From the Editors...

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This issue's "From the Editors" column is coauthored with all the associate editors to emphasize their major role in the leadership of the journal. Our first article is on "Proper Scoring Rules, Dominated Forecasts, and Coherence," by Mark J. Schervish, Teddy Seidenfeld, and Joseph B. Kadane. In the second article, Jason R. W. Merrick provides an overview of "Bayesian Simulation and Decision Analysis: An Expository Survey." Our third article, by Barry R. Cobb and Atin Basuchoudhary, is on "A Decision Analysis Approach to Solving the Signaling Game." The next article, by Robert T. Clemen and James E. Smith, is "On the Choice of Baselines in Multiattribute Portfolio Analysis: A Cautionary Note." In our final article, Russ Garber presents "An Interview with Ronald A. Howard."

Key words: Bayesian statistics; Brier score; decision analysis; decision trees; finite additivity; game theory; influence diagrams; interview; mixed strategy; multiple objective decision analysis; Nash equilibrium; operations research practice; portfolio optimization; resource allocation; signaling game; simulation; editorial

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Chance is always powerful. Let your hook always be cast; in the pool where you least expect it, there will be fish.
                                                                    Ovid

This column is coauthored with our associate editors to recognize another year of their editorial leadership. As we leave 2009, we are also printing our annual thank you to our referees. Our authors, editors, and referees have successfully teamed to launch our journal successfully. As one indication of our success, we are pleased to report that *Decision Analysis* is now covered by the Social Science Citation Index, beginning with Volume 6, Issue 1 (March 2009).[1]

As we enter 2010, we will begin the second and final three-year term of this editorship. Coming up in 2010 is the Special Issue in Memory of Michael Rothkopf, which has a number of papers on auctions.

[1] Our INFORMS Publications staff members are attempting to get coverage back to Volume 1.

We thank associate editor Greg Parnell for his excellent leadership; his term is ending and he remains on the board. Welcome to new associate editors Ali Abbas (Univ. of Illinois at Urbana-Champaign), David Budescu (Fordham Univ.), and George Wu (Univ. of Chicago), plus, as of July 1, 2010, Vicki Bier (UW Madison). Joining the editorial board are Erin Baker (Univ. of Mass. Amherst), J. Eric Bickel (UT Austin), Han Bleichrodt (Erasmus Univ.), Enrico Diecidue (INSEAD), and Kenneth C. (Casey) Lichtendahl Jr. (Univ. of Virginia).

Our first three articles in this issue involve chance, as represented in probabilistic models. These papers cover coherent probabilities, the use of Bayesian probabilistic simulation, and the representation of the actions of others in a game setting probabilistically. It appears from the quote at the beginning of this column that Ovid might agree with the game theory

concept of a mixed strategy for fishing and for other decision domains. Our fourth article deals with choosing multiattributed items (projects, capital allocations, stocks) to include in a portfolio. The final article is an interview with Ron Howard.

In our first article, Mark J. Schervish, Teddy Seidenfeld, and Joseph B. Kadane address "Proper Scoring Rules, Dominated Forecasts, and Coherence." The concept of coherent probabilities was presented by de Finetti (1974, 1981), using either a gambling approach or a quadratic probability scoring rule. Schervish et al. (2009) provide conditions under which a general strictly proper scoring rule can replace the quadratic scoring rule. Prior related papers in *Decision Analysis* on scoring rules include Abbas (2009), Bickel (2007), Johnstone (2007), and Kilgour and Gerchak (2004).

Next, in "Bayesian Simulation and Decision Analysis: An Expository Survey," Jason R. W. Merrick provides a comprehensive survey of Bayesian simulation. Merrick (2009) aims to encourage decision analysts to pursue promising research areas within Bayesian simulation. Prior papers in *Decision Analysis* by Jason Merrick include Merrick et al. (2005a) and Merrick (2008) on expert judgments, and Merrick et al. (2005b) on a multiple-objective decision analysis for watershed improvement. Jason Merrick also provides leadership to the journal by serving as an associate editor.

