

JUDGMENT / DECISION MAKING

NEW OFFICERS

The 1992 J/DM meeting marked a turnover in the Executive Board. Frank Yates was named the President-Elect for 1993. Daniel Kahneman will move from that position to President and Robin Hogarth will serve a term as Past President. Reid Hastie will take over Frank's place on the Executive Board and serve for next year. Joining him and Barbara Mellers (in her second year) will be Janet Sniezek to serve the first of her three years on the Board.

TEACHING FORUM

A new feature of the 1992 annual meeting was a Teaching Forum held during the Sunday evening poster session. The forum was a great success, with handouts being exhausted early in the program. For those who were not able to secure a copy of one or more handouts, please see the notice on p. 3 of the Newsletter.

LOOKING AHEAD

The 1993 meeting is scheduled for November 7-8, 1993, in Washington, D.C. More information from the 1992 meeting in St. Louis will appear in the next issue of the newsletter.

Shawn Curley

NEWSLETTER

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SOCIETY FOR JUDGMENT AND DECISION MAKING

1993 EXECUTIVE BOARD

Daniel Kahneman, *President*
 J. Frank Yates, *President-Elect*
 Robin Hogarth, *Past President*
 Reid Hastie, *1992-1993*
 Barbara Mellers, *1992-1994*
 Janet A. Sniezek, *1993-1995*
 Terry Connolly, *Secretary/Treasurer*

J/DM NEWSLETTER

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FROM THE EDITOR . . .

The *JIDM Newsletter* welcomes submissions from individuals and groups. However, we do not publish substantive papers. Book reviews will be published. If you are interested in reviewing books and related materials, please write to the editor.

There are few ground rules for submissions. In order to make the cost of the *JIDM Newsletter* as low as possible, please submit camera-ready copy. This means that the copy should be typed single-spaced on white 8½ by 11 paper. If possible, use a carbon or film ribbon. Please mail flat -- do not fold. A better alternative is to submit your contribution via EMAIL or in an ASCII file on a 3.5" or 5.25" diskette.

Subscriptions: Subscriptions are available on a calendar year basis only. Requests for information concerning membership in the Society for Judgment and Decision Making should be sent to Terry Connolly.

Address correction: Please check your mailing label carefully. Because the *JIDM Newsletter* is usually sent by bulk mail, copies with incorrect addresses or which are otherwise undeliverable are neither forwarded nor returned. Therefore, we have no way of knowing if copies are delivered. Address changes or corrections should be sent to Terry Connolly.

Mailing Labels: Some readers may wish to send reprint lists or other material to people listed in the directory. Contact Terry Connolly for details.

J/DM Electronic Mail Directory: The Society maintains an EMAIL directory. To add your name to the *JIDM Electronic Mail Directory* (or to receive a copy of the electronic directory) contact Terry Connolly.

1992 JDM TEACHING FORUM PRESENTATIONS

There was considerable interest in the new Teaching Forum at the recent 1992 JDM meeting in St. Louis. Unfortunately, all the presenters rapidly ran out of the materials they had brought. Thus, if you attended the meeting but were unable to get copies of the items you wanted (or even if you did not come to the meeting at all), you can use the present opportunity to obtain the materials you would like. Simply check off the name of the presenter below and send this sheet to Frank Yates. Alternatively, you could send the request via e-mail.

- _____ Colin Camerer, University of Chicago, Teaching Issue Note:
 "Natural Examples of Availability and Representativeness Thinking"
- _____ Len Dalglish, University of Queensland, Syllabus:
 "Judgment and Decision Making"
- _____ Syllabus:
 "Applied Decision Making"
- _____ Baruch Fischhoff, Carnegie Mellon University, Syllabus:
 "Behavioral Decision Making"
- _____ Kenneth Hammond, University of Colorado, Syllabus:
 "Human Judgment and Social Policy."
- _____ David R. Holtgrave, Center for Disease Control, Teaching Technique Note:
 "Teaching Clinical Decision Making in a Family Practice Clerkship"
- _____ Alice M. Isen, Cornell University, Syllabus:
 "Affect and Decision Making"
- _____ Lynda M. Kilbourne, Texas A&M University, Teaching Technique Note:
 "Decision Making in Human Resource Management: A Classroom Simulation."
- _____ Don Kleinmuntz, University of Illinois, Syllabus:
 "Managerial Decision Making"
- _____ Syllabus:
 "Decision Processes and Models for Accountancy."
- _____ R. Duncan Luce, University of California, Irvine, Teaching Technique Note:
 "Summary of Major Features of Conditional Probability and Bayes's Theorem"
- _____ Scott Plous, Wesleyan University, Teaching Technique Note:
 "Class Survey"
- _____ Lori Van Wallendael, University of North Carolina at Charlotte, Teaching Issue Note:
 "J/DM Representation in the Introductory Psychology Course"
- _____ J. Frank Yates, University of Michigan, Syllabus:
 "Decision Processes"
- _____ Teaching Technique Note:
 "Problem-Focused Search and Writing Assignments."

