



Society for Judgment and Decision Making

Newsletter

www.sjdm.org

Volume 22, Number 2

June 2003

Contents

| | |
|--|----|
| 2003 Executive Board..... | 2 |
| Can we talk?..... | 3 |
| History of our Society – The First Meeting in 1980..... | 5 |
| Teaching judgment and decision making | 8 |
| Passages | 10 |
| Book Review: Biblical Games..... | 11 |
| Boring but important announcements..... | 12 |
| Conferences..... | 13 |
| Call for papers: SJDM annual conference, 10-11 November 2003 | 13 |
| Other Conferences | 14 |
| Filler, but still important | 14 |
| Application for 2003 Jane Beattie Memorial Scholarship..... | 16 |
| The National Cancer Institute seeks your research opinion..... | 17 |
| Recent publications of our members & others..... | 18 |
| Animal group decision making (of all things!)..... | 19 |
| Environmental decision making | 20 |
| Consumer Decision Making | 20 |
| 2003 Dues and Address Corrections..... | 21 |

**A local decision maker awaits us with open wings.
The SJDM annual conference in Vancouver, 10-11 November
See you there!**



2003 Executive Board

Josh Klayman, *President*, joshk@uchicago.edu
 Eric Johnson, *President-elect*, ejj3@columbia.edu
 George Loewenstein, *Past President*, g120@andrew.cmu.edu
 Reid Hastie, *2001-2003*, reid.hastie@colorado.edu
 Peter Ayton, *2002-2004*, p.ayton@city.ac.uk
 Rami Zwick, *2003-2005*, mkzwick@ust.hk
 Bud Fennema, *Secretary/Treasurer*, bfennema@garnet.acns.fsu.edu
 Sandra Schneider, *Conference Coordinator*, sjdm@web.usf.edu
 Alan Schwartz, *Webmaster*, alansz@sjdm.org
 Warren Thorngate, *Newsletter Editor*, warrent@ccs.carleton.ca

JDM Newsletter Editor
 (Submissions & Advertisements)
 Warren Thorngate
 Psychology Department
 Carleton University
 1125 Colonel By Drive
 Ottawa, Ontario K1S 5B6
 Canada
 (613) 520-2600 x 2706
 fax (613) 520-3667
warrent@ccs.carleton.ca

The *JDM Newsletter*, published four times a year (March, June, September, and December), 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 However, we do not publish substantive papers.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 or email the editor. There are few ground rules for submissions. The best way to send your contribution is via EMAIL or a 3.5" diskette. Send an IBM-compatible text file or word-processed document up to versions WordPerfect 10 or Word 2000. If you must send hard copy (e.g., if you are using special graphics or do not have computer access), the copy should be typed single-spaced on white 8½ by 11 paper. Please mail flat -- do not fold.

Subscriptions: Subscriptions are available on a calendar year basis only with society membership. Requests for information concerning membership

in the Society for Judgment and Decision Making should be sent to Bud Fennema.

Advertising Rates: Advertising can be submitted to the editor. Inclusion of the ad and the space given to the ad is at the editor's discretion. The current charge is \$100 per page (\$50 per 1/2 page). Contact Warren Thorngate for details.

Secretary/Treasurer
 Bud Fennema
 Chairman, Department of Accounting and Ernst & Young Professor
 College of Business
 Florida State University
 Tallahassee, Florida 32306-1110
 Voice: (850)644-8231 Fax: (850)644-8234
bfennema@garnet.acns.fsu.edu

Mailing Labels: Some readers may wish to send reprint lists or other material to people listed in the directory. The current charge is \$125 for a set of labels. A diskette of the database is available for one-time use. The charge is \$50 for commercial use, \$25 for nonprofit use. Contact Bud Fennema for details.

Address Corrections: Please keep your mailing and/or email address current. We often have no way of knowing if you are not receiving the newsletter. Address changes or corrections should be sent Bud Fennema. Reports of problems in receiving or opening the pdf file should be sent to the editor.

Can we talk?

Josh Klayman, President SJDM

In this issue, I take a break from quasi-intellectual editorializing to deal with some Society business. There are several issues, varying in importance, that deserve more, and better-quality, discussion among us JDMers. In each case, let's start with some good discussion, with the goal establishing a good basis for later action. A good forum to start with is the JDM e-mail list, jdm-society@mail.sjdm.org. If you're not signed on yet, go to <http://www.sjdm.org/mailman/listinfo/jdm-society>. Alternatively, if you prefer, you can just send ideas to me, at joshk@uchicago.edu.