Now it is time for our *Trivia question*: Which of the following are true about the Bayes referred to in Bayesian simulation or Bayesian statistics?

A. Reverend Thomas Bayes started the modern Christmas celebration.

B. The late Ward Edwards wanted to lead a procession to Bayes' tomb in England.

C. He proved what we now call Bayes' Theorem.

D. He wrote "Statistical Techniques for Simulation Models."

E. He wrote "To Bayes or Not to Bayes."

See the footnote for our Trivia answer.[2]

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[2] *Trivia answer:* A: False, but Merry Christmas and Happy Holidays. B: True, for a photo of the tomb in Moorgate, England, see a link in http://www.gap-system.org/~history/Biographies/Bayes.html. C: True, in Bayes (1763), "An Essay Towards Solving a Problem in the Doctrine of Chances"; http://rstl.royalsocietypublishing.org/content/53/370. D: False, this article is by A. J. Bayes (1970) in *Australian Computer Journal*. E: False, see Budescu and Yu (2006).

Our third article, by Barry R. Cobb and Atin Basuchoudhary, is on "A Decision Analysis Approach to Solving the Signaling Game." Building upon a paper in *Decision Analysis* by van Binsbergen and Marx (2007), Cobb and Basuchoudhary (2009) present a modified decision-theoretic approach to solve two-player games, where each player has a separate decision tree. They demonstrate their approach for a multistage signaling game. A prior paper in *Decision Analysis* by Cobb (2007) considered influence diagrams with continuous decision variables and non-Gaussian uncertainties. Other prior game theory-related papers in *Decision Analysis* include Cavusoglu and Raghunathan (2004), Lippman and McCardle (2004), and Rothkopf (2007).

Next, by Robert T. Clemen and James E. Smith, is "On the Choice of Baselines in Multiattribute Portfolio Analysis: A Cautionary Note." Clemen and Smith (2009) discuss how analysts should take care in deciding upon an appropriate baseline score for *not* doing a project in multiattribute portfolio analysis. This is valuable guidance for both practitioners and teachers of multiattribute decision analysis. Prior articles in *Decision Analysis* by these authors include Winkler and Clemen (2004) on combining correlation assessments, Bickel and Smith (2006) on sequential exploration, Smith (2004b) on risk sharing and corporate risk attitudes, and short comments on two papers in Smith (2004a, 2005). Clemen served, along with Don Kleinmuntz, as the founding editor-in-chief of *Decision Analysis*. Both Clemen and Smith currently serve on the editorial board.

Our final paper is "An Interview with Ronald A. Howard" by Russ Garber. This wide-ranging interview spans from the early years of decision analysis to the present. Experienced decision analysts will welcome the look back in Garber (2009), and newcomers to the field will benefit from the historical perspective. Prior work in *Decision Analysis* by Ron Howard includes Howard (2004) on precise decision language, Abbas and Howard (2005) on attribute dominance utility, and Howard and Matheson (2005a, b) on influence diagrams.

References

Abbas, A. E. 2009. A Kullback-Leibler view of linear and log-linear pools. *Decision Anal.* **6**(1) 25–37.

Abbas, A. E., R. A. Howard. 2005. Attribute dominance utility. *Decision Anal.* **2**(4) 185–206.

Bayes, A. J. 1970. Statistical techniques for simulation models. *Australian Comput. J.* **2** 180–184.

Bayes, T. 1763. An essay towards solving a problem in the doctrine of chances. (A letter from the late Reverend Mr. Thomas Bayes, F. R. S. to John Canton, M. A. and F. R. S. The letter was sent to the Royal Society by Richard Price.) *Philos. Trans. Roy. Soc. London* **53**(Read December 23, 1763) 370–418.

Bickel, J. E. 2007. Some comparisons among quadratic, spherical, and logarithmic scoring rules *Decision Anal.* **4**(2) 49–65.