Contact person: Frank Yates, Judgment and Decision Laboratory,
 Department of Psychology, University of Michigan, 330 Packard Road,
 Ann Arbor, MI 48104-2994, USA. (Fax: 313-747-3693)

POSITIONS AVAILABLE**INDIANA UNIVERSITY-PURDUE UNIVERSITY AT INDIANAPOLIS**

The Department of Psychology at Indiana University-Purdue University at Indianapolis (IUPUI) invites applications for an assistant professor, tenure-track position in one of its graduate areas: M.S. program in INDUSTRIAL/ORGANIZATIONAL psychology, M.S. and Ph.D. programs in CLINICAL REHABILITATION psychology, and a developing Ph.D.-level program in EXPERIMENTAL psychology with an emphasis on addictions. Special attention will be given to candidates who also have a research interest in COGNITION.

IUPUI is the third-largest university in the state, with 28,000 students. The department has 22 full-time faculty, and will be moving to new teaching and research quarters in January 1993. Send CV, reprints (limit of four) and three letters of recommendation to D.W. Rajecki, Search Committee, Department of Psychology, 1125 E. 38th St., Indianapolis, IN 46205-2810.

Review of material will begin February 15, 1993, and continue until the position is filled. Equal Opportunity/Affirmative Action Employer.

THE UNIVERSITY OF OREGON

Empirical study of decision-making. Ph.D. required. Rank open. The appointee will be a member of the Institute of Cognitive and Decision Sciences, University of Oregon and will hold a regular tenure-related position in an appropriate department. Appropriate substantive focus includes: Behavioral or experimental economics; political and sociological issues in decision-making; public or collective decision-making; institutional design; negotiations; mathematical and/or computer models of decision-processes; decision analysis; ethics and choice. A developed research program in decision making and evidence of excellence in teaching. Send resume, three letters of recommendation, select manuscripts and a statement of research objectives to John Orbell, Institute of Cognitive and Decision Sciences, Straub Hall, University of Oregon, Eugene, OR 97403 by January 10, 1993. AA/EEO Institution committed to cultural diversity.

CONFERENCES**Decision Making: Towards the 21st Century**

Papers are requested for this conference, sponsored by the Real Academia de Ciencias, which explores developments in foundations and experimentation in Decision Theory, Expert Systems, Negotiations and Multicriteria Decision Making. The conference will be held in Madrid, Spain, June 2-5, 1993. The contact person is Sixto Rios, Real Academia de Ciencias, Valverde 22, 28004 Madrid, Spain. Fax: 34-1-5325716. E-mail: dmxxi@fi.upm.es

Eighth Annual Conference on**Making Statistics More Effective in Schools of Business**

The Eighth Annual Conference on Making Statistics More Effective in Schools of Business will be held from June 10-12, 1993 at the Carlson School of Management at the University of Minnesota, Minneapolis. This year's program includes tracks on teaching and curriculum, quality management, and research partnerships among academia, industry, and government. Special sessions and events include: a tour of the Ford Motor Company Assembly Plant in St. Paul; a presentation by a team from IBM-Rochester on their experiences in winning the 1990 Malcolm Baldrige National Quality Award; plenary and workshop sessions on cooperative learning; a panel of business school deans discussing how to restore relevance to business school research; and a buffet dinner at the Hubert H. Humphrey Metrodome followed by a game between the Minnesota Twins and Oakland Athletics.

The conference is co-sponsored by the American Statistical Association, with contributions by the Minnesota Section of the American Society for Quality Control.

For more information or to receive the final program announcement and call for papers, send your name, address, and phone number to: **Professor P. George Benson, Carlson School of Management, University of Minnesota, Minneapolis, MN 55455. (612) 624-0568. FAX: (612) 626-1316.**

Thirteenth International Symposium on Forecasting**June 9-12, 1993**

Sponsored by the
International Institute of Forecasters
in collaboration with

**John H. Heinz III School
of Public Policy and Management
Carnegie Mellon University**

**Richard T. Farmer School
of Business Administration
Miami University, Ohio**

The International Symposium has had a history of highly successful conferences, including those in Philadelphia, London, Boston, Amsterdam, Vancouver, Delphi, New York, and Wellington. They have been characterized by a high degree of interaction across a wide variety of disciplines.

The Thirteenth International Symposium on Forecasting (ISF '93) will be held in Pittsburgh. Sessions will take place from Thursday, June 10 through Saturday, June 12. The meeting place is the Pittsburgh Hilton at Gateway Center.

