

# JUDGMENT / DECISION MAKING

## J/DM BYLAWS. . .

At the J/DM Meeting in November, there was considerable support for the development of a formal organization. We are pursuing the matter and are writing bylaws for what will be known as the Judgment/Decision Making Society. Our bylaws are being patterned after those of similar organizations. If you have knowledge of the organization of similar groups and would like to assist in the bylaw writing process, please contact the editor. When we get a reasonable set of bylaws, they will be presented to the group for ratification.

## J/DM ONLINE. . .

We are in the final stages of negotiations for the creation of an on-line J/DM Bulletin Board. Those J/DMer's with terminals and modems will be able to access the J/DM Bulletin Board and read current information and insert information which they think is relevant. Particularly timely portions of the J/DM Newsletter such as job openings and announcements of forthcoming meetings will be available on-line. You will also be able to send and receive messages from other J/DMer's. The Bulletin Board will be available through either Compuserve or the Source. A survey of members indicated that one of these services would be preferred to some of the other services which are more 'academic' in nature, such as EDUNET and BITNET. Although the Bulletin Board will probably be in operation before the next newsletter comes out, full details will be sent to all members. J/DMer's wishing to make particular suggestions concerning the possible vendors should contact the editor.

## FOREIGN SUBSCRIPTIONS. . .

In our effort to keep the cost of the J/DM Newsletter as reasonable as possible, we are sending issues addressed several people at a single foreign university to one person and asking that individual to distribute them to their colleagues. We hope that this arrangement works well and would welcome other suggestions to help us improve our foreign distribution.

## CONTENTS

From the Editor.....	2
Note Regarding the Recent Developments Column.....	2
Recent Articles from Medical Decision Making.....	3
Book Review: Quick Analysis for Busy Decision Makers.....	4
New Book.....	5
Consumer Choice Models...A Call for Papers.....	6
Recent Developments in the Psychology of Judgment and Decision Making.....	7
Positions Available.....	11
A New Journal for J/DMer's Concerned with Computers and Social Policy.....	12
Forthcoming Meetings.....	13
J/DM Newsletter Subscription Form.....	13

NEWSLETTER

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DEADLINE FOR SUBMISSIONS FOR THE NEXT J/DM NEWSLETTER: JUNE 1, 1985

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**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 8 1/2 by 11 paper. Please leave good margins--1 inch at the sides and bottom and 2 inches at the top. If possible, use a carbon or film ribbon. Please mail flat--do not fold.

Subscriptions: The current rate for the J/DM Newsletter is \$5.00/year. We are dedicated to keeping the cost at a minimum, but must emphasize that recent increases in postage rates will cause problems unless as many readers as possible pay. Please send your subscription to the editor. If you do not know whether or not your subscription has been paid or is current, check your mailing label. If it has an X, you have not paid; if it has an R, it is time to renew. Subscriptions are available on a calendar year basis only.

Checks should be made payable to the Indiana University Foundation.

Foreign Subscriptions: The cost of foreign subscriptions is necessarily higher than domestic subscriptions. Copies will be sent airmail to foreign addresses for \$7.00 (U. S.) per year if drawn on a U. S. bank. (If payable in U. S. dollars, but not drawn on a U. S. bank, the cost is \$25.00 per year. Note that many foreign banks have accounts with a U. S. bank and draw checks on that account.)

Address Correction: Please check your mailing label carefully. Because the J/DM Newsletter is sent by bulk mail, copies with incorrect addresses or otherwise undeliverable are neither forwarded nor returned. Therefore we have no way of knowing if copies are delivered. Any changes or corrections in addresses should be reported to Gary McClelland. (Address changes may also be sent to the editor with subscription payments.)

Mailing Labels: Some readers may wish to send reprint lists or other material to people listed in the directory. Gary McClelland has agreed to provide sets of mailing labels for \$5.00 to individuals employed by non-profit institutions.

**REGARDING THE PREPARATION OF "RECENT DEVELOPMENTS" . . .**

I do not rely on computer searches of the literature in preparing "Recent Developments," but instead rely on my reading of the journals. Consequently, while I try to make the selection as complete as possible, fatigue, eye strain, and chance events may cause me to overlook a relevant article. If any readers of the J/DM Newsletter are aware of an omission please let me know, and I shall try to include the omitted article in a subsequent column. Finally, I would encourage people not to cite the articles based on my annotations. To keep in rein my personal biases, I base my annotations solely on the author's written text. Consequently, some of the annotations of the article may report claims of the authors which many readers of the entire article may conclude are unsubstantiated.