So, here are the issues:

I. Psychonomics and Us.

Should the JDM conference stay attached to the Psychonomics conference? An endless debate. I know that we're researchers and not practitioners, but frankly we've been making this decision in a rather haphazard fashion. Furthermore, we mostly discuss it at JDM meetings, which of course is not a representative sample of members with regard to questions about when, where and how to run the meetings. Let me lay out a few of the well-established arguments, so we can move on from there.

What we like about linking to Psychonomics:

- It cuts the cost and labor of setting up the conference. Psychonomics does a large part of the leg work, such as finding suitable locations and facilities and negotiating with hotels.
- Psychonomics puts on a full day of JDM session on the day before our conference begins, which are open to our members to attend.

- Some members find it convenient to be able to attend the two conferences together.

On the other hand:

- We wish the JDM conference could make use of Friday or Saturday, which are prime conferencing days.
- We wish we had the option to hold the conference in locations other than those chosen by Psychonomics.
- We wish we didn't have to hold the conference only in large hotels.

Of course there's much more to say on the topic. I think we can raise the level of discussion if we can trade ideas on the following questions:

- What are additional elements that we like about linking with Psychonomics, and additional wishes for features we don't have with the current arrangements?
- What are good alternatives, with or without Psychonomics, that could allow us to preserve or enhance what we like and give us more of what we wish? (Be creative!)
- What additional information would be useful to gather to help make this decision?
- How should this decision be made?

II. What's in a name?

A few years ago, the JDM board put forth the proposition that we should change the name of our society—a little. The reasoning was that we are not, as our name suggests, a society of people who make judgments and decisions, nor a society to encourage people to make more of them. We are a society dedicated to the *study of*, or *research into* judgment and decision making, and, the argument goes, our name should say so. I remember (perhaps incorrectly) these two

finalists: “The Society for Judgment and Decision Research,” and “The Society for Research in Judgment and Decision Making.” The first name is shorter, but arguably still retains a modicum of ambiguity. (Is that a society for judgment and for decision research?) The second option is long, but it’s specific and retains the core initials we’re used to; we can still call ourselves “JDM.” We on the Board at the time thought that the point about our current name was valid, and we proposed the name change at a business meeting at the following JDM conference. The reaction of the membership was, basically, “Huh?,” and as I recall, the proposal won a majority of the votes, but a super-majority was needed and that was that. Well, while not of earth-shaking significance, I think it’s worth discussing further.

III. “Let’s logo!” contest

Along with a good name, our society should have a good logo. What we use now is that decision-analysis-over-the-globe thing from the Newsletter. All right, but uninspired. Also, we still retain rights to that three-circles logo that appeared one year on Official JDM T-Shirts, and which Cambridge University Press borrowed for the JDM book series. But I hereby announce a contest for some new ideas for a good-looking logo. Get out your pencil, computer, whatever, and let’s see some classy, professional, creative, interesting, flashy JDM logo ideas! If you make your creation into a .ppt or .jpg or .pdf file, you can send it to me at joshk@uchicago.edu. I’ll collect them and then exhibit them on the Society web site. Prizes to be announced!

IV. An interesting outreach idea from Mike Doherty

Inspired by a JDM e-mail exchange started by Deb Frisch, Mike Doherty suggested an interesting way in which we JDMers might contribute something to the betterment of the people. We would develop a series of short articles to be published in general-audience media, e.g., airline magazines, lay science magazines, “women’s” magazines... These articles would be written by JDM members about a variety of topics that we study that would be of interest to the general public. There should be plenty of such ideas among us! A JDM editorial board would work with the authors to assure that the articles were the size, format, and style appropriate to these outlets. The articles would appear perhaps with the Society listed as the author, or perhaps with the names of the actual writers, with SJDM identified as their affiliation. Some of these media pay for articles, in which case proceeds would go to support the Society. In other cases, the media operate by having their own writers write articles based on interviews with and information provided by members. In that case, the editorial board would work to connect the appropriate journalists with the appropriate JDM members. You can send your comments and ideas on this project via the JDM list, or write to Mike, who has volunteered to work on the project. In particular, let Mike know if you’d be willing to help with it. He’s at ddoherty@dacor.net OK, that’s enough taking care of business. Now back to your intellectual pursuits. But go give a few spare firings of the synapses to dear old JDM, and contribute your questions, ideas, and opinions on any or all of the above.

History of our Society – The First Meeting in 1980

James Shanteau

The beginning of JDM, or at least my involvement, can be traced to two conversations in the 1970s. The first was with Ken Hammond at one of the regular Brunswikian meetings in Boulder. He talked about the need for a newsletter that would circulate information to all those interested in “Human Judgment and Decision Making” (as the field was known then). The problem was that the Brunswikians weren’t talking to Ward Edwards’ Bayesians, who were not talking to the linear model folks, who weren’t talking to Clyde Coombs’ group, who weren’t talking to Norman Anderson’s people, who weren’t talking to the Biases and Heuristics’ researchers, etc. Several of us were trying to build bridges between these groups and were intrigued by Ken’s idea – although no one immediately volunteered to start such a newsletter.