If you are doing research that is concerned with the development, validation, use, or impacts of forecasts in management, government, education, or other areas, the symposium will likely be of interest to you. Contributions have come from researchers in a variety of areas, including:

- Judgement
- Decision Theory
- Cognitive Psychology
- Organizational Design
- Demography
- Agriculture
- Tourism
- Expert Systems
- Machine Learning
- Software Design
- Marketing
- Inventory
- Statistics
- Economics
- Numerical Analysis
- Operations Research
- Operations Management
- Accounting & Finance

The conference is scheduled at a good time. In addition to Pittsburgh's standing sports and artistic attractions, the conference coincides with the 34th Three Rivers Arts Festival and the 1993 Mellon Jazz Festival.

If you wish to organize a session, present a paper or get further information, contact the program co-chair: **Anne B. Koehler, Department of Decision Sciences, Miami University, Oxford, OH 45056.**
Internet: isf93@miamiu.acs.muohio.edu

To: Scientists and practitioners interested in Bayesian research, inference by people, machines, or a blend, evaluation and decision making by the same, decision support systems, expert systems for inference and/or decision, and the like.

From: Ward Edwards

re: **31st Annual Bayesian Research Conference**

This is your invitation to come and participate in the 31st Annual Bayesian Research Conference. The dates this year are February 11 and 12, 1993. We will meet again this year at the Sportsmen's Lodge, at the intersection of Ventura Boulevard and Coldwater Canyon Boulevard in Studio City, California.

Our format and purpose will be the same this year as in recent previous years. We will give 30-minute papers to one another about research on inference, evaluation, decision processes and problems. We always strive for a blend of basic research and applications. A mixture of behavioral and normative interests has characterized us over the years. This means that decision analysts and behavioral decision theorists will be talking to one another. In recent years a number of members of the Normative AI Systems community have been attending. So, in addition to more familiar topics like utility, probability, cognitive illusions, and the like, we will also hear about influence diagrams, formal representations of uncertainty, utility theory as a basis for control, Normative Systems as competitors to expert systems, and similar topics. Our liaison with the Audit Research community continues, so audit judgment is likely to be a topic. The School of Accounting's Audit Judgment Symposium is in Oxnard, California, on February 15 and 16. If you want an invitation, you could call Ted Mock at 213-740-4861, or write him at the School of Accounting, University of Southern California, Los Angeles, CA 90089-1421. We are as ecumenical about topics as about people; new topics that surprise me turn up each year.

A special event this year will be a report by the committee, created last year, whose mission was to explore ideas about what should happen to the Bayesian Conference when I retire. (Not that I have any intention of retiring soon--but the question must be faced.)

As old hands know, the atmosphere is informal, the discussion can get intense, and many of the best debates take place during coffee breaks or in the hospitality suite at the end of the day. This Conference is a good place to try out your latest, wildest set of ideas on a kindly, knowledgeable, and critical audience. It is not a good place to make once again the speech for which you have received plaudits for the last two years.

To get to the Sportsmen's Lodge, if you are driving, get to the Ventura Freeway, turn East from the San Diego Freeway or West from the Hollywood Freeway, exit at Coldwater Canyon Boulevard, drive South to Ventura Boulevard, and you are there; it is on the NE corner of that intersection. Those not driving have various options. If you fly into Burbank Airport and have a reservation, simply phone the Sportsmen's Lodge and they will send a van to pick you up, if it is before 10 pm. If you fly into LAX, City Shuttle, Primetime or Super Shuttle will, for a price, take you from LAX to the Sportsmen's Lodge. Flyaway Bus Service will get you to Van Nuys, which is pretty close; from there you can take a cab.

The Conference will have a registration fee of \$40 per person. There will be a hospitality room on Wednesday and Thursday nights. Those who choose to stay over Friday evening will find other colleagues who do the same; we usually have a good time. All who do are invited to join me at my house for post-Conference drinks and conversation, after which we all usually go out to dinner.

If you indicate on the questionnaire that you must talk or want to talk, you should assume that you are on the program. If you check "schedule me if time permits," bring your viewgraphs but don't be hurt if time doesn't permit. I will, as usual, rewrite the title of your talk in an effort to make it funny unless you save yourself from my often inept ministrations by making it funny in the first place.

Please let us know as soon as you can whether or not you can come. We need answers by January 28, in order that the Sportsmen's Lodge can know how many rooms to hold. If I have missed someone who should have been invited, either let me know or simply Xerox this and pass it on.

I'll see you in the Hospitality Suite on Wednesday evening, February 10, at 6:00 pm or any time after that. Do come Wednesday evening. It's a good time to visit with old friends, meet new ones, and prepare yourself for the following day's stimulation.

