

# JUDGMENT / DECISION MAKING

## 1989 J/DM MEETING. . .

### CALL FOR POSTER PRESENTATIONS

The Annual Meeting of the Society for Judgment and Decision Making will be held November 19-20 in Atlanta. This year's meeting will include a poster session. Presentations on all aspects of judgment and decision making are encouraged by the Program Committee (Reid Hastie, Thomas Wallsten, and Frank Yates, Chair). At least one of the authors of a poster presentation must be a member of the Society. The required application form is included in this issue of the Newsletter (see Page 16). The deadline for receipt of applications by the Program Committee Chair is Monday, June 26, 1989.

## 1989 DUES REMINDER. . .

If you have not paid your dues for 1989, now is the time to do so. Check your mailing label: *If the number in the upper right hand corner is a 7 or 8, then you have NOT paid for 1989. If the number is a 9, then you are O.K. Dues are \$10.00 (\$5.00 for students) this year. Please use the form on the last page of the newsletter when paying your dues.*

--Steve Edgell

## LIVING UNDER UNCERTAINTY. . .

We sail within a vast sphere, ever drifting in uncertainty, driven from end to end.

What a chimera then is man! ... Judge of all things, ... a sink of uncertainty and error, the glory and shame of the universe!

--Pascal, ca. 1670

### CONTENTS

From the Editor.....	2
Recent Philosophical Literature.....	3
Recent Developments in the Psychology of Judgment and Decision Making.....	4
New Journal.....	5
New & Recent Books.....	5
Decision-Aiding Software and Judgment/Decision-Making.....	6
Papers & Reprints Available.....	9
Journal of Behavioral Decision Making.....	12
New Book.....	13
Call for Papers.....	14
J/DM Directory Addendum.....	15
Poster Presentation Form for Annual J/DM Meeting.....	16
Position Available.....	17
J/DM Dues Form and Address Change.....	17

SUBMISSION DEADLINE FOR THE NEXT J/DM NEWSLETTER: JUNE 26, 1989

NEWSLETTER

Vol. VIII  
Number 2  
May 1989

## SOCIETY FOR JUDGMENT AND DECISION MAKING

### Executive Board

Robyn Dawes, Chairperson  
 Lola Lopes, Chairperson-Elect  
 Kenneth R. Hammond, Past-Chairperson  
 Baruch Fischhoff, 1989-91  
 Duncan Luce, 1987-89  
 Paul Slovic, 1988-90  
 Stephen E. Edgell, Secretary/Treasurer  
 N. John Castellan, Jr., Newsletter Editor

### J/DM NEWSLETTER

Editor:

N. John Castellan, Jr.  
 Department of Psychology  
 Indiana University  
 Bloomington, Indiana 47405

(812) 855-4261

BITNET: castellan@IUBACS

Addresses & Corrections:

Stephen E. Edgell  
 Department of Psychology  
 University of Louisville  
 Louisville, Kentucky 40292

(502) 588-5948

BITNET: seedge04@ULKYVX

### FROM THE EDITOR.

The *J/DM 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 *J/DM 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.

**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 Stephen Edgell.

**Address correction:** Please check your mailing label carefully. Because the *J/DM 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 Stephen Edgell.

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

**Electronic Mail:** The editor may be reached through BITNET at "castellan@IUBACS." [Some users may find it either necessary (or more convenient) to address the editor using only the first 8 characters (castella).] BITNET addresses also can be reached from most of the university and research networks. I check for mail several times a day, and a prompt reply to electronic messages is assured. To add your name to the *J/DM Electronic Mail Directory* (or to receive a copy of the electronic directory) contact the Editor.

## RECENT PHILOSOPHICAL LITERATURE. . .

Tillers, P. & Green, E. D. (Eds.) (1988). *PROBABILITY AND INFERENCE IN THE LAW OF EVIDENCE: THE USES AND LIMITS OF BAYESIANISM*. Kluwer Academic Publishers. Pp. 342. (\$71.10)

1. 499 people bought tickets to Jane's rodeo, but 1000 are counted in the seats. Dick was in a seat, but there is no other evidence against him. Jane sues Dick for the price of the ticket. The probability that Dick was a gatecrasher is .501, which (let us suppose) meets the "preponderance of the evidence" standard required for civil suits. Should Jane win?

2. Bert sues Ernie for an injury. Bert must prove that Ernie intended that injury and that he caused it. According to legal tradition, the proof of each of these elements (cause and intention) must meet the "preponderance" standard in order for the whole case to meet that standard. But the requirement that each element meet the standard ( $p > .5$ , say) implies that the whole case must meet a higher standard ( $p > .75$  assuming independence). The more elements there are, the higher the standard for the whole case. Is this right?

These are the sorts of questions discussed in the papers in this volume. The answers are varied: Bayesian theory should be used explicitly in legal proceedings; the theory should not be used explicitly, but legal rules should be modified so that they are consistent with it; they do not need to be modified because they already are consistent; ~~Bayesian theory is not appropriate anyway and should be replaced with Cohen's measures~~ of inductive support or Shafer's belief functions (raising again the question of how THESE should be applied).

For example, arguably, the unwillingness of judges to admit statistical evidence (like that against Dick) encourages plaintiffs to search for non-statistical evidence, leading to non-normative results in particular cases but closer-to-normative results overall. (Of course, the same argument could be used to justify exclusion of ANY type of evidence.) Or the simple application of probability theory to the case could ignore the ABSENCE of specific evidence against Dick; the absence of specific evidence could reduce the probability below .5. The exchange between L. J. Cohen, Kaye, Brillmayer, and Martin on the question of missing evidence and the role of stories or scenarios is most enlightening.