The second conversation took place in 1979 on the steps of the Psychology Department building at the University of Oklahoma. I was visiting OU as part of the Mid-American State Universities speakers’ exchange. Charles Gettys (my host at OU) and I were talking about why it took a special occasion for those of us from nearby campuses to get together. For instance, we Midwesterners often found ourselves only talking to fellow Midwesterners at meetings on the East or West Coast. Why should we have to travel so far to talk to folks from just a few hours away?

We discussed the idea of organizing a small meeting as an add-on to some nearby meeting we would be attending anyway. After looking at schedules, we realized the next opportunity was the Psychonomic Society meeting to be held in St. Louis in November 1980. Another group –

Computers in Psychology – was already meeting prior to the Psychonomic meetings. So we decided to organize a meeting following Psychonomics.

The next problem was how to pay the start-up expenses for such a meeting. Neither of us had any independent means of covering up-front costs for a conference. After putting pencil to paper, we found that if we could get 30 people to attend, each paying \$8 each, we would have enough to cover basic costs – if we did everything on the cheap. That year, Psychonomics was meeting at the *Chase-Park* – a grand old (but expensive) hotel in St. Louis. Based on attending previous meetings in St. Louis, I knew about a cheap place down the street from the *Chase-Park* called the *Bel Air* motel. So with great trepidation (neither of us ever told our wives how much we were charging to our personal credit cards), we reserved a meeting room and a suite (for a reception) at the *Bel Air*.

We then invited everyone we knew who was interested in “Human Judgment and Decision Making” (as the field was then called) in the Midwest. We put together a list of 42 names and had positive responses from about 1/3 of them – not a good start given that we need 30 to break even. Our fallback plan was to contact people during the Psychonomics meeting who might be interested in attending. In those days, Psychonomics ended at noon on Saturday. However, many attendees scheduled return flights on Sunday to take advantage of cheaper airfares. Fortunately, we convinced about a dozen folks at Psychonomics to attend our meeting, so things started looking up. Better yet, Duncan Luce immediately agreed to attend; with him there, we knew

we had the intellectual weight for a meeting of real substance. Duncan will always be known as the first “big name” to attend a JDM meeting.

One interesting aside was that we were originally called the “Midwestern Judgment-Decision Research” (abbreviated “MJD”) meeting – we left off “Human” because it was too unwieldy to post on the billboard in front of the Bel Air. However, we soon realized that many in attendance came from outside the Midwest. So we quickly changed the billboard and it thereafter read “Judgment and Decision Making Meeting.” Following our initial mailing, Sarah Lichtenstein suggested the abbreviation “JDM, ” which has stuck every since.

In organizing the program for the first meeting, we consulted several major researchers who had regularly conducted their own meetings, such as Ward Edwards and Ken Hammond. Both suggested creating interesting meetings by having longer talks, with extended discussion time. And both advised us against falling into the trap of innumerable short talks in parallel sessions. We decided to have open-ended workshops based on “whatever is hot.” As we said in our letter of invitation, “the emphasis should be on give-and-take rather than sit-and-snore.”

But this presented a dilemma – most academics need to be on the program to get their way paid to meetings. If we only had a few long presentations, we might only have a few in attendance. Chuck came up with two solutions: The first was to ask the Psychonomic Society to schedule a paper session on decision research at their meeting; in that way, our attendees would be able to be on the program for a major conference. Psychonomics agreed and have been scheduling JDM papers on their

program ever since. The second idea was to have a “Conversation Hour” at a reception in late afternoon (hence the need for a suite to hold the reception). Those wanting to talk one-on-one about their work with others to be listed on the program; this later became the hugely popular JDM poster sessions.

In order to avoid being captured by one camp or the other, we decided to have our kick-off address be on a topic of interest to all. Brown Greer at Northern Illinois University had given a well-received talk the previous year on the history of mathematical models at the Mathematical Psychology Meeting. We asked Brown if he would prepare a similar talk on decision making. He agreed and his talk on “Judgment and Decision Making: 2000 Years of History” was a great success. I still refer to his handout in my advanced course on JDM, especially the part where Brown traced our field back to decision rules developed by the ancient Mesopotamians.

