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From the Editor...

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Our first two articles in this issue focus on decision analysis in practice, from charitable decisions to government policy making. Kevin F. McCardle, Kumar Rajaram, and Christopher S. Tang present "A Decision Analysis Tool for Evaluating Fundraising Tiers." Next, Rex V. Brown draws upon his years as a consultant in "Working with Policy Makers on Their Choices: A Decision Analyst Reminisces." The next two articles are on aggregating probability judgments from multiple experts. Ali E. Abbas presents "A Kullback-Leibler View of Linear and Log-Linear Pools." The final article, on "Combining the Opinions of Experts Who Partition Events Differently," is by Robert F. Bordley. The call for papers on auctions for a special issue in memory of Michael Rothkopf is also included in this issue.

Key words: applications: government; applications: infrastructure decisions; applications: public policy; charitable giving; decision analysis; expert judgment; forecasts: combining; incoherence; opinion pools; KL-measure; organizational studies: motivation-incentives; optimization; probability: combining; probability: elicitation; probability: entropy; probability: group; professional practice; probability scoring rules; utility functions: Cobb-Douglas; editorial

The charity that is a trifle to us can be precious to others.
Homer

I am often encouraged by charitable organizations to increase my donation level so I can reach the next tier of recognition, apparently going beyond Homer's advice above which might evoke a modest donation, but not a more generous one. Sometimes, I am on the other side trying to obtain more generous donations, such as increasing donations to my university. Our first paper applies a decision analysis approach to answer the question of how a charity should set the cutoff levels for each tier. In "A Decision Analysis Tool for Evaluating Fundraising Tiers," Kevin F. McCardle, Kumar Rajaram, and Christopher S. Tang constructed a utility function model of donors who need to decide their donation amount, in the face of different tier levels. The basic idea is that if a person originally plans on giving a specific amount, when the donor sees that the planned donation is near a cutoff for a higher recognition tier, the donor may choose to increase the planned donation to reach the cutoff level and achieve the extra prestige. Using data on donations to a private high school, McCardle et al. (2009) demonstrate their decision analysis tool for a charity to evaluate the effectiveness of the cutoff levels for different tiers.[1] McCardle previously contributed to *Decision Analysis* on how to divide an estate in Lippman and McCardle (2004). Other practical applications of decision analysis are in Keefer et al. (2004).

Davy Crockett, a frontiersman and member of the U.S. Congress in the early 1800s, said "We have the right as individuals to give away as much of our own money as we please in charity; but as members of Congress we have no right to appropriate a dollar of the public money." Now we move on from charity decisions to government policy decisions, keeping those words from the "King of the Wild frontier" in mind.[2]

In our next article, Rex V. Brown provides insights from his 40-year career as a decision analysis consultant to policy makers. In "Working with Policy Makers on Their Choices: A Decision Analyst Reminisces," Brown (2009) describes a variety of cases at a national government level, with particular attention

[1] This approach is also potentially generalizable to another arena, that of customer prestige levels. Having more than once taken an extra trip on my chosen airline to earn enough miles to reach another tier, I can confess that the tier cutoff level definitely affected my behavior. (And I just got my new "Platinum level" card in the mail today while writing this!)

[2] http://en.wikipedia.org/wiki/Davy_Crockett.

to clients' private, political, and bureaucratic interests. For example, the help he provided has often had more to do with validating or advocating actions than with helping policy makers make up their own minds. He candidly discusses challenges and dilemmas for the consultant. Brown's (2004) previous contribution to *Decision Analysis* was a comment on Ron Howard's (2004) article on decision analysis terminology. French et al. (2007) and Gregory et al. (2005) also addressed how decision analytic approaches can improve public policy decisions.

The next two papers have great potential to be of use for decision analysis practice because they discuss methods to combine probability judgments from different experts and their interpretation. In our third article, Ali E. Abbas presents "A Kullback-Leibler View of Linear and Log-Linear Pools." He shows that, although linear and log-linear pools are widely used methods for aggregating belief, we should think carefully about the actual problem we are solving when proposing these pools as an aggregation methodology. Framing the aggregation problem as a decision problem with scoring rules, he shows how the asymmetry of the Kullback-Leibler divergence measure enables the assignment of both linear and log-linear pools when used as a scoring function. Abbas (2009) then illustrates his approach with several examples. Abbas contributed earlier to *Decision Analysis* on probability assessment (Abbas et al. 2008) and utility (Abbas and Howard 2005, Abbas 2007). Prior papers in *Decision Analysis* include ones on scoring rules by Bickel (2007), Johnstone (2007), and Kilgour and Gerchak (2004) and on information aggregation by Budescu and Yu (2006) and Hoffmann et al. (2007).

In our final article, Robert F. Bordley presents a new method for "Combining the Opinions of Experts Who Partition Events Differently." Many prior methods for combining information from experts assume that the experts divide up the possible outcomes of an event using the same set of partitions. Bordley (2009) presents his new method and applies it to an example of a problem with an automobile (drawing upon his role at General Motors Research Laboratories) when experts from different parts of an organization (such as engineering, sales, and the executive level) have different partitions for problems, such as {propulsion, frame, body} or {drivability, comfort}. Bordley's article addresses an important practical problem—the fact that experts often think about problems using different partitions—which has been widely discussed in the psychological literature but not explicitly addressed in the extensive literature on aggregating probability assessments. In a related paper in *Decision Analysis*, Predd et al. (2008) presented a way to aggregate probabilistic forecasts from incoherent and abstaining experts.

Our discussion on probabilities leads to our *Trivia question.* Match the following people with their quotes involving taking chances or living life: Lola Lopes, Arnold Palmer, Peter Fishburn, Dale Carnegie, and Bono.[3] Here are the quotes:

(a) "I've always made a total effort, even when the odds seemed entirely against me. I never quit trying; I never felt that I didn't have a chance to win."

(b) "Take a chance! All life is a chance. The man who goes farthest is generally the one who is willing to do and dare."

(c) "As a rock star, I have two instincts, I want to have fun, and I want to change the world. I have a chance to do both."

(d) "Bernoulli's resolution of the prudent people paradox was an early version of the expected utility hypothesis."

(e) "The popular press has a fondness for stories about the risks of life. Death and destruction, pollution and pestilence, murder and mayhem: the more the merrier. So it has always been."

In conclusion, I encourage you to consider submitting a paper for our Special "Michael Rothkopf Memorial" Issue on Auctions, with guest editors Robert Bordley and Elena Katok. Consistent with the late Prof. Rothkopf's research interests, this special issue will focus on auctions (and, more generally, market design), as well as their application to energy and related public policy issues. There will also be a memorial conference[4] to remember Mike Rothkopf, who lived life well, at Pennsylvania State University on June 1–3, 2009.

[3] *Trivia answer:* (a)—Palmer, (b)—Carnegie, (c)—Bono, (d)—Fishburn (1991, p. 27), (e)—Lopes (1992, p. 57).

[4] Attendance at the conference is not a requirement to submit to the special issue, http://www.smeal.psu.edu/rothkopf-conference. See http://www.informs.org/site/DA/ and http://www.informs.org/site/DA/index.php?c=10&kat=Special+Issues.

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