Most contributors try to be open-minded. Shafer does not even defend his theory of belief functions, and Schum suggests that his prior development of Bayesian theory (not summarized) might not be all there is to say. It appears that many of the legal scholars do not fully understand the Bayesian theory, even when they defend it. Perhaps the law will not be ready for Bayesianism until the teachers of lawyers understand it. In a final brief commentary, Ward Edwards concludes compellingly that the theory has not been touched by the criticisms made of it.

The papers are short on detail but long on words. (I recommend prior familiarity with Bayesian theory, including Schum & Martin's approach, and with alternatives such as Shafer or Cohen.) But the book provides - uniquely so far as I know - an overview of the controversy concerning the role of Bayesian reasoning in the law.

-- Jonathan Baron

## Recent Developments in the Psychology of Judgment and Decision Making

Compiled by JAY CHRISTENSEN-SZALANSKI, PhD, MPH

### Journal Articles

- BARON J, Hershey JC: Heuristics and biases in diagnostic reasoning. I. Priors, error costs, and test accuracy. *Organ Behav Hum Decis Proc* 41:259-279, 1988. Examines the influence of test cost and accuracy on undergraduates' judgments.
- BEACH LR, Mitchell TR: Image theory. Principles, goals, and plans in decision making. *Acta Psychol* 66:201-220, 1987. Proposes a model of how people make personal decisions; suggests that people do not maximize expected utility but rather chose alternatives that fit their image of what is right. [Commentaries follow: Montgomery H: Image theory and dominance search theory. How is decision making actually done? *Acta Psychol* 66:221-224, 1987. Vlek C: Towards a dynamic structural theory of decision behavior? *Acta Psychol* 66:225-230, 1987. Beach LR, Mitchell TR: More on image theory. *Acta Psychol* 66:231-235, 1987.]
- BILLINGS RS, Scherer LL: The effects of response mode and importance on decision-making strategies. *Judgement versus choice*. *Organ Behav Hum Decis Proc* 41:1-19, 1988. Concludes that research that uses a judgment response (e.g., policy capturing) should be generalized to choice tasks.
- CAMERER CF: Do biases in probability judgment matter in markets? Experimental evidence. *Am Econ Rev* 77:981-997, 1987. Suggests that certain judgment biases may have limited effects on people's behavior in experimental markets.
- COLBERT JL: Inherent risk. An investigation of auditors' judgments. *Account Organ Society* 13:111-121, 1988. Suggests that auditors are sensitive to different measures of inherent risk.
- HESSING DJ, Elffers H, Weigel R: Exploring the limits of self-reports and reasoned action. An investigation of the psychology of tax evasion behavior. *J Pers Soc Psychol* 54:405-413, 1988. Observes no relationship between people's self-reports of tax evasion and objectively documented behavior.
- JEMMOTT JB III, Croyle RT, Ditto PH: Commonsense epidemiology. Self-based judgments from laypersons and physicians. *Health Psychol* 7:55-73, 1988. Reports that people who had a history of a condition assigned a greater prevalence to the condition.
- JOHNSON JT, Drobny J: Happening soon and happening later. Temporal cues and attributions of liability. *Basic Appl Soc Psychol* 8:209-234, 1987. Investigates how temporal contiguity affects judgments of legal responsibility; reports that actions of a defendant were rated less negligent when temporally remote, while actions of a plaintiff were perceived to be more negligent.
- KEREN GB, Raaijmakers JGW: On between-subjects versus within-subjects comparisons in testing utility theory. *Organ Behav Hum Decis Proc* 41:233-247, 1988. Proposes a process to assess whether within-subject or between-subject designs should be used to test theories of judgment.
- KULIK JA, Mahler HIM: Effects of preoperative roommate assignment on preoperative anxiety and recovery from coronary-bypass surgery. *Health Psychol* 6:525-543, 1987. Shows that patients who had a postoperative roommate before their operation were less anxious preoperatively, more ambulatory postoperatively, and more quickly released from the hospital.
- KUNDA Z: Motivated inference. Self-serving generation and evaluation of causal theories. *J Pers Soc Psychol* 53:636-647, 1987. Suggests that people hold theories of causality that are consistent with the belief that good things will happen to them and bad things will not.
- LOWENSTEIN GF: Frames of mind in intertemporal choice. *Manage Sci* 34:200-214, 1988. Demonstrates the applicability of the framing reference point to intertemporal choice.
- MARCH JG, Shapira Z: Managerial perspectives on risk and risk taking. *Manage Sci* 33:1404-1418, 1987. Identifies three ways in which managers' conceptions of risk lead to risk orientations that are different from what might be expected from a decision theory perspective.
- MEDIN DL, Edelson SM: Problem structure and the use of base-rate information from experience. *J Exp Psychol (General)* 117:68-85, 1988. Observes that subjects' use of base rate information can be altered by the nature of the task presented to them.
- PAQUETTE L, Kida T: The effect of decision strategy and task complexity on decision performance. *Organ Behav Hum Decis Proc* 41:128-142, 1988. Reports that the more efficient decision makers were those who used a reduced processing strategy when faced with a complex decision task.
- PETERSON DK, Pitz GF: Confidence, uncertainty, and the use of information. *J Exp Psychol (Learn)* 14:85-92, 1988. Finds that a person's beliefs about possible values for an unknown quantity and the belief that a specific prediction is correct are affected differently by the amount of available information.
- PURO CP: The framing of buying decisions. *J Cons Res* 14:301-315, 1987. Demonstrates a conceptual framework of the reference point formation process for buying decisions.
- RAVINDEA HV, Kleinmuntz DN, Dyer JS: The reliability of subjective probabilities obtained through decomposition. *Manage Sci* 34:186-199, 1988. Develops an expression that describes the random error associated with decomposition estimates as a function of characteristics of the component assessments.
- SHARDA R, Bart SH, McDonnell JC: Decision support system effectiveness. A review and an empirical test. *Manage Sci* 34:139-159, 1988. Reviews empirical evidence regarding effectiveness of decision support systems.