Registration Form

Bayesian Research Conference

February 11 and 12, 1993

Name: _____

Affiliation: _____

PLEASE FILL OUT AND RETURN BY JANUARY 28 TO:

Ward Edwards, Director
Social Science Research Institute
University of Southern California
Los Angeles, CA 90089-1111

1. Will you attend:

____ Yes
____ No

2. What accommodations would you prefer:

____ Sportsmen's Lodge Hotel
 Single Room \$82.00
 Double Room \$86.00
____ I will make my own accommodations.

3. Reservation request:

____ Wednesday and Thursday (nights of Feb. 10 and 11)
____ Wednesday, Thursday, & Friday (nights of Feb. 10, 11, 12)
____ Thursday and Friday (nights of Feb. 11 and 12)
____ Wednesday night only (Feb. 10)
____ Other (please specify:)

4. Will you speak? Topic?

5. Check one:

____ I must speak to have trip financed.
____ I must speak.
____ I would like to speak.
____ Schedule me only if time permits.

6. Audio/Visual equipment needed:

7. Additional comments: (Other appropriate invitees, please include address, special arrangements, etc.)

Please note that once again in order to hold block reservations, the registration form must be returned no later than JANUARY 28. A total count of reserved rooms must be guaranteed to the hotel two weeks prior to the meeting. Your promptness will be greatly appreciated.

Registration fee is \$40.00. Please return checks made payable to Ward Edwards along with this form. Receipts will be available at the conference.

Recent Developments in the Psychology of Judgment and Decision Making

Compiled by JAY CHRISTENSEN-SZALANSKI, PhD, MPH

Journal Articles

ARMSTRONG JS. Prediction of consumer behavior by experts and novices. *J Consumer Res.* 1991;18:251-6. Observes no difference among the predictive abilities of academicians, practitioners, and students.

BLOCK R, HARPER DR. Overconfidence in estimation: testing the anchoring-adjustment hypothesis. *Org Behav Hum Decis Proc.* 1991;49:188-207. Suggests that overconfidence occurs because people do not realistically assess their estimation ability.

BUNN D, WRIGHT G. Interaction of judgmental and statistical forecasting methods: issues & analysis. *Manage Sci.* 1991;37:501-18. Reports that expert judgmental forecasts are better than previously asserted by researchers.

CROYLE RT, WILLIAMS KD. Reactions to medical diagnosis: the role of illness stereotypes. *Basic Appl Soc Psychol.* 1991;12:227-41. Observes that people who perceived that high blood pressure was associated with achievement and competence also felt that high blood pressure was a less serious threat to one's health.

EISER JR, HOEFFNER F. Accidents, disease, and the greenhouse effect: effects of response categories on estimates of risk. *Basic Appl Soc Psychol.* 1991;12:195-210. Reports that people's notions of risk are poorly anchored numerically, but do not reflect "irrational" processing of statistical information.

FISCHHOFF B. Value elicitation. Is there anything in there? *Am Psychol.* 1991;46:835-47. Identifies conditions for which values can be well articulated by people.

GAVANSKI I, ROSKOS-EWOLDSSEN DR. Representativeness and conjoint probability. *J Pers Soc Psychol.* 1991;61:181-94. Suggests that the conjunction fallacy is more a result of people's incorrectly applying combination rules than of the representativeness heuristic.

GOSZCZYNSKA M, TYSZKA T, SLOVIC P. Risk perception in Poland: a comparison with three other countries. *J Behav Decis Making.* 1991;4:179-93. Observed considerable similarity in the basic factor structures of risk perception between Polish and American populations.

GOTLIEB JB, DUBINSKY AJ. Influence of price on aspects of consumers' cognitive process. *J Appl Psychol.* 1991;76:541-9. Suggests that price information about competing products and the credibility of advertisements need to be included in theories that seek to explain the effect of an advertised price on consumers' cognitive processes.

HOGARTH RM, GIBBS BJ, MCKENZIE CRM, MARQUIS MA. Learning from feedback: exactingness and incentives. *J Exp Psychol [Learn Mem Cogn].* 1991;17:734-52. Examines the impact of the degree to which wrong decisions are punished upon a person's performance.

KAMAKURA WA, MAZZON JA. Value segmentation: a model of the measurement of values and value systems. *J Consumer Res.* 1991;18:208-18. Uses the Rokeach value survey to identify distinct value systems within a population and to classify individuals according to them.

KEMP S. Magnitude estimation of the utility of public goods. *J Appl Psychol.* 1991;76:533-40. Suggests that magnitude estimation can be used to measure an underlying construct of the utility of public goods and services.

LAWRENCE T. Impacts of artificial intelligence on organizational decision making. *J Behav Decis Making.* 1991;4:195-214. Argues that the implementation of expert systems will lead to less complex and political decision processes.

LOEWENSTEIN G, FURSTENBERG F. Is teenage sexual behavior rational? *J Appl Soc Psychol.* 1991;21:957-86. Reports that teenagers place disproportionate weight on discomfort of using birth control and little weight on the effectiveness of the method of birth control.