-- Jay Christensen-Szalanski

## Recent Articles in

## The Journal of Medical Decision Making

Compiled by Jay J.J. Christensen-Szalanski

Cebul RD: "A look at the chief complaints" revisited: Current obstacles and opportunities for decision analysis. Med Decis Making 4:271-283, 1984. Considers the cognitive and practical obstacles to the dissemination of decision analysis.

Cebul RD, Beck LH, Carroll JG, et al: A course in clinical decision making adaptable to diverse audiences. Med Decis Making 4:285-296, 1984. Concludes that the course's concepts and skills can be effectively adapted to and assimilated by physicians at all levels of training and experience.

Clarke JR: A concise model for the management of possible appendicitis. Med Decis Making 4:331-338, 1984. Reports that the surgeon's decision to operate is determined by the probability of appendicitis, the probability of perforation during observation, and the relative differences in outcomes between avoidable perforation and unnecessary operation.

Kwoh CK, Beck JR, Pauker SG: Repeated syncope with negative diagnostic evaluation. To pace or not to pace? Med Decis Making 4:350-377, 1984. Demonstrates that complex, time-dependent prognoses do not always require the creation of a Markov process for adequate modeling; presents an example in which the decision to implant a pacemaker is largely modulated by patient values.

Morton BA, Teather D, du Boulay GH: Statistical modelling and diagnostic aids. Med Decis Making 4:339-348, 1984. Considers the problems involved in constructing aids for diagnosis; applies this approach to a problem of cerebral disease diagnosis.

Read JL, Quinn RJ, Berwick DM, et al: Preferences for health outcomes. Comparisons of assessment methods. Med Decis Making 4:315-329, 1984. Compares standard gamble, time trade-off, and category scaling methods for assessing preferences among hypothetical outcomes; concludes that the methods are not interchangeable

Wagner DP, Draper EA, Campos RA, et al: Initial international use of APACHE. An acute severity of disease measure. Med Decis Making 4:297-313, 1984. Demonstrates the international predictive accuracy of a severity of disease measure for intensive care admissions.

## BOOK REVIEW...

Behn, R. D. & Vaupel, J. W. Quick Analysis for Busy Decision Makers. New York: Basic Books, 1982. ISBN: 0-465-06787-5  
\$18.95.

In the preface to this book, Behn and Vaupel divide all analysis into two kinds, researched analysis and quick analysis. They recommend the use of quick analysis when time is short and data are sparse. They also advocate a common sense approach to decision analysis throughout the book, stressing straightforward methods of problem formulation and reformulation rather than the use of complex models and analytic techniques.

The book is written with three types of audience in mind, a) practising decision makers, b) students preparing for careers in decision making professions, c) individuals who want to improve the quality of their personal decisions. The book succeeds in catering to the needs of the first and third audiences, largely because the principal concepts are expressed well, with the emphasis being on practical applications rather than mathematical rigor. In a college course, the book would be a useful reference text, but a coverage of more complex decision analytic tools and relevant mathematical theory would also be necessary in many cases.

The book is spiced with intriguing examples which are spread over its twelve chapters. My favorite case study is the hemophilia-abortion decision in chapter ten which provides a convenient springboard for introducing conditional probabilities and folding back (a limited form of Bayesian analysis). The gentle chiding of politicians and bureaucrats throughout the book is amusing and struck a responsive chord with this reader.

The first five chapters give the fundamentals of quick analysis. They include an introduction to decision trees, and the use of preference probabilities (cf. basic reference lotteries) and substitution in evaluating the relative attractiveness of paths within a tree. The pace is pedestrian, but the examples are thought provoking. As someone who had doubts about the use of reference gambles I felt much happier about the use of preference probabilities (reference gambles) after reading these chapters. Perhaps the major strength of the book is the development of an intuitive feel for mathematical concepts. Some, however, will be disappointed that this intuitive understanding was not reinforced more strongly with mathematical arguments and notation. For those interested in the psychology of decision making, chapter four was one of the best in the book, providing a brief, but thoughtful summary of some of the important literature. Chapters six to nine introduce the notion of a confidence interval and its application to risk assessment. The introduction to confidence intervals is almost painfully slow, but the interest of the reader is maintained with well-chosen examples.

The final three chapters capitalize on the thorough treatment which preceded them. The analysis of problems with tradeoffs and multiple criteria is explained simply and effectively. Chapter 12 shows how quick analysis can be used in a representative situation, in this case a needle-phobic student deciding on whether or not to get an inoculation or risk contracting swine flu. This final chapter is a little

(continued on next page...)

## BOOK REVIEW (continued)

disappointing and a complex example which put quick analysis through its paces more thoroughly would have been more convincing.