## RECENT DEVELOPMENTS (Continued)

TAYLOR SE, Brown JD: Illusion and well-being. A social psychological perspective on mental health. *Psychol Bull* 103:193-210, 1988. Reviews the usefulness of exaggerated perceptions of control and unrealistic optimism to people engaging in productive and creative work.

TURNQUIST DC, Harvey JH, Anderson BL: Attributions and adjustment to life-threatening illness. *Br J Clin Psychol* 27:55-65, 1988. Reviews the role of attributions in people's adjustment to a life-threatening illness or injury.

VAN DER PLIGT J, Eiser JR, Spears R: Comparative judgments and preferences. The influence of the number of response alternatives. *Br J Soc Psychol* 26:269-280, 1987. Shows that the more alternatives that a person has to rate, the smaller are the percentage ratings they give to any single alternative.

WAGENAAR W: Calibration and the effects of knowledge and

reconstruction in retrieval from memory. *Cognition* 28:277-296, 1988. Suggests that a person's calibration should be better when recalling information that is stored in memory than when reconstruction information is based on inferential reasoning.

WAGNER U, Taubes A: Stochastic models of consumer behaviour. *Eur J Oper Res* 29:1-23, 1987. Reviews probabilistic approaches to predicting consumer behavior.

WRIGHT G, Ayton P: Decision time, subjective probability, and task difficulty. *Mem Cogn* 16:176-185, 1988. Obtains findings that are inconsistent with predictions of a nonmonotonic relationship between decision time and task difficulty.

WRIGHT G, Ayton P: Task influences on judgmental forecasting. *Scand J Psychol* 28:115-127, 1987. Observes that task difficulty and time duration were not related to forecasting performance.

## NEW JOURNAL. . .

*Games and Economic Behavior* publishes original and survey papers dealing with game-theoretic modeling in the social, biological, and mathematical sciences. Papers published are mathematically rigorous as well as accessible to readers in related fields. Research areas include game theory, Economics, Political Science, Biology, Computer science, mathematics, psychology. Volume 1 will be published in 1989. For further information contact Academic Press, Inc., Journal Promotion Department, 1250 Sixth Avenue, San Diego, CA 92101. (619) 699-6742.

## SOME NEW AND RECENT BOOKS. . .

Etzioni, A. (1988). *The Moral Dimension: Toward a New Economics*. New York: The Free Press. Pp. 352. ISBN: 0-02-909900-5 (\$24.95)

Paulos, J. A. (1988). *Innumeracy: Mathematical Illiteracy and Its Consequences*. New York: Hill and Wang. Pp. 135. \$16.95 ISBN: 0-8090-7447-8

Reiser, S. J., Bursztajn, H. J., Appelbaum, P. S., et al. *Divided Staffs, Divided Selves: A Case Approach to Mental Health Ethics*. New York: Cambridge University Press. Pp. 150. \$29.95, \$8.95 (paper)

## AND THE J/DM READER. . .

Arkes, H. R., & Hammond, K. R., (Eds.) (1986). *Judgment and Decision Making: An Interdisciplinary Reader*. New York: Cambridge University Press. Pp. 812. ISBN: 0-521-33914-6 (Available in paper).

## DECISION-AIDING SOFTWARE AND JUDGMENT/DECISION-MAKING

By Stuart S. Nagel, University of Illinois

The essence of decision-aiding software is that it consists of various forms of microcomputer programming designed to enable users to process a set of (1) goals to be achieved, (2) alternatives available for achieving them, and (3) relations between goals and alternatives in order to choose the best alternative, combination, allocation, or predictive decision-rule.

Decision-aiding software should be distinguished from at least two other kinds of software that are relevant to making decisions, but do not process goals, alternatives, and relations in order to arrive at prescriptive conclusions. One related type of software is information retrieval software. It can be very useful for determining such things as the amount of money spent on a certain expense item in a certain year, the court cases that are relevant to a given subject matter, or any kind of information that might be contained in a statistical almanac, encyclopedia, or other compendium of information. Another related type of software is office practice software which can be useful for word processing reports, filing and retrieving in-house information, or doing bookkeeping relevant to financial matters. That kind of software is useful for better organizing the decision-making processes of a government agency, a law firm, or any kind of office. Such software, however, does not process goals, alternatives, and relations to arrive at prescriptive conclusions.