The theme of the meeting was “Trends in Judgment/Decision Making Research: Past, Present, and Future.” Aside from the keynote address, there were workshops on “The Role of Rationality in Decision Making,” “Computers and Computers Aids in Decision Making,” and “Sources of Research Funding.” Following a suggestion from Ward, we tried to incorporate young people into the program in two ways. First, we specifically encouraged students to come by not charging registration and letting them stay for free in the hospitality suite. Second, we set aside time at the end of each session for students to make comments. (In following years, we scheduled “New Investigator Sessions” with several young people presenting, followed by an overall discussion by a well-known researcher.)

What ensured the continued success of the meeting, however, was the belated arrival at the first meeting of Hillel Einhorn from the University of Chicago. We had not been expecting him, although we had certainly hoped he would attend. Not only did Hilly show up, he also brought a contingent from Chicago with him. Both Chuck and I knew at the moment that Hilly walked in the door that our little meeting was going to be a success!

To encourage ongoing discussions, we built communal meals into the program. We had an unremarkable buffet lunch at the hotel; but our dinner at a very nice Japanese restaurant was quite memorable. It seems hard to imagine now, but our entire JDM group (a total of 31 people) sat around one large sit-on-the-floor table at the restaurant. This was the first, and last, time that we could get everyone at one table in a restaurant.

Since the meeting was done on the cheap, I borrowed projection equipment, tape recorders, etc., from my department. This was all taken to the meeting in the back of my station wagon. After we arrived in St. Louis, my graduate students were then given the task of buying snack food and liquor for the reception in the “JDM Suite.” This started two traditions that lasted for many years: First, nearby hosts provided a welcoming reception for the JDM participants (just as the Oklahoma/Kansas group did this past year for the meeting in Kansas City). Second, graduate students were given a major role in running part of the meeting.

As an interesting aside, we discovered the next day that some on the *Bel Air* staff had helped themselves to the liquor leftover from the night before. Even worse, the battery from my car was stolen while it was

parked in a supposedly secure parking lot at the *Bel Air*. (As a footnote, I was called by someone from the *Bel Air* about 10 years ago asking if we wanted to organize another meeting there; after nearly dropping the phone, I politely declined.)

At the end of the day, we had a business meeting to discuss two questions. First, should we start a Newsletter? There was general agreement with the idea, with John Castellan volunteering to be the first editor – if we would provide funds for copying and postage. He estimated that \$2 per person would be sufficient; money quickly moved down the table to where John was sitting and the Newsletter was born.

Second, should we meet on a regular basis? Again, there was widespread support. The next Psychonomics meeting was scheduled for November 1981 in Philadelphia. Neither Chuck nor I wanted to do another meeting on our own so soon. Instead, we asked for volunteers to take over some of the tasks involved in organizing a meeting. Fortunately, many capable people step forward: Lola Lopes volunteered to take care of the hotel arrangements, and Gary McClelland was willing to compile a mailing list and to collect dues. Thus, the tradition of yearly JDM meetings was begun.

The initial meeting in St. Louis established five precedents for later meetings. First, the meeting was held by and for the benefit of entire community of JDM researchers – no single group or paradigm dominated. Second, the local Midwest flavor of the initial meeting was quickly replaced by an International focus; we were not alone in feeling the need for such a meeting. Third, the program emphasized a variety of presentation formats and styles – everything from 1-hour talks with 5-minute discussions,

to debates, workshops, and symposia. Fourth, we sought cutting-edge topics, with provocative titles for symposia such as “If I had to do it all over again, what would I do differently?” Finally, and perhaps most contentiously, we started a linkage with the Psychonomic Society that remains to the present day; it was simply more convenient to let a larger group do the organizing and negotiating with a hotel.

For another Newsletter, I will write about the early meetings after 1980 that were held in Philadelphia, Minneapolis, San Diego, and San Antonio. These set the stage for the much larger gatherings we now have. Also, I will describe the steps leading up to the founding of JDM as an official society.

One final comment: I have tape recordings of nearly all the major addresses at the early JDM meetings. These include talks by many major figures no longer with us: Clyde Coombs, John Castellan, Hillel Einhorn, Amos Tversky, Jane Beattie, Chuck Gettys, and Janet Snizek. In the future, I will make copies available so that students and others can hear what these giants sounded like in their own voices.

(In preparing these comments, I had help with my admittedly faulty memory from Steve Edgell, Robin Hogarth, and Gary McClelland. Any errors, however, are all mine. James Shanteau, Professor of Psychology, Kansas State University, e-mail: shanteau@ksu.

Teaching judgment and decision making

Warren Thorngate

Most of us who teach decision making sooner or later lecture about the Rational Calculus and its appetite for two kinds of information: (1) information related to probabilities, and (2) information related to values. The lecture is normally followed by several more discussing the voluminous research on probabilities and how people estimate them. Much less is said about values. Every year or two, some precocious student in