The book is available in an inexpensive paperback edition from Basic Books and should be suitable as a reference text for college courses in decision analysis, as well as for individual decision makers. It is technically sound, to my knowledge, and apparently free of obvious typographic or notational errors. Basic concepts in decision analysis such as substitutability, independence, transitivity, confidence intervals, cumulative, subjective and conditional probabilities are covered well. The restricted mathematical coverage will undoubtedly increase the accessibility of the material for many, but others may find it annoying to wade through wordy descriptions of simple mathematical concepts. The book is well organized, with an orderly treatment of topics. It is a refreshing change from other texts in decision analysis which burden the reader with esoteric notation, and it provides an introduction to the effect of psychological influences on decision making. Some readers may find the sheer number and redundancy of decision tree figures to be a definite case of overkill, however.

Quick Analysis for Busy Decision Makers represents a useful addition to the decision analysis literature. It manages to combine satisfactorily the economic and psychological perspectives on decision making. Some will appreciate it as an intuitive, but reasonably thorough, introduction to important concepts in probability, statistics and decision analysis. Others will find interesting examples which provide a fresh perspective on familiar mathematical concepts. The authors make a strong case for the use of quick analysis in decision making, but it is to be hoped that more detailed analytic tools will also be used (when appropriate) more extensively in practical decision making.

--Mark Chignell

## NEW BOOK...

Borcharding, K., Brehmer, B., Vlek, C. A. J., & Wagenaar, W. A., (Editors). Research Perspectives on Decision Making Under Uncertainty. Amsterdam: North-Holland, 1984. ISBN: 0-444-87574-3, U.S. \$52.00.

This book is a selection of revised papers which were originally presented at the Ninth Research Conference on Subjective Probability, Utility, and Decision Making, which was held in Groningen, the Netherlands, in August-September 1983.

**CONTENTS:** Preface. Sections: I. **Basic Theory.** A Panel Discussion on "What Constitutes 'a Good Decision'?" (*W. Edwards, I. Kiss, G. Majone and M. Toda*, with introduction and postscript by *Ch. Vlek*); A Theory of Requisite Decision Models (*L.D. Phillips*); The Evaluation of Managerial Decisions' Quality by Managers (*D. Zakay*); The Content and Structure of Value Tree Representations (*G. Pitz and S. Riedel*); Cognitive Maps of Past and Future Economic Events (*G. Sevón*); Learning From Feedback in Probabilistic Environments (*J. Klayman*); Methodological Decision Rules as Research Policies: A Betting Reconstruction of Empirical Research (*W. Hofstee*). II. **Methodology.** Information Search and Evaluative Processes in Decision Making: A Computer Based Process Tracing Study (*U. Dahlstrand and H. Montgomery*); The Intertwining of Information Search and Decision Aiding (*F. Bronner and R. de Hoog*); Designing Decision Support Methods in Organizations (*A. Vari and J. Vecsenyi*); Stochastic Choice Heuristics (*K.M. Aschenbrenner, D. Albert and F. Schmalhofer*); The Multiple Objectives of Gamblers (*W.A. Wagenaar, G. Keren and A. Pleit-Kuiper*).

## III. Risk.

Behavioral Decision Theory Perspectives on Risk and Safety (*P. Slovic, B. Fischhoff and S. Lichtenstein*); Contrasting Risk Judgements Among Interest Groups (*H. Kuyper and Ch. Vlek*); The Political Processing of Uncertainty (*J. Linnerooth*); Empirical and Theoretical Relationships Between Value and Utility Functions (*F.H. Barron, D. von Winterfeld and G. Fischer*). IV. **Applications.** Formulations of Real-Life Decisions: A Study of Foreign Policy Decisions (*W. Saris and I. Gallhofer*); Probabilistic Analysis in Legal Factfinding (*M. Bar-Hillel*); Magistrate Decision Making (*C. McKnight*); A Simulation Model to Control the Oosterschelde Storm-Surge Barrier (*W. Heins and J. Vreugdenhil*); Formal and Knowledge-Based Methods in Decision Technology (*J. Fox*).

## CONSUMER CHOICE MODELS

### CALL FOR PAPERS

#### For a Special Issue of *Marketing Science*

Understanding choice is one of the fundamental areas of research in marketing. Indeed, modeling of choice by individuals has been a fruitful area of research in various fields such as Economics, Psychology and Marketing. The objective of the special issue is to report on the state of the art with regard to consumer choice models in an integrated, constructive way. In particular, we seek to publish articles that deal with theory, measurement, and applications of choice models. Articles that deal with theory alone should make substantial contributions either in developing new theories, or in terms of providing new insights in integrating various methodologies and relating them to the special interests of marketing professionals. Articles that deal with developing new measurement instruments should obviously illustrate their use and compare them to alternative methods. Applications of choice models in simulated or real situations are greatly encouraged. Such papers would be particularly useful if they are of a comparative nature, i.e., they provide insight about the usefulness of different models in different choice situations (e.g., Conjoint Analysis when making decisions about product ingredients and perceptual space models when making decisions about strategic positioning).