Decision-aiding software can take a variety of forms. The most common might be the following:

1. Decision-tree software for making decisions under conditions of risk such as whether to go on strike or accept a management offer. A decision tree is usually pictured as looking like a tree on its side with branches and sub-branches. The branches generally represent alternative possibilities that depend on the occurrence or non-occurrence of probabilistic events.
2. Linear-programming software for allocating money, time, people, or other scarce resources to activities, places, tasks, or other objects to which the resources are to be allocated. In terms of form rather than function, linear programming involves maximizing or minimizing an objective function or algebraic equation subject to constraints generally in the form of inequalities like greater than or less than.
3. Statistical software for predicting how a future event is likely to occur such as a trial, an election, or a weather occurrence in light of past events or expert opinions. Statistical software generally involves calculating averages or predictive equations in which decisions or other outcomes are related to factual inputs.
4. Spreadsheet-based software in which the alternatives tend to be on the rows, the criteria on the columns, relations in the cells, overall scores for each alternative in a column at the far right, and a capability for determining what it would take to bring a second-place or other-place alternative up to first place.
5. Rule-based software which contains a set of rules for dealing with a narrow or broad field of decision-making. The user gives the computer a set of facts, and the computer applies the rules to the facts in order to determine which alternative decision should be or is likely to be decided. Such software is sometimes referred to as artificial intelligence or expert systems, but the other forms of decision-aiding software also have characteristics associated with AI and expert systems.
6. Multi-criteria decision-making (MCDM) software which emphasizes multiple goals to be achieved, as contrasted to decision trees, linear programming, and statistical regression analysis which emphasize a single objective function or a single dependent variable.
7. Decision-aiding software that focuses on a specific subject matter, as contrasted to the above software which cuts across all subjects. Subject-specific software could relate to how to decide where to drill an oil well, how to deal with crisis situations in flying a plane, or any other specific decision-making situations.
8. Software that is useful for generating alternatives, goals, or relations, but that does not process those elements in order to draw a conclusion.

Decision-aiding software enhances various decision-making skills. These include:

1. Choosing among alternatives, where each alternative is a lump sum choice, meaning that one cannot generally choose parts or multiples of such an alternative. The situation can involve mutually exclusive alternatives, or it can allow for combinations.

2. Allocating scarce resources such as money, time, or people to such objects as places or activities. The allocating can be with or without minimum or maximum constraints on how much each object can receive.
3. Explaining and predicting behavior including individual cases or relations, either in the past or the future.
4. Teaching decision-making, as well as actually making or prescribing decisions.

There are various obstacles to systematic decision-making which decision-aiding software helps overcome. Those obstacles include:

1. Multiple dimensions on multiple goals. This is sometimes referred to as the apples and oranges problem, although the problem appears to become more difficult if the goals are more abstract, like freedom and equality. The measures may simultaneously involve hours, miles, dollars, 1-5 scales, pounds, pollution units, and other measures.
2. Multiple missing information. In its simplest form, this problem involves knowing the benefits and costs for a number of alternatives with the exception of one benefit or one cost. In its more challenging form, many benefits, costs, probabilities, and other inputs are unknown.
3. Multiple and possibly conflicting constraints. In its simplest form, there are a number of constraints that need to be met simultaneously, but they do not conflict. In its more challenging form, there may be minimum allocations required for each budget category, but the sum of the minimums adds to more than the maximum budget constraint.
4. The need for simplicity in drawing and presenting conclusions in spite of all that multiplicity. This is where spreadsheet-based software can be especially helpful because it can be relatively easy to manipulate and interpret in comparison to decision trees, payoff matrices, systems of simultaneous equations and inequalities, and arrow diagrams.

Decision-aiding software can be applied to a variety of fields of knowledge, such as the following:

1. Physics: Choosing among alternative energy policies.
2. Chemistry: Comparing alternative incentives for reducing water pollution.
3. Geology: Policies for dealing with earthquakes and related natural disasters.
4. Astronomy: Deciding on research and deployment for the Star Wars defense.
5. Biology: Deciding an optimum level of cancer in light of the prevention and damage costs.
6. Psychology: Deciding whether to take away or leave an abused child.
7. Sociology: Alternative public policies toward race relations.
8. Economics: How to deal with unemployment and inflation.
9. Political Science: Evaluating alternative ways of relating government to the electorate.
10. Philosophy: Comparing socialistic and capitalistic perspectives.
11. Language-Literature: Alternative ways of handling freedom of speech.
12. Art-Music: Public policies toward the arts.
13. History: The alternative motives of key decision-makers like FDR or JFK.

Other benefits from using decision-aiding software include:

1. Being more explicit about goals to be achieved, alternatives available for achieving them, and relations between goals and alternatives.
2. Being stimulated to think of more goals, alternatives, and relations than one would otherwise be likely to do.
3. Being able to handle multiple goals, alternatives, and relations without getting confused and without feeling the need to resort to a single composite goal or a single go/no-go alternative.
4. Being encouraged to experiment with changes in the inputs into one's thinking to see how one's conclusions are affected.

5. Being better able to achieve (or more than achieve) one's goals when choosing among alternatives or allocating scarce resources.
6. Being better able to predict future occurrences and explain past occurrences.
7. Being better able to teach decision-making and other related skills to students in courses that involve controversial issues.
8. Being able to more effectively handle multi-dimensionality, missing information, and multiple constraints as surmountable obstacles to systematic decision-making.
9. Being more able to deal with diverse subject matters as a result of having a cross-cutting decision-analytic framework that is easy to use.
10. Becoming more capable of systematic decision analysis, even when the software is not available.

One of the most exciting developments regarding the future of decision-aiding software is the idea of being able to achieve super-optimum solutions. Such a solution is one that is better than what each side in a controversy had originally proposed as its best alternative using each side's own goals and their relative weights. For example, George Bush proposes retaining the minimum wage at \$3.35 in order to stimulate business. Michael Dukakis proposes raising the minimum wage to \$4.00 in order to help labor. A super-optimum solution might be to allow business firms to pay as low as \$3.00 an hour where they agree to hire the elderly, the handicapped, mothers of preschool children, or other unemployed people and also agree to provide on-the-job training. The workers, however, receive \$4.50 an hour with the government paying a \$1.50 minimum wage supplement to the \$3.00 business base. Business comes out ahead of its best expectations (\$3.35) of being able to retain the present minimum wage. Labor comes out ahead of its best expectation of getting \$4.00 an hour. The taxpayer is also better off if unemployed people are put to work who might otherwise be receiving public aid, food stamps, Medicaid, public housing, and maybe committing crimes. They can now become income-receiving taxpayers. This is a super-optimum solution where everybody comes out better off. It should be distinguished from a compromise solution which would be between \$3.35 (Bush) and \$4.00 (Dukakis) an hour. Super-optimum solutions are facilitated by thinking in terms of multiple goals and alternatives using spreadsheet-based decision-aiding software.