MANNIX EA. Resource dilemmas and discount rates in decision making groups. *J Exp Soc Psychol.* 1991;27:379-91. Reports that changes in discount rates can alter groups' resource distribution strategies.

MARTIN SL, TERRIS W. Predicting infrequent behavior: clarifying the impact on false-positive rates. *J Appl Psychol.* 1991;76:484-7. Suggests that the false-positive rate does not affect judgments about the degree to which one individual is better than another individual.

PATRICK CJ, LACONO WG. Validity of the control question polygraph test: the problem of sampling bias. *J Appl Psychol.* 1991;76:229-38. Reports shortcomings of the most commonly used polygraph procedures.

PAUNONEN SV. On the accuracy of ratings of personality by strangers. *J Pers Soc Psychol.* 1991;61:471-7. Examines reasons for the accuracy of personality judgments made by strangers.

POLISTER P. Do medical decision analyses' largest gains grow from the smallest trees? *J Behav Decis Making.* 1991;4:121-38. Concludes that simpler trees do not outperform intuition as much as do complex trees.

PRELEC D, LOEWENSTEIN G. Decision making over time and under uncertainty: a common approach. *Manage Sci.* 1991;37:770-86. Identifies parallels between expected utility and discounted utility models.

RAVINDER HV, KLEINMUNTZ DN. Random error in additive decompositions of multiattribute utility. *J Behav Decis Making.* 1991;4:83-97. Presents conditions under which decomposition improves the consistency of multiattribute estimates.

SANTIOSO R, KUNDA Z. Ducking the collection of costly evidence: motivated use of statistical heuristics. *J Behav Decis Making.* 1991;4:161-78. Concludes that increasing the cost of collecting evidence contributes to people's using the aggregation principle.

SCHKADE DA, KILBOURNE LM. Expectation-outcome consistency and hindsight bias. *Org Behav Hum Decis Proc.* 1991;49:105-23. Reports that the hindsight bias is significantly larger when outcomes are inconsistent with expectations.

SCHWARTZ N, BLESS H, STRACK F, et al. Ease of retrieval as information: another look at the availability heuristic. *J Pers Soc Psychol.* 1991;61:195-202. Shows that the impact of an informational value was eliminated when its informational value was discredited.

SHILOH S, LAROM S, BEN-RAFAEL Z. The meaning of treatments for infertility: cognitive determinants and structure. *J Appl Soc Psychol.* 1991;21:855-74. Observes several differences between fertile and infertile women's judgments toward fertility treatments.

SMITH CA, DOBBINS CJ, WALLSTON KA. The mediational role of perceived competence in psychological adjustment to rheumatoid arthritis. *J Appl Soc Psychol.* 1991;21:1218-47. Suggests that self-competence mediated patients' adjustment to chronic rheumatoid arthritis.

SMITH JF, KIDA T. Heuristics and biases: expertise and task realism in auditing. *Psychol Bull.* 1991;109:472-89. Questions the generalizability of the cognitive bias and heuristic literature to expert auditors.

STONE DN, SCHKADE DA. Numeric and linguistic information representation in multiattribute choice. *Org Behav Hum Decis Proc.* 1991;49:42-59. Observes that relative to numbers, words lead to more alternative-based information searches

and less compensatory behaviors.

SWITZER FS, SNIJEZEK JA. Judgment processes in motivation: anchoring and adjustment effects on judgment and behavior. *Org Behav Hum Decis Proc.* 1991;49:208-29. Observes that both relevant information and irrelevant information have anchoring effects on judgment but do not have concomitant effects on behavior.

WEINSTEIN ND, SANDMAN PM, ROBERTS NE. Perceived susceptibility and self-protective behavior: a field experiment to encourage home radon testing. *Health Psychol.* 1991;10:25-33. Found that perceptions of susceptibility and illness severity were significantly correlated with orders of radon test kits.

WALLER WS, MITCHELL TM. Conditional probability judgments: effects of imaging vs experiencing the conditioning event. *Org Behav Hum Decis Proc.* 1991;49:302-25. Reports the effect that a conditioning event has on a person's judgment of conditional probabilities.

WINKLER RL. Ambiguity, probability, preference, and decision analysis. *J Risk Uncertain.* 1991;4:285-97. Argues that the effects of ambiguity on decision making operate by way of the decision maker's values rather than probability estimates.

YATES JF, McDANIEL LS, BROWN ES. Probabilistic forecasts of stock prices and earnings: the hazards of nascent expertise. *Org Behav Hum Decis Proc.* 1991;49:60-79. Argues that better-trained judges made less accurate forecasts because they mistakenly used non-predictive cues.