The following topics are illustrative of the issues that would be appropriate for the special issue:

#### 1. *Model Structure*

- Emphasis on physical attributes versus perceptual dimensions
- Treatment of price: as an attribute, as a constraint, or "per dollar" maps
- Treatment of risk preference by the consumer (e.g. von Neumann-Morgenstern, Prospect Theory, or other)
- Product similarity, i.e., the handling of independence of irrelevant alternatives and other potential complexities such as elimination by aspects (EBA) and hierarchical elimination models (HEM)
- Heterogeneity, i.e., are preferences and/or perceptions and/or choice rules assumed to be homogeneous, assumed to be described by a probability density function, or allowed to be individual specific.
- Static vs. Dynamic, e.g., is learning on the consumer side modeled explicitly via different information stages (awareness, preference, choice), uncertainty reduction, etc.

#### 2. *Parameterization, Estimation and Measurement*

In order to use the models, they have to be parameterized and then the parameters have to be calibrated. The latter can be done by direct consumer measurement on profiles of product attributes, by estimation using actual choice data (revealed preference), combinations of the above, or other methods. The best method obviously depends on the availability and cost of data, and the costs of errors (accuracy). Issues relating to the pros and cons of using the various techniques, the level of data aggregation, and the problem to be solved are of great importance.

#### 3. *Applications*

The application of choice models to solve actual marketing problems is extremely important. Papers here should discuss why the particular technique and calibration procedure was most appropriate for the case, and how the model helped in improving the solution to the marketing problem at hand. Real applications are preferred.

Interested authors should send *five* copies of their articles to:

Professor Subrata K. Sen, Editor  
*Marketing Science*  
Yale School of Management  
Box 1A  
New Haven, CT 06520

The deadline for submission of articles is *June 30, 1985*.

## RECENT DEVELOPMENTS IN THE PSYCHOLOGY OF JUDGMENT AND DECISION MAKING

### Journal Articles

ALLOY LB, TABACHNIK N: Assessment of covariation by humans and animals. The joint influence of prior expectations and current situational information. *Psychol Rev* 91:112-149, 1984. Analyzes the accuracies and errors in people's covariation assessments.

ASHFORD SJ, CUMMINGS LL: Feedback as an individual resource. Personal strategies of creating information. *Organ Behav Hum Perform* 32:370-398, 1983. Proposes a model of feedback seeking behaviors; discusses several motivations for this behavior.

ASHTON AH: The descriptive validity of normative decision theory in auditing contexts. *J Account Res* 20:415-428, 1982. Compares auditors' decision making with normative models.

BAIMAN S, EVANS JH III: Pre-decision information and participative management control systems. *J Account Res* 21:371-395, 1983. Examines a model in which decision-making responsibilities have been delegated to a subordinate who has better information than the superior.

BAMBER EM: Expert judgment in the audit team. A source reliability approach. *J Account Res* 21:396-412, 1983. Reports that auditors' judgments were sensitive to the reliability of their supervisor; suggests that managers may underutilize information from a less than perfectly reliable source.

BARRON FH: Validation and error in multiplicative utility functions. *Acta Psychol (Amst)* 53:99-117, 1983. Considers different kinds of errors in utility assessments generated from four different multiplicative multiattribute utility models.

BEACH LR, BARNES V: Approximate measurement in a multiattribute utility context. *Organ Behav Hum Perform* 32:417-424, 1983. Reports that simple ranking methods can yield good approximations to the orderings generated by a rigorous ranking method.

BECK KH, FELDMAN RHL: Information seeking among safety and health managers. *J Psychol* 115:23-31, 1983. Reports that managers' decision to seek information is based on their beliefs and not on those of their coworkers.

BELL DE: Risk premiums for decision regret. *Manage Sci* 29:1156-1166, 1983. Investigates the normative implications of decision regret; discusses cases where the outcomes not chosen are never resolved.

BERMAN JS, READ SJ, KENNY DA: Processing inconsistent social information. *J Pers Soc Psychol* 45:1211-1224, 1983. Indicates that information consistent with expectations was rated more accurately and remembered better than information inconsistent with expectations.

BEYTH-MAROM R: How probable is probable? A numerical translation of verbal probability expressions. *J Forecast* 1:257-269, 1982. Reports that there is a high variability in the interpretation of verbal probability expressions.