For further information concerning decision-aiding software, see S. Nagel, *Evaluation Analysis with Microcomputers* (Greenwich, Conn.: JAI Press, 1989); and S. Nagel (ed.), *Decision-Aiding Software and Decision Analysis* (London and New York: John Wiley and Sons, 1990). The latter book is still in the process of being developed. I would welcome receiving papers or proposals relevant to any of the subjects discussed in this article on decision-aiding software. The book will probably be part of the series of decision analysis books that is being developed by the Judgment/Decision Making Society.



The Dispute Resolution Research Center  
J.L. Kallagy Graduate School of Management  
Northwestern University  
2001 Sheridan Road, Evanston, Illinois 60208-2011

1. ANALYSIS OF INCENTIVES IN DISPUTE RESOLUTION  
Roger B. Myerson, February 1988

2. THEORETICAL BASE OF THE ROAD TO CONSENSUS IN SMALL GROUPS  
Rajiv Neebe, October 1988

3. WHAT IS PROCEDURAL JUSTICE: CRITERIA USED BY CITIZENS TO  
ASSESS THE FAIRNESS OF LEGAL PROCEDURES  
Tom R. Tyler, January 1987

4. TASK FORCES AND GROUP DECISION MAKING  
Jeanne M. Brett, October 1988

5. ARBITRATION VS. MEDIATION - IT'S TIME TO SETTLE THE  
DIFFERENCES  
John W. Cooley, January 1988

6. MEDIATIONS OF A MEDIATOR  
Stephen B. Goldberg, October 1988

7. NEGOTIATION AND ARBITRATION: A GAME-THEORETIC PERSPECTIVE  
Robert J. Weber, November 1988

8. NEGOTIATION IN SMALL GROUPS: EFFECTS OF AGENDA, DECISION  
RULE, AND POWER  
Elizabeth A. Mannix, Leigh L. Thompson, Max Bazerman,  
October 1987

9. GROUP NEGOTIATION: EFFECTS OF DECISION RULE, AGENDA, AND  
ASPIRATION  
Leigh L. Thompson, Elizabeth A. Mannix, Max H. Bazerman,  
available in print: JOURNAL OF PERSONALITY AND SOCIAL  
PSYCHOLOGY, 1988, 54, 86-95.

10. NEGOTIATION BEHAVIOR AND DECISION PROCESSES IN DYADS, GROUPS,  
AND MARKETS  
Max H. Bazerman, Elizabeth Mannix, Harrie Sondak, Leigh  
Thompson, October 1987

11. BLIND SPOTS IN STRATEGIC DECISION MAKING: THE CASE OF  
COMPETITOR ANALYSIS  
Edward Zajac and Max Bazerman, October 1987

12. WATCHING AND NEGOTIATION PROCESSES IN QUASI-MARKETS  
Harrie Sondak and Max Bazerman, October 1987

J.L. Kallagy Graduate School of Management Northwestern University  
DISPUTE RESOLUTION RESEARCH CENTER

January 11, 1989

Kallagy

Dear Colleagues:

Our series of working papers has been received with great  
interest. Several papers have been added in the past year, and  
are listed below. To cover the costs of mailing, we are charging  
\$2.00 per paper; make checks payable to Northwestern University.  
If you would like to order a copy of any of the papers, please  
circle the number of the paper on the list, write your name and  
address, and return this letter to:

The Dispute Resolution Research Center  
J. L. Kallagy Graduate School of Management  
Organization Behavior  
Northwestern University  
Evanston, Illinois 60208-2011

Sincerely,

*Roger Myerson*  
Roger Myerson  
Professor

Managerial Economics and Decision Sciences

Name and address of individual requesting copies of papers  
circled below:

- |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 |    |    |    |    |    |

Amount enclosed:



The Dispute Resolution Research Center  
J.L. Kelllogg Graduate School of Management  
Northwestern University  
2001 Sheridan Road,  
Evanston, Illinois 60208-2011