Bickel, J. E., J. E. Smith. 2006. Optimal sequential exploration: A binary learning model. *Decision Anal.* **3**(1) 16–32.

Budescu, D. V., H.-T. Yu. 2006. To Bayes or not to Bayes? A comparison of two classes of models of information aggregation. *Decision Anal.* **3**(3) 145–162.

Cavusoglu, H., S. Raghunathan. 2004. Configuration of detection software: A comparison of decision and game theory approaches. *Decision Anal.* **1**(3) 131–148.

Clemen, R. T., J. E. Smith. 2009. On the choice of baselines in multiattribute portfolio analysis: A cautionary note. *Decision Anal.* **6**(4) 256–262.

Cobb, B. R. 2007. Influence diagrams with continuous decision variables and non-Gaussian uncertainties. *Decision Anal.* **4**(3) 136–155.

Cobb, B. R., A. Basuchoudhary. 2009. A decision analysis approach to solving the signaling game. *Decision Anal.* **6**(4) 239–255.

de Finetti, B. 1974. *The Theory of Probability.* John Wiley & Sons, New York.

de Finetti, B. 1981. The role of "Dutch books" and "proper scoring rules." *British J. Philos. Sci.* **32** 55–56.

Garber, R. 2009. An interview with Ronald A. Howard. *Decision Anal.* **6**(4) 263–272.

Howard, R. A. 2004. Speaking of decisions: Precise decision language. *Decision Anal.* **1**(2) 71–78.

Howard, R. A., J. E. Matheson. 2005a. Influence diagrams. *Decision Anal.* **2**(3) 127–143.

Howard, R. A., J. E. Matheson. 2005b. Influence diagram retrospective. *Decision Anal.* **2**(3) 144–147.

Johnstone, D. J. 2007. The parimutuel Kelly probability scoring rule. *Decision Anal.* **4**(2) 66–75.

Kilgour, D. M., Y. Gerchak. 2004. Elicitation of probabilities using competitive scoring rules. *Decision Anal.* **1**(2) 108–113.

Lippman, S. A., K. F. McCardle. 2004. Sex, lies, and the Hillblom estate: A decision analysis. *Decision Anal.* **1**(3) 149–166.

Merrick, J. R. W. 2008. Getting the right mix of experts. *Decision Anal.* **5**(1) 43–52.

Merrick, J. R. W. 2009. Bayesian simulation and decision analysis: An expository survey. *Decision Anal.* **6**(4) 222–238.

Merrick, J. R. W., J. R. van Dorp, A. Singh. 2005a. Analysis of correlated expert judgments from extended pairwise comparisons. *Decision Anal.* **2**(1) 17–29.

Merrick, J. R. W., G. S. Parnell, J. Barnett, M. Garcia. 2005b. A multiple-objective decision analysis of stakeholder values to identify watershed improvement needs. *Decision Anal.* **2**(1) 44–57.

Rothkopf, M. H. 2007. Decision analysis: The right tool for auctions. *Decision Anal.* **4**(3) 167–172.

Schervish, M. J., T. Seidenfeld, J. B. Kadane. 2009. Proper scoring rules, dominated forecasts, and coherence. *Decision Anal.* **6**(4) 202–221.

Smith, J. E. 2004a. Precise decision language (comment on Howard 2004). *Decision Anal.* **1**(2) 79–81.

Smith, J. E. 2004b. Risk sharing, fiduciary duty, and corporate risk attitudes. *Decision Anal.* **1**(2) 114–127.

Smith, J. E. 2005. Alternative approaches for solving real-options problems: (Comment on Brandão et al. 2005). *Decision Anal.* **2**(2) 89–102.

van Binsbergen, J. H., L. Marx. 2007. Exploring relations between decision analysis and game theory. *Decision Anal.* **4**(1) 32–40.

Winkler, R L., R. T. Clemen. 2004. Multiple experts vs. multiple methods: Combining correlation assessments. *Decision Anal.* **1**(3) 167–176.