ACKNOWLEDGEMENT

Recent Developments in the Psychology of Judgment and Decision Making and *Recent Developments in Medical Decision Making* are prepared by Jay J. Christensen-Szalanski and are reprinted from *Medical Decision Making* with the permission of Hanley & Belfus, Inc.

Medical Decision Making is an international journal of the Society for Medical Decision Making (SMDM) published quarterly by Hanley & Belfus, Inc., 210 South 13th Street, Philadelphia, PA 19107.

The journal is devoted to the analysis of decision making as it applies to clinical practice, to the establishment of health care policies, and to the administration of health care programs. SMDM membership includes a journal subscription. Annual dues are \$105.00 (U.S.) regular; \$75.00 trainee. For libraries, the annual subscription rate is \$92.00 (U.S.). For non-SMDM individuals, the annual subscription rate is \$82.00.

For information concerning SMDM membership or journal subscription, contact J. Robert Beck, Editor-in-Chief, *Medical Decision Making*, BICC-OHSU, 3181 S.W. Sam Jackson Park Road, Portland, OR 97201-3098, (503) 494-4502.

Recent Developments in the Psychology of Judgment and Decision Making

Compiled by JAY CHRISTENSEN-SZALANSKI, PhD, MPH

Articles

AFFLECK G, TENNEN H, URROWS S, HIGGINS P. Individual differences in the day-to-day experience of chronic pain: a prospective daily study of rheumatoid arthritis patients. *Health Psychol.* 1991;10:419-26. Reports that those patients who felt depressed also reported more intense pain independent of their disability.

ASHBY FG, MADDOX WT. Complex decision rules in categorization: contrasting novice and experienced performance. *J Exp Psychol (Human).* 1992;18:50-71. Observes that novices and experienced subjects used quadratic decision rules but that novices used their rules less consistently.

BARTHELEMY JP, MULLET A. A model of selection of aspects. *Acta Psychol.* 1992;79:1-19. Discusses a choice model based on elimination of aspects heuristic.

BJORKMAN M. Knowledge, calibration, and resolution: a linear model. *Organ Behav Human Decis Proc.* 1992;51:1-21. Finds support for a linear model that approximated the calibration curve.

BOOTH PA. Errors and theory in human-computer interaction. *Acta Psychol.* 1991;78:69-96. Discusses reasons for problems with human-computer interactions.

BORCHERDING K, EPPLE T, VON WINTERFELDT D. Comparison of weighting judgments in multiattribute utility measurement. *Manage Sci.* 1991;37:1603-49. Recommends the combined use of the trade-off method and the pricing-out method for eliciting weights.

BROCKNER J. The escalation of commitment to a failing course of action: toward theoretical progress. *Acad Manage Rev.* 1992;17:39-61. Reviews the research on the escalation to commitment.

CAMERER C. The rationality of prices and volume in experimental markets. *Organ Behav Human Decis Proc.* 1992;51:237-72. Questions whether prices negotiated in competitive market settings will reflect the parties' true values.

COSTERMANS J, LORIES G, ANSAY C. Confidence level and feeling of knowing in question answering: the weight of inferential processes. *J. Exp Psychol (Learn).* 1992;18:142-150. Suggests that a person's confidence level is based on the retrieval of some elements of the right answer, while the feeling of knowing may be derived from recency effects elicited by the question.

ENZLE ME, HAWKINS WL. A priori actor negligence mediates a posteriori outcome effects on moral judgment. *J Exp Soc Psychol.* 1992;28:169-85. Shows that moral judgments were affected by a posteriori outcome information only when there was substantive evidence of a priori actor negligence.

GAVANSKI I, ROSKAS-EWOLDSSEN DR. Representativeness and conjoint probability. *J. Pers Soc Psychol.* 1991;61:181-94. Concludes that the application of incorrect combination rules and not the representativeness heuristic causes the conjunction fallacy.

HENDERSON PW, PETERSON RA. Mental accounting and categorization. *Organ Behav Human Decis Proc.* 1992;51:92-117. Equates mental accounting with categorization, schema, and script theories.

HENDRICKX L, VIEK C. Perceived control, nature of risk information and risk taking. *J. Behav Decis Making.* 1991;4:235-47. Observes that subjects did not set a lower risk level for action when the actual loss probability was lower.

HOGARTH RM, EINHORN HJ. Order effects in belief updating: the belief-adjustment model. *Cogn Psychol.* 1992;24:1-55. Presents a theory of belief updating that explicitly accounts for order-effect phenomena.

HORA SC, HORA JA, DODD NG. Assessment of probability distributions for continuous random variables: a comparison of the bisection and fixed value methods. *Organ Behav Human Decis Proc.* 1992;51:133-55. Finds little difference between the bisection and direct-assessment methods of eliciting probabilities from people.