- 25. BEYOND FORMAL PROCEDURES: THE INTERNATIONAL CONTEXT OF PROCEDURAL JUSTICE  
Tom R. Tyler and Robert J. Eise, August 1988
- 26. CAUSAL ACCOUNTS AND MANAGING ORGANIZATIONAL CONFLICT: IS IT ENOUGH TO SAY IT'S NOT MY FAULT?  
Robert J. Eise, Debra L. Shapiro, Larry L. Cummings, August, 1988
- 27. SOCIAL UTILITY AND DECISION MAKING IN INTERPERSONAL CONFLICTS,  
George Loewenstein, Leigh Thompson, Max Bazerman, July, 1988
- 28. THE PSYCHOLOGY OF PROCEDURAL JUSTICE: A TEST OF THE GROUP VALUE MODEL,  
Tom R. Tyler, September, 1988
- 29. MISSING PERSPECTIVES IN ORGANIZATIONAL THEORY AND RESEARCH: THE INTERACTION OF PRESCRIPTIVE AND DESCRIPTIVE THEORY  
Max H. Bazerman and Margaret A. Neale, November, 1988
- 30. DIMENSIONS OF CONFLICT FRAME: DISJUNCT INTERPRETATIONS OF CONFLICT  
Robin L. Plinkley, December, 1988
- 31. DIVERGENT EXPECTATIONS AS A CAUSE OF DISAGREEMENT IN NEGOTIATION: EVIDENCE FROM A COMPARISON OF AMBITIOUS SCHEMES,  
Henry S. Fisher and Max H. Bazerman, December, 1988
- 32. MANAGERS HANDLING DISPUTES: THIRD PARTY ROLES AND PERCEPTIONS OF FAIRNESS,  
Debra Karpavayla and Jeanne M. Brett, January, 1989
- 33. DESIGNING SYSTEMS FOR RESOLVING DISPUTES IN ORGANIZATIONS,  
Jeanne M. Brett, Stephen B. Goldberg and William T. O'By, January, 1989.
- 34. PROTECTING THE EMPATHETIC AND PRINCIPLED FOUNDATIONS FOR COOPERATION,  
Jane Karpavayla, December, 1988
- 35. BREAKING THE ADVERSARY MOLD,  
Jane Karpavayla, December, 1988
- 36. The Gap Between Due Process of Law and Public Conceptions of Fair Procedure  
Tom R. Tyler and Regina Schuller, January 1989

The Dispute Resolution Research Center  
J.L. Kelllogg Graduate School of Management  
Northwestern University  
2001 Sheridan Road, Evanston, Illinois 60208-2011

- 13. MANAGING CONFLICT BEFORE IT HAPPENS: THE ROLE OF ACCOUNTS  
Robert J. Eise, October 1987
- 14. AN EVALUATION OF LEARNING IN THE BILATERAL WINNER'S CURSE  
Sheryl Hill, Max Bazerman, John Carroll, October 1987
- 15. INCENTIVE CONSTRAINTS AND OPTIMAL COMMUNICATION SYSTEMS: AN EXAMPLE  
Roger Myerson, December 1987
- 16. GROUPS AS MIXED-MOTIVE NEGOTIATORS  
Max Bazerman, Elizabeth Mannix, Leigh Thompson, available in print: Advances in Group Processes, 1988, Vol. 5, 195-216.
- 17. JUDICIAL DECISION-MAKING, ATTITUDES, AND THE HINDSIGHT BIAS  
Jonathan D. Casper, Kenneth Benedict, Jo L. Perry, December 1987
- 18. THE EFFECTS OF ROLE-RELATED BEHAVIOR ON THE QUALITY OF JURY DELIBERATIONS  
Jo L. Perry, December 1987
- 19. THE EFFECT OF THIRD-PARTY BEHAVIOR ON DISJUNCT SATISFACTION: IMPLICATIONS FOR A THEORY OF PROCEDURAL JUSTICE  
Larry Haver and Steven Parend, December 1987
- 20. INFLUENCE OF NEGOTIATORS' PERCEPTIONS OF THE TASK AND THE OPINION ON NEGOTIATION OUTCOMES  
Leigh Thompson and Reid Hastie, December 1987
- 21. JUDGMENT TASKS AND RISKS IN NEGOTIATION  
Leigh Thompson and Reid Hastie, December 1987
- 22. FACTORS IN INTEGRATIVE NEGOTIATIONS  
Laurie R. Weingart, Leigh T. Thompson, Max H. Bazerman, John S. Carroll, January 1988
- 23. BEYOND "VOICES": THE INFLUENCE OF DECISION-MAKER JUSTIFICATION AND SINCERITY ON PROCEDURAL FAIRNESS JUDGMENTS  
Robert J. Eise, January 1988
- 24. INTERESTS, RIGHTS AND POWERS: DESIGNING DISPUTE RESOLUTION SYSTEMS  
William T. O'By, Jeanne M. Brett, Stephen B. Goldberg, January 1988

The Dispute Resolution Research Center  
J.L. Kellogg Graduate School of Management  
Northwestern University, Evanston, IL 60208-2011

Negotiations Teaching Materials

A manual of new materials for teaching negotiations and dispute resolution will be available in late spring. The manual will be spiral bound and will cost \$10. If you wish to order the manual, return the form below.

Contents:

1. El Tek - an quantified integrative negotiation exercise set within a firm. Max Bazerman and Jeanne Brett
2. Comparative Advertising - iterated Prisoner's Dilemma. Decision is whether or not to advertise. Len Greenhalgh and Max Bazerman
3. Amanda Project - manager-as-a-third party set within a corporation. High emotional content. Jeanne Brett and Rakha Karabayya
4. Social Services - a coalition exercise in the not-for-profit sector. Based on Howard Raiffa's coalition game (The Art and Science of Negotiation, pp. 257-274) Max Bazerman
5. Five applied game theory cases: Sargasso Shelf (the winner's curse); Bialystok and Associates (multiple and correlated equilibria and mediation in games); Ware Medical Corporation (randomized equilibrium); Stonecraft Account (illustrates problems of moral hazard, adverse selection and the utility of mediation); Pagemaster Corporation (role of informational incentive constraints). Roger Myerson
6. Negotiating a Job Offer - a quantified, multi issue integrative negotiation exercise. Maggie Neale and Robin Pinkley
7. Southern Electric Company - a union-management grievance mediation simulation. Steve Goldberg
8. Carter Racing - an intra organizational negotiations perspective on the Challenger disaster case. Case: Jack Brittain and Sim Sitkin. Teaching note: Maggie Neale
9. Zephyr - an intra firm coalition exercise that deals with social dilemmas. Beta Mannix

I would like a copy of the Dispute Resolution Research Center's Negotiations Teaching Manual which will be available in Spring, 1989.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Enclosed is check for \$10 payable to Northwestern University

The Dispute Resolution Research Center  
J.L. Kellogg Graduate School of Management  
Northwestern University  
2001 Sheridan Road, Evanston, Illinois 60208-2011

The following books were written by members of the Dispute Resolution Research Center and are available at the Northwestern University bookstore, 312-491-3990.