BEYTH-MAROM R, FISCHHOFF B: Diagnosticity and pseudodiagnosticity. *J Pers Soc Psychol* 45:1185-1195, 1983. Contrasts subjects' intuitive evaluation of data for hypothesis testing with the Bayesian concept of diagnosticity; reports that the instructions given to subjects can alter the subjects' performance.

BIRNBAUM MH: Perceived equity of salary policies. *J Appl Psychol* 68:49-59, 1983. Examines how people judge the fairness of different systems to allocate salary raises.

BIRNBAUM MH, MELLERS BA: Bayesian inference. Combining base rates with opinions of sources who vary in credibility. *J Pers Soc Psychol* 45:792-804, 1983. Reports that people did not exhibit a "base-rate fallacy" nor Bayesian behavior; suggests that the observed behavior was consistent with a scale-adjustment averaging model of probability revisions.

BROCKNER J, NATHANSON S, FRIEND A, et al: The role of modeling processes in the "knee deep in the big muddy" phenomenon. *Organ Behav Hum Perform* 33:77-99, 1984. Reports that witnessing an entrapped individual increases an individual's tendency to become entrapped.

CASEY CJ: Prior probability disclosure and loan officers' judgments. Some evidence of the impact. *J Account Res* 21:300-307, 1983. Reports that the disclosure of the objective prior probability of a corporate failure did not have a significant impact on loan officers' judgments.

CHRISTENSEN-SZALANSKI JJJ, BEACH LR: Publishing opinions. A note on the usefulness of commentaries. *Am Psychol* 38:1400-1401, 1983. Suggests that critical commentaries can increase the readers' judgment of the importance of the original article.

CHRISTENSEN-SZALANSKI JJJ, BEACH LR: The citation bias. Fad and fashion in the judgment and decision literature. *Am Psychol* 39:73-78, 1984. Suggests that the prevailing view of people as poor decision makers results in part because studies reporting good performance are ignored in the literature.

CLARY EG, TESSER A: Reactions to unexpected events. The naive scientist and interpretive activity. *Pers Soc Psychol Bull* 9:609-620, 1983. Reports that the occurrence of unexpected information results in people generating explanations that maintain the original explanation.

DAGSVIK JK: Discrete dynamic choice models of Thurstone and Luce. *J Math Psychol* 27:1-43, 1983. Suggests that Markov models can be applied when modeling processes involve individual discrete decisions over time.

ECKEL NL: The impact of probabilistic information on decision behavior and performance in an experimental game. *Decision Sci* 14:483-502, 1983. Shows that presenting probabilistic information to a person can improve the person's performance in experimental games.

EINHORN HJ, HOGARTH RM: Prediction, diagnosis, and causal thinking in forecasting. *J Forecast* 1:23-36, 1982. Examines the nature of diagnostic thinking with respect to different forecasting activities.

FILDES R: An evaluation of Bayesian forecasting. *J Forecast* 2:137-150, 1983. Compares a Bayesian method of forecasting with different time series forecasting models.

FISCHHOFF B, MACGREGOR D: Subjective confidence in forecasts. *J Forecast* 1:155-172, 1982. Reports that people exhibit over-confidence when making forecasts.

FORGAS JP: What is social about social cognition? *Br J Soc Psychol* 22:129-144, 1983. Suggests that social cognition should include the relationship between individual cognition and socio-cultural representations.

GARDENFORS P, SAHLIN N-E: Decision making with unreliable probabilities. *Br J Math Stat Psychol* 36:240-251, 1983. Presents a decision theory which allows people to account for the uncertainties of their probability estimates.

GRIGGS RA, COX JR: The effects of problem content and negation on Wason's selection task. *Q J Exp Psychol* 35A:519-533, 1983. Reports on the strategies that people used to solve a covariation task.

HAGAFORS R: Effects of information presentation mode on subjects' hypotheses in a probabilistic inference task. *Acta Psychol (Amst)* 53:195-204, 1983. Reports that people make more accurate judgments on multiple-cue probability learning tasks when they can see an ordered array of cue values.

HAMILTON RE, WRIGHT WF: Internal control judgments and effects of experience. Replications and extensions. *J Account Res* 20:756-765, 1982. Reports that an auditor's expertise was unrelated to the stability of auditors' judgments, but positively related to self-insight.

HOSKIN RE: Opportunity cost and behavior. *J Account Res* 21:78-95, 1983. Reports that people do not always use opportunity costs in the way prescribed by economic theory.

JACCARD J, SHENG D: A comparison of six methods for assessing the importance of perceived consequences in behavioral decisions. Applications from attitude research. *J Exp Soc Psychol* 20:1-28, 1984. Reports that different methods to measure the importance of perceived consequences yielded estimates that were unrelated to each other.