JOSEPHS RA, LARRICK RP, STEELE CM, NISBETT RE. Protecting the self from negative consequences of risky decisions. *J. Pers. Soc. Psychol.* 1992;62:26-37. Concludes that people's decisions are influenced by the damage to self-esteem that is perceived to result from a bad outcome.

KAHNEMAN D. Reference points, anchors, norms, and mixed feelings. *Organ Behav Human Decis Proc.* 1992;51:296-312. Reviews the evidence on the roles of reference points and anchors in individual choice.

KEREN G. Additional tests of utility theory under unique and repeated conditions. *J Behav Decis Making.* 1991;4:297-304. Presents additional evidence that people behave differently when making unique and repeated decisions.

KRUPNICK AJ, CROPPER ML. The effect of information on health risk valuations. *J Risk Uncer.* 1992;5:29-48. Observes that familiarity with chronic lung disease led people to give up more income to reduce the risk of chronic lung disease.

MACRAE CN. A tale of two curries: counterfactual thinking and accident-related judgments. *Pers Soc. Psychol. Bull.* 1992;18:84-7. Observes that more money was awarded to a victim of an accident when the accident was perceived to be exceptional rather than routine.

MARCH JG, SHAPIRA Z. Variable risk preferences and the focus of attention. *Psychol. Rev.* 1992;99:172-83. Develops models to account for the changes in an individual's risk-taking behavior with changes in the individual's fortunes.

MCGUIRE M, PRATT J, ZECKHAUSER R. Paying to improve your chances: gambling or insurance? *J Risk Uncer.* 1991;4:329-38. Proposes a method to distinguish between gambling and a form of insurance.

NEALE MA, BAZERMAN MH. Negotiator cognition and rationality: a behavioral decision theory perspective. *Organ Behav Human Decis Proc.* 1992;51:157-75. Reviews negotiation behavior from behavior decision theory perspective.

RITOV I, BARON J. Status-quo and omission biases. *J. Risk Un-*

cer. 1992;5:49-61. Suggests that people's tendency to maintain the status quo is partly caused by a bias toward omission.

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Recent Developments in Medical Decision Making

Compiled by JAY CHRISTENSEN-SZALANSKI, PhD, MPH

ARTICLES

ALEMI F. Improving the accuracy of severity indexes: exceptions to the rules. *Med Decis Making.* 1992;12:8-14. Illustrates how nonadditive indexes can be more accurate than additive indexes in calculating severity scores.

CARR-HILL RA. Allocating resources to health care: is the QALY (quality adjusted life year) a technical solution to a political problem? *Int J Health Serv Res.* 1991;21:351-63. Asserts that the use of QALYs to allocate health resources is potentially politically dangerous. [Comments follow: Williams A. Is the QALY a technical solution to a political problem? Of course not! *Int J Health Serv Res.* 1991;21:365-9. Carr-Hill RA. A response to Alan Williams. *Int J Health Serv Res.* 1991;21:371-2.]

DIAMOND GA. Off Bayes: effect of verification bias on posterior probabilities calculated using Bayes' theorem. *Med Decis Making.* 1992;12:22-31. Presents an algorithm to correct the distortions of predictive accuracies caused by selection bias.

EBELL MH, DOUKAS DJ, SMITH MA. The do-not-resuscitate order: a comparison of physician and patient preferences and decision-making. *Am J Med.* 1991;91:255-60. Observes several similarities in the way physicians and patients make DNR decisions.

EBEN-CHAIME M, PLUSKIN JS. Incorporating patient travel times in decisions about size and location of dialysis facilities. *Med Decis Making.* 1992;12:44-51. Demonstrates the use of integer programming to support decision making.

SNIEZEK JA, BUCKLEY T. Confidence depends on level of aggregation. *J. Behav Decis Making.* 1991;4:263-72. Identifies the importance of the level of aggregation in confidence assessments.

THOMPSON L, LOEWENSTEIN G. Egocentric interpretations of fairness and interpersonal conflict. *Organ Behav Human Decis Proc.* 1992;51:176-97. Concludes that egocentric interpretations of fairness hinder conflict resolution.

TYSZKA T, WIELOCHOWSKI M. Must boxing verdicts be biased? *J. Behav Decis Making.* 191;4:283-95. Outlines a model of how sports judges make judgments.

Correction

In the April-June "Recent Developments" column, the entries for the articles by Metz and Singal and their co-workers were inadvertently combined. The correct entries are:

METZ CE, SHEN J-H. Gains in accuracy from replicated readings of diagnostic images: prediction and assessment in terms of ROC analysis. *Med Decis Making.* 1992;12:60-75. Proposes a model to improve predictiveness of ROC curves.

SINGAL BM, HEDGES JR, SUCCOP PA. Efficacy of the stat serum electrolyte panel in the management of older emergency patients. *Med Decis Making.* 1992;12:52-9. Reports that physicians tend to overestimate the potential impact of the serum electrolyte panel.

