journal from the perspective of the editorial office.

Having entered our fifth year of publication, we are pleased that our journal is now known throughout the world. Our six associate editors are located in four different countries. Over the last year and a half we have published papers from authors in Australia, Canada, France, Germany, Israel, Italy, Norway, Portugal, Spain, Sweden, The Netherlands, United Kingdom, and the United States. Over the same time period, we received submissions from authors in more than 25 countries, across five continents. A broad variety of papers have appeared in *Decision Analysis*, spanning theory, application, assessment methodologies, experiments, and surveys. Descriptions of the papers in each recent issue are in the “From the Editor...” columns by Keller (2007a,b,c; 2008) and Keller et al. (2007).

<sup>1</sup> <http://www.daag.net/>.

The full text versions of these editorials are available, along with the newly instituted author biographies and photos section, from our journal's online site (<http://da.journals.informs.org/> from Highwire press).

In addition to our journal's scholarly contributions, we will mention just a few ways that our journal has received attention from members of the public in the past year. In the INFORMS headquarters office, as the paper on a woman's biological clock decision by Ralph Keeney and Dinah Vernik (2007) was in the pre-production process, the topic generated a lot of discussion among the women of the INFORMS staff. It was as if the paper were a hot topic on the television show "The View." The paper also subsequently received coverage in the popular press (e.g., Bryner 2007). According to our Production Editor, Miranda Walker, "This paper was discussed by more INFORMS staff members than any other one that I can remember in recent years." For the Excel decision model and a brief streaming video clip with Keeney and Vernik talking about their paper, see <http://www.fuqua.duke.edu/news/clock/>. We also recently received a "letter to the editor" in the INFORMS office regarding the Feng and Keller (2006) paper on a multiple objective decision analysis for terrorism protection. The writer advocated wide-spread distribution of potassium iodide ahead of time, so it could be available for pregnant women and children to take at the time of a nuclear incident releasing radioactive iodine, to protect the thyroids of young children (or soon to-be-born children) from the risk of thyroid cancer.

As we discussed how the general public views the field of decision analysis in preparing this article, we shared how we think about decisions involving probabilistic risk. One of us (Kelly) has used a modified computer game set up by her husband and played the game repeatedly to gain understanding of just how unusual rare events can be. To get an idea of how low a 1 in 100,000 chance is, one of us (Robin) likes to picture in her mind the 100,000 seats in the Rose Bowl football stadium in Pasadena, California and imagine being in the one seat that wins the lottery or has an adverse health event.

In our first article, Mort Webster tackles the complex problem of global climate change policy with a new approach to incorporate path dependency into

decision-analytic methods. Since policy making for climate change involves sequences of decisions over very long time periods, it is possible to reduce uncertainty and revise decisions along the way. But, political systems can exhibit path dependency, which is a force that makes large policy shifts in the future difficult and rare, possibly resulting in relatively small incremental changes for future decisions. Webster (2008) explores how to make decisions to take into account such path dependency. Earlier articles in *Decision Analysis* (Gregory et al. 2005, Hoffmann et al. 2007) address the use of decision analysis to guide public policy decisions and Keefer et al. (2004) describe applications in a variety of arenas, including climate change policies.

In our second article, Aurélien Baillon (2008) presents a new approach for eliciting subjective probabilities through exchangeable events, and presents the results of an experiment that elicits probabilities through this exchangeable events method. Two events are considered "exchangeable" if the decision maker is indifferent to permutations of their outcomes. Prior articles in *Decision Analysis* on elicitation of probabilistic information include Kilgour and Gerchak (2004), van Dorp et al. (2007), and Winkler and Clemen (2004).

Next, Niklas Varemán (2008) provides a provocative philosophical analysis on "Norms and Descriptions," in which he asks whether a decision theory can really be normative or descriptive in its essence. He argues that a decision theory can be used in either a normative or a descriptive way, despite any original conception of whether the theory is, in essence, aimed at being normative or descriptive (or prescriptive). The June 2004 issue of *Decision Analysis* contains a number of papers addressing some philosophical issues on decision analysis and decision language (Howard 2004a, b; Brown 2004; Keeney 2004; Kirkwood 2004; Smith 2004).

Malcolm Gladwell (2005) argues in his book *Blink* that many real life decisions are made rapidly—in the blink of an eye. (*Trivia question*: Among books that are (at least somewhat) related to our field, name four that are known by a single word title, followed by a subtitle. Such a title might be, e.g., *Decisions: Analysis Can Help You Make the Right Choices*.)<sup>2</sup> When we

<sup>2</sup> Trivia answer: Answers will vary; here are four one-word titled books that are in Robin's house (you can guess which ones her

talked above about Keeney and Vernik's (2007) paper in the context of the time pressure from the biological clock, the decision's time period was over many years. Our next paper addresses rapid decisions that might be made in one or two blinks of an eye. Izack Cohen (2008) in "Improving Time-Critical Decision Making in Life-Threatening Situations: Observations and Insights" addresses the key distinctive features in time-sensitive decision making. He provides two time-sensitive decision cases, one on emergency medical care on a battlefield and one on an airplane pilot's decision to eject from a plane in mechanical trouble. This paper overlaps with the field of naturalistic decision making and contains references to studies in that area. Cohen focuses on examining actual decisions in the field, which often involve time pressure and high stakes.

We are pleased to welcome Jeffrey S. Stonebraker to the editorial board. At the beginning of 2008, *Decision Analysis* moved to the online manuscript submission and review system, Manuscript Central, which is also used by other journals published by INFORMS. Please check our website (<http://da.pubs.informs.org/>) for the latest information on the submission process and the editorial team.

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fantasy baseball-playing economist husband acquired): *Blink* by Gladwell (2005), *Nudge* by Thaler and Sunstein (2008), *Freakonomics* by Levitt and Dubner (2005), and *Moneyball* by Lewis (2003). Aside: Chapter 3 in *Freakonomics* is about Robin's University of California, Irvine colleague marketing professor Alladi Venkatesh's son Sudhir "Sid" Venkatesh, who lived two doors down from her in Irvine. Sudhir did his University of Chicago dissertation on the economics of gangs, using what is essentially a naturalistic decision making study approach—very closely observing and interacting with the gangs. His own book on the story just came out: Venkatesh (2008), *Gang Leader for a Day: A Rogue Sociologist Takes to the Streets*.

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