LEWIS B, SHIELDS MD, YOUNG SM: Evaluating human judgments and decision aids. *J Account Res* 21:271-285, 1983. Provides an experimental method for evaluating human judgments and the appropriateness of decision aids.

LIPUKAS SK: Thresholds and transitivity in stochastic consumer choice. A multinomial logit analysis. *Manage Sci* 30:110-122, 1984. Proposes a theory to account for the use of thresholds when a decision maker is confronted with more than two alternatives.

MEYER AD: Mingling decision making metaphors. *Acad Manage Rev* 9:6-17, 1984. Discusses the problems that are associated with the use of metaphors in building decision-making theories.

MIDDEN CJH, RITSEMA BSM: The meaning of normative processes for energy conservation. *J Econ Psychol* 4:37-55, 1983. Reports that normative processes can not account for people's decision to conserve the use of energy.

MIHAL WL, SORCE PA, COMTE TE: A process model of individual career decision making. *Acad Manage Rev* 9:95-103, 1984. Presents a model of career decision making.

MINER FC JR: Group versus individual decision making. An investigation of performance measures, decision strategies, and process losses/gains. *Organ Behav Hum Perform* 33:112-124, 1984. Examines factors that alter the relative performance of groups and individuals at making the correct decision.

MORGAN RL: Risk preference as a function of the number of wins and the amount won. *Am J Psychol* 96:469-475, 1983. Shows that an individual's previous experience with losing gambles alters the individual's risk preferences.



NELSON TO: A comparison of current measures of the accuracy of feeling-of-knowing predictions. *Psychol Bull* 95:109-133, 1984. Evaluates eight different quantitative measures of feeling-of-knowing accuracy.

NISBETT RE, KRANTZ DH, JEPSON C, KUNDA Z: The use of statistical heuristics in everyday inductive reasoning. *Psychol Rev* 90:339-363, 1983. Identifies circumstances in which people use explicitly statistical principles to solve problems.

PARKER R, LUI L, MESSICK C, et al: A computer laboratory for studying resource dilemmas. *Behav Sci* 28:298-304, 1983. Describes a method to study group members' decisions about the use of shared renewable resources.

READ SJ, ROSSON MB: Rewriting history. The biasing effects of attitudes on memory. *Soc Cogn* 1:240-255, 1982. Shows that people's memories for events are distorted to become more consistent with their attitudes and beliefs.

RUSO JE, DOSHER BA: Strategies for multiattribute binary choice. *J Exp Psychol [Learn]* 9:676-696, 1983. Reports that decision-making strategies are selected to minimize the joint cost of errors and cognitive effort.

RYNES S, LAWLER J: A policy-capturing investigation of the role of expectancies in decisions to pursue job alternatives. *J Appl Psychol* 68:620-631, 1983. Reports that there is a wide individual variability in the way expectancies influence job search patterns; examines factors that influence this variability.

SCHEPANSKI A: The predictive ability criterion in experimental judgment research in accounting. *Decision Sci* 14:503-512, 1983. Suggests that the ability of a linear model to predict human behavior is the result of various features of the experimental design and not necessarily indicative of actual decision-making processes.

SCHMIDT FL, HUNTER JE, CROLL PR, MCKENZIE RC: Estimation of employment test validities by expert judgment. *J Appl Psychol* 68:590-601, 1983. Shows that expert judges may provide more accurate estimates of validity for cognitive tests than do local criterion-related validation studies.

SCHOENFELD AH: Beyond the purely cognitive. Belief systems, social cognitions, and metacognitions as driving forces in intellectual performance. *Cogn Sci* 7:329-363, 1983. Explores the way that individuals' belief systems can shape the manner in which people solve problems.

SCHROEDER DA, JENSEN TD, REED AJ, et al: The actions of others as determinants of behavior in social trap situations. *J Exp Soc Psychol* 19:522-539, 1983. Reports that people conform to the behavior of others when competing for a finite common resource.

SCHUL Y, BURNSTEIN E: The informational basis of social judgments. Memory for informative and uninformative arguments. *J Exp Soc Psychol* 19:422-433, 1983. Shows that the memory for an argument increases with its informativeness and with its thematic relatedness to other arguments.

SHRIVASTAVA P, MITROFF II: Enhancing organizational research utilization. The role of decision makers' assumptions. *Acad Manage Rev* 9:18-26, 1984. Examines why organizational research has been of limited use for practical decision making.

SJOBERG L: Aided and unaided decision making. Improving intuitive judgment. *J Forecast* 1:349-363, 1982. Presents different ways to improve judgments.

SJOBERG L: Value change and relapse following a decision to quit or reduce smoking. *Scand J Psychol* 24:137-148, 1983. Suggests that a person's emotional state and not a discounting of delayed values causes a person to change preferences with time.

SOLOMON I: Probability assessment by individual auditors and audit teams. An empirical investigation. *J Account Res* 20:689-710, 1982. Reports that auditors' probability assessments were not accurate; shows that the accuracy was improved when the auditors worked as a team.

STACK LC, LANNON PB, MILEY AD: Accuracy of clinicians' expectancies for psychiatric rehospitalization. *Am J Com Psychol* 11:99-113, 1983. Identifies different factors that affect the accuracy of clinicians' predictions.

SVENSON O: Cognitive processes in judging cumulative risk over different periods of time. *Organ Behav Hum Perform* 33:22-31, 1984. Reports on conditions when people behave as good intuitive statisticians.

SWELLER J, MAWER RF, WARD MR: Development of expertise in mathematical problem solving. *J Exp Psychol [General]* 112:639-661, 1983. Reports that people learn better to solve problems when they are taught to work forward from the givens of a problem, rather than backward from the goal.

TEIGEN KH: Studies in subjective probability IV. Probabilities, confidence, and luck. *Scand J Psychol* 24:175-191, 1983. Suggests that subjective probability is poorly suited as a common measure of the varieties of subjective uncertainty.

TODA M: Future time perspective and human cognition. An evolutionary view. *Int J Psychol* 18:351-365, 1983. Outlines a model that examines people's ability to form judgments about the future.

TREISMAN M: A solution to the St Petersburg paradox. *Br J Math Stat Psychol* 36:224-227, 1983. Discusses different explanations for the statistical paradox.

TVERSKY A, BAR-HILLEL M: Risk. The long and the short. *J Exp Psychol [Learn]* 9:713-717, 1983. Analyzes the "fallacy of large numbers" from both mathematical and psychological standpoints.

TVERSKY A, KAHNEMAN D: Extensional versus intuitive reasoning. The conjunction fallacy in probability judgment. *Psychol Rev* 90:293-315, 1983. Examines observed violations of the conjunction rule of probability in human judgment.

WERNER PD, ROSE TL, YESAVAGE JA: Reliability, accuracy; and decision-making strategy in clinical predictions of imminent dangerousness. *J Consul Clin Psychol* 51:815-825, 1983. Reports on factors that can affect clinicians' ability to predict accurately a psychiatric patient's imminent dangerousness.

ZAKAY D: The relationship between the probability assessor and the outcomes of an event as a determiner of subjective probability. *Acta Psychol (Amst)* 53:271-280, 1983. Reports that people make different probability assessments when judging whether the event will occur to them than when judging whether the event will occur to others.

#### Book Reviews

Bastick T: *Intuitions. How We Think and Act.* Chichester, England: Wiley, 1982, 518 pp. Reviewed in *Cont Psy* 28:837-838, 1983.

COLMAN A: *Game Theory and Experimental Games. The Study of Strategic Interactions.* Oxford, Pergamon, 1982, 301 pp. Reviewed in *Br J Math Stat Psychol* 36:282, 1983.

DIXON N: *Preconscious Processing.* Chichester, England: Wiley, 1981, 313 pp. Reviewed in *Br J Psychol* 74:544-545, 1983.

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## POSITIONS AVAILABLE. . .

Michigan

The Societal Analysis Department, General Motors Research Laboratories, anticipates a position for a cognitive psychologist with interests in decision making. Experimentalists are preferred. Potential project areas include building a cognitive model of the driver, the mechanic, or the customer. The department consists of psychologists, economists, sociologists, mathematicians, and computer scientists. External publication is encouraged. Candidates must hold Ph.D. degree or have equivalent research experience. Must have U.S. citizenship or visa status which permits legal acceptance of permanent employment under U.S. immigration laws. General Motors is an Equal Opportunity Employer. Salary and benefits are competitive. For further information, contact

Dr. Gregory W. Cermak  
Societal Analysis Department  
General Motors Research Laboratories  
Warren, Michigan 48090 9057  
(313) 575-3244

Ohio

POSITION: Research Associate

STARTING DATE: Between April 1 and June 1, 1985

QUALIFICATIONS: Psychology (Anthropology background will be considered)  
Ph.D preferred (ABD or M.S. will be considered)  
Two years practical experience:  
Interviewing, research design, writing; experience in  
Department of Defense or industrial setting desirable

SALARY: Negotiable, depending on qualifications

APPOINTMENT: One year

RESPONSIBILITIES: Data collection and analysis of research projects, mainly  
DoD funded, in the areas of decision making, analogical  
reasoning, metaphor, and other applied cognitive areas.  
Major responsibility for literature reviews, subject  
interviews and data analysis, report writing. Proposal  
writing and experimental design for follow-on and  
proposed studies.