FRAZIER LM, BROWN JT, DIVINE GW, et al. Can physician education lower the cost of prescription drugs? A prospective, controlled trial. *Ann Intern Med.* 1991;115:116-21. Reports that providing physicians with a manual of comparative drug prices resulted in physicians ordering less expensive drugs.

GAFNI A. Willingness-to-pay as a measure of benefits. Relevant questions in the context of public decision making about health care programs. *Med Care.* 1991;29:1246-52. Examines several ways to apply willingness to pay information in medical decision making.

GOETZLER RM, MOSKOWITZ MA. Changes in physician attitudes toward limiting care of critically ill patients. *Arch Intern Med.* 1991;151:1537-40. Reports that physicians considered the patients' desires and their own malpractice concerns when deciding whether to limit care of critically ill patients.

HAYES MV. The risk approach: unassailable logic? *Soc Sci Med.* 1991;33:55-61. Questions the use of WHO's risk approach for allocating resources. [Comments follow: Davies AM, Backett EM, Petros-Barvazian A. The risk approach to health care. *Soc Sci Med.* 1991;33:61-6. Dowie, J. Comment. *Soc Sci Med.* 1991;33:66-7. Dawes RM. *Soc Sci Med.* 1991;33:67-9. Hayes MV. Rejoinder. *Soc Sci Med.* 1991;33:69-70.]

HECKERLING PS, TAPE TG, WIGTON RS. Relation of physicians' predicted probabilities of pneumonia to their utilities for ordering chest x-rays to detect pneumonia. *Med Decis Making.* 1992;12:32-8. Observes that physicians who experienced greater regret over missing a pneumonia than over-ordering an unnecessary x-ray estimated lower probabilities of pneumonia for patients for whom they ordered x-rays.

HILDEN J, GLASZIOU PP, HABBEMA DF. A pitfall in utility assessment—patients' undisclosed investment decisions. *Med Decis Making*. 1992;12:39–43. Shows how decision analysis may lead to faulty solutions for contingent investment decisions.

HOOSHIARI A, KHORRAMSHAHGOL R. A method for the measurement of outpatient resource utilization. *Med Decis Making*. 1992;12:15–21. Investigates how different types of providers and ancillary services are used by different classes of patients.

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KNOTTNERUS JA. Application of logistic regression to the analysis of diagnostic data: exact modeling of a probability tree of multiple binary variables. *Med Decis Making*. 1992;12:93–108. Describes a method that deals with the limitations of logistic regression with respect to the analysis of the relationships of binary tests and disease outcome.

LLEWELLYN-THOMAS HA, THIEL EC, MCGREAL MJ. Cancer patients' evaluations of their current health state: the influences of expectations, comparisons, actual health status, and mood. *Med Decis Making*. 1992;12:115–22. Observes that actual health state was a consistent predictor of patients' evaluations of their health state.

LOEWY JW, KAPADIA AS, HSI B, DAVIS BR. Statistical methods that distinguish between attributes of assessment: prolongation of life versus quality of life. *Med Decis Making*. 1992;12:83–92. Proposes a Markov model that can separate quality of life and length of survival in medical care decisions.

MARGOLIS CZ. Proposal for clinical algorithm standards. *Med Decis Making*. 1992;12:149–54. Proposes standards for formulating an algorithm map.

METZ CE, SHEN J-H. Gains in accuracy from replicated readings of diagnostic images: prediction and assessment in terms of ROC analysis. *Med Decis Making*. 1992;12:52–9. Reports that physicians tend to overestimate the potential impact of the serum electrolyte panel.

Recent Developments in Medical Decision Making

ARTICLES

AYANIAN JZ, BERWICK DM. Do physicians have a bias toward action? a classic study revisited. *Med Decis Making*. 1991;11:154–8. Suggests that physicians have a bias toward action.

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DOKAS DJ, McCULLOUGH LB. The values history. The evaluation of the patient's values and advance directives. *J Fam Pract*. 1991;32:145–53. Proposes that physicians systematically evaluate their patients' preferences about future health care decisions.

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PSYCHOLOGICAL ASPECTS OF DECISION MAKING

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Value-Focused Thinking

A Path to Creative Decisionmaking

Ralph L. Keeney

The standard way of thinking about decisions is backwards, says Ralph Keeney; people focus first on identifying alternatives rather than on articulating values. A problem arises and people react, placing the emphasis on mechanics and fixed choices instead of on the objectives that give decisionmaking its meaning. In this book, Keeney shows how recognizing and articulating fundamental values can lead to the identification of decision opportunities and the creation of better alternatives. The intent is to be proactive and to select more attractive decisions to ponder before attempting any solutions.

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Scott Plous, Wesleyan University

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