A Student's Guide to Mediation and the Law, Richard Salem and Nancy H. Rogers, published by Matthew Bender, 1987.

Getting Disputes Resolved: Designing Systems to Cut the Costs of Conflict, William Ury, Jeanne M. Brett, and Stephen B. Goldberg, Jossey-Bass, 1988

The Social Psychology of Justice, Tom Tyler and E. Allan Lind, Plenum, 1988.

Dispute Resolution, Stephen B. Goldberg, Eric Green and F.S.A. Sander, Little, Brown, 1987.

Judgement in Managerial Decision Making, Max H. Bazerman, John Wiley & Sons, 1986.

## JOURNAL OF BEHAVIORAL DECISION MAKING

Recent issues of the *Journal* include the following titles:

- "An Advantage Model of Choice," by Eldar B. Shafir, Daniel N. Osherson, and Edward E. Smith
- "An Availability Bias in Professional Judgment," by Laurette Dube-Rioux and J. Edward Russo
- "Nonexpected Utility as Aversion of Information," by Peter Wakker

Forthcoming issues of the *Journal* include these titles:

- "Groupthink and the Space Shuttle Challenger Accident: Toward a Quantitative Case Analysis," by James K. Esser and Joanne S. Lindoerfer
- "Robust Interactive Decision-Analysis: Behavioral Results and Implications," by Herbert Moskowitz, Richard T. Wong, and Po-Young Chu
- "The Psychophysics of Spending," by Caryn Christensen

Among the *Journal's* regular features are commentaries on selected articles, book reviews, software reviews, and abstracts of articles of interest to researchers in multiple disciplines.

Members of the Society for Judgment and Decision Making can avail themselves of a special 1989, Volume 2, subscription rate of \$36 for the *Journal*. Alternatively, or in addition, they might request that their libraries take out subscriptions at the \$110 regular rate.

### JOURNAL OF BEHAVIORAL DECISION MAKING SUBSCRIPTION ORDER FORM

Volume 2, 1989, 4 Issues

- Society for Judgment and Decision Making special rate: \$36 (US)
- Regular/institutional rate: \$110 (US)

Name (Print or type) \_\_\_\_\_ Date \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Send with payment (air mail) to: Jane Skinner/BDM, John Wiley & Sons Ltd., Baffins Lane, Chichester, West Sussex, PO19 1UD, ENGLAND

# CONTEMPORARY SCIENCE AND NATURAL EXPLANATION

## Commonsense Conceptions of Causality

Denis J. Hilton, Editor

Conceptions of causality are central to accounts of phenomena as diverse as scientific discovery and the experience of clinical depression. In Hume's memorable phrase, causation is a constituent of "the cement of the universe". But the question as to what this cement is itself composed of has continued to preoccupy philosophers, psychologists, and cognitive scientists to the present day.

This new book takes a fresh look at this problem by offering an interdisciplinary set of perspectives on the commonsense conceptions of causality employed in natural processes of explanation. Models and analogies for commonsense explanations are derived from fields as wide ranging as animal learning theory and artificial intelligence.

The text is made up of contributions which summarize research programs from a wide range of fields, as well as including specially prepared new material. No other book on causal explanation draws on such a wide range of sources, or combines conceptual with empirical work so closely.

This thorough consideration of the relations that exist between differing accounts of causality in contemporary science will be essential reading for students of both the "natural" and social sciences.

### CONTENTS AND CONTRIBUTORS

#### Preface

1. Introduction: Images of science and commonsense explanation; *Denis Hilton*, Department of Psychology, University of Illinois

#### SECTION I: CONTRASTS AND CAUSAL EXPLANATIONS

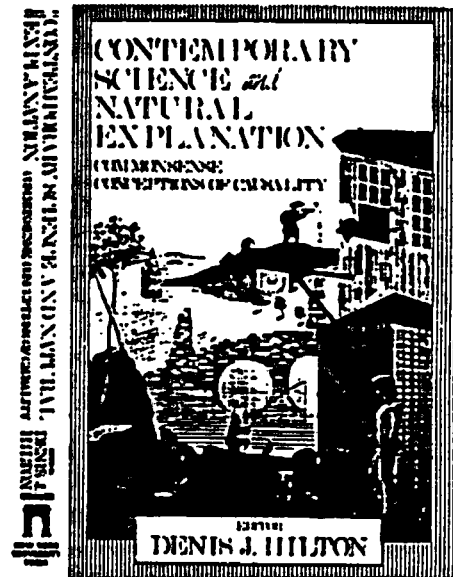
2. The problem of causal selection; *Germund Hesslow*, Department of Physiology, University of Lund
3. Logic and causal attribution; *Denis Hilton*, Department of Psychology, University of Illinois
4. Conversational and linguistic processes in causal attribution; *William Turnbull* and *Ben Slugoski*, Department of Psychology, Simon Fraser University
5. The role of selective attribution in causality judgment; *David Shanks*, MRC Applied Psychology Unit, Cambridge, and *Anthony Dickinson*, Department of Experimental Psychology, University of Cambridge