SETTING: Klein Associates is a small Research and Development  
organization established in 1978 to provide advanced  
behavioral research support for applications by  
government, industry, and social service organizations.  
Research has centered around analogical reasoning applied  
to prediction problems, decision making tasks, analysis  
of highly proficient performance, and training  
requirements. Current projects focus on prediction  
techniques, computer interface methods, knowledge  
engineering, decision making, and information management.  
The firm employs four to six associates, all of whom have  
or are pursuing advanced degrees, plus office staff.

Yellow Springs is a small town with excellent cultural  
opportunities, near Dayton, Ohio, 60 miles equidistant  
from Cincinnati and Columbus.

CONTACT: Paula G. John, Administrative Officer  
KLEIN ASSOCIATES  
740 Wright Street  
Yellow Springs, OH 45387  
(513) 767-2691

CALL FOR PAPERSComputers and the Social Sciences

Beginning in April 1985, Paradigm Press will publish a new journal, Computers and the Social Sciences. Its goal is communication among those interested in the study of computers and their impact. This focus of attention has become increasingly necessary as many social scientists have attempted to evaluate the role of microcomputers in their work as well as in the society at large. This journal will address the information needs of analysts and researchers attempting to bring together computer technology and the social sciences. While concentrating on social science research into the impact of computers, it will also include articles which critically analyze and offer perspectives on the emerging role of computers in the social sciences.

Papers are solicited in two broad areas: (1) the social science of computers, i.e., research on the impact of computer technology; (2) computers in the social sciences, e.g., critical analyses, novel conceptualizations, and systematic evaluations of computing applications in the social sciences. Suggested topics include:

The Social Science of Computers

- \* Research on the computer-human interface, especially social and behavioral responses to computer systems
- \* Research on the impact of computers on society, especially organizational and occupational impacts, e.g., articles in SOCIOLOGY OF WORK AND OCCUPATIONS, May, 1979
- \* Broad, in-depth assessments of the current or future implications of computers on society
- \* Studies of the effects of computers on the social sciences

Computers in the Social Sciences

- \* Assessments of computing needs or evaluations of practices in social science research or teaching
- \* Exemplary conceptualizations of computer technology and computer models in the social sciences
- \* Surveys of existing computing techniques, see for example the articles in AMERICAN BEHAVIORAL SCIENTIST, Jan-Feb 1977
- \* Analysis of networking and organizational processes resulting from information needs

Paradigm Press, Osprey, Florida, also publishes the well known international quarterly, Computers and the Humanities. The approximately one thousand libraries in the United States and abroad that currently subscribe to that journal will receive the first issue of Computers and the Social Sciences free. This procedure will insure immediate broad availability for the new journal. Papers or inquiries should be sent to:

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Computers and the Social Sciences  
2122 Riverside Avenue  
Minneapolis, MN 55454  
612/373-0177

**FORTHCOMING MEETINGS. . .**

Every year EURO organizes a SUMMER INSTITUTE for the most promising young scientists (age 25-35) in a particular field of Operations Research. The theme this year is **Multicriteria Analysis**. It will be organized in Bruxelles from July 12 to August 2, 1985 at the E.I.A.S.M. (European Institute for Advanced Studies in Management, rue d'Egmont, 13, 1050 Bruxelles). For information contact Prof. J.P. Brans, President of EURO, V.U.B. C 500 Pleinlaan 2, B 1050 Bruxelles BELGIQUE.

The 10th RESEARCH CONFERENCE ON SUBJECTIVE PROBABILITY, UTILITY, AND DECISION MAKING will take place in Helsinki, Finland, August 26-29, 1985 at the Swedish School of Economics. (For more information see the J/DM Newsletter, January 1985.) Contact Guje Sevón, Swedish School of Economics, Arkadiagatan 22, 00100 Helsinki, FINLAND, or Gordon Pitz, Department of Psychology, Southern Illinois University, Carbondale, Illinois 62901, USA.

The 5th INTERNATIONAL SYMPOSIUM ON FORECASTING will be held in Montreal, Canada, June 9-12, 1985. Contact Robert Carbone, Faculty of Management, McGill University, Montreal, PQ, Canada H3A 1G5. (514) 392-4251. (See J/DM Newsletter, August 1984.)

The annual meeting of the MIDWESTERN PSYCHOLOGICAL ASSOCIATION will be held May 2-4, 1985 at the Palmer House, Chicago, Illinois. As we go to press the final program is not available. However, there will be several sessions dealing with decision making and judgment, the first will be on Thursday afternoon, May 2.

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