#### SECTION II: CONCEPTUAL STRUCTURES AND THEORIES

6. Modes of explanation; *Rom Harre*, Subfaculty of Philosophy, University of Oxford
7. Seeing the connections in lay causal comprehension: A return to Heider; *Charles Abraham*, Department of Business Studies, Dundee College of Technology
8. Knowledge structures and causal explanation; *Robert Abelson*, Department of Psychology, Yale University
9. Relationships between similarity-based explanation-based categorization; *William Wattenmaker*, *Glenn Nakamura*, and *Douglas Medin*, Department of Psychology, University of Illinois
10. Index

ISBN: 0-8147-3443-X / 320 pages / \$45.00

SEE SPECIAL ORDER FORM ON NEXT PAGE



### CALL FOR PAPERS

#### Applications of J/DM Research

**Atlanta, Georgia - November 20 & 21, 1989  
(immediately following the J/DM meetings)**

The University at Albany Center for Policy Research will host a series of sessions devoted to advances in the application of J/DM research. Papers, panels, and workshops will be considered that focus on the problems and possibilities of extending J/DM research to settings outside the laboratory. Discussion of applications involving well established work with individual professionals, groups, or organizations is preferred.

Topics of interest include but are not limited to gaining access, elicitation, structuring, design, consensus building, adoption, and routinization. Applications of interest include but are not limited to expert systems, decision support systems, artificial intelligence, electronic meeting systems, and groupware.

Anyone interested in making a presentation during the sessions should send a one-page abstract; proposals for panels and workshops should be limited to three pages. Proposals should be received by July 1. Address all proposals to:

Thomas R. Stewart, Chair  
Program Committee  
Center for Policy Research  
The University at Albany  
State University of New York  
Albany, New York 12222

#### SPECIAL 25% DISCOUNT

Please send me \_\_\_\_\_ copies of *Contemporary Science and Natural Explanation: Commonsense Conceptions of Causality* at \$33.75 per copy plus \$3.00 shipping and handling per order. I enclose my \_\_\_\_\_ check, \_\_\_\_\_ money order, or please charge my bank card: \_\_\_\_\_ VISA, \_\_\_\_\_ MC, \_\_\_\_\_ AMEX.  
Card Number \_\_\_\_\_ Exp. Date \_\_\_\_\_

Signature \_\_\_\_\_  
Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Address orders to:  
NYU Press, 136 South Broadway, Irvington, NY 10533

For telephone orders:  
1-(914)-591-9111

Society for Judgment and Decision Making  
Annual Meeting, Atlanta, Georgia  
Sunday-Monday, November 19-20, 1989

POSTER PRESENTATION APPLICATION (Please type)

1. Author 1: \_\_\_\_\_ Author 2: \_\_\_\_\_  
 Institution: \_\_\_\_\_ Institution: \_\_\_\_\_  
 Member?: Yes \_\_\_ No \_\_\_ Member?: Yes \_\_\_ No \_\_\_  
 Author 3: \_\_\_\_\_ Author 4: \_\_\_\_\_  
 Institution: \_\_\_\_\_ Institution: \_\_\_\_\_  
 Member?: Yes \_\_\_ No \_\_\_ Member?: Yes \_\_\_ No \_\_\_
2. Title of Presentation (10 words or less): \_\_\_\_\_  
 \_\_\_\_\_
3. Abstract (75 words or less):

4. Person to whom correspondence should be addressed:

Name: \_\_\_\_\_ Address: \_\_\_\_\_  
\_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_\_

5. Include a self-addressed, stamped post card for notification of application status.

6. Mail application to: J. Frank Yates, Department of Psychology, 330 Packard Road, Ann Arbor, MI 48104-2994, U.S.A.

DEADLINE for receipt of application: MONDAY, JUNE 26, 1989.





**POSITION AVAILABLE. . .**

The Program in Clinical Decision Making, Department of Family Medicine, OUHSC, is recruiting for a family physician with interest, training, and experience in Clinical Decision Making. Duties include patient care, teaching in Family Medicine and Clinical Decision Making, and research in one or more areas of Medical Decision Making. Minimum qualifications include residency training and board certification in Family Practice, and three years of post-residency clinical experience or completion of a two year fellowship in Family Medicine. Faculty rank and salary will be commensurate with training and experience. Interested candidates should send a curriculum vitae to:

Stephen J. Spann, M.D.  
Director, Clinical Decision Making Program  
Department of Family Medicine  
800 NE 15th Street, Rm. 503  
Oklahoma City, OK 73104

**SOCIETY FOR JUDGMENT AND DECISION MAKING**

**1989 DUES FORM**

Please check your mailing label. If it does not have a "9" in the upper left-hand corner, we have not received your dues for 1989. (If you sent your dues in the last three weeks, we may not have had time to record your payment.)

If your name and/or address on the mail label is incorrect, please make corrections below:

Name \_\_\_\_\_ Phone \_\_\_\_\_

Address \_\_\_\_\_ EMAIL \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_

1989 Dues: Member \$10.00, Student \$5.00

Please make checks payable to the JUDGMENT/DECISION MAKING SOCIETY. Checks must be in US dollars and payable through a US bank. Please complete the form and mail it with your check to:

Stephen E. Edgell  
Secretary/Treasurer  
Department of Psychology  
University of Louisville  
Louisville, KY 40292

\* Students must have endorsement of a faculty member:

Faculty Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Institution: \_\_\_\_\_

**J/DM NEWSLETTER**  
Department of Psychology  
Indiana University  
Bloomington, Indiana 47405

Nonprofit Organization  
U. S. Postage  
PAID  
Bloomington, Indiana  
Permit No. 2

TIME-DATED MATERIAL

Rob Hamm  
Institute of Cognitive Sci  
Box 345  
University of Colorado  
Boulder, CO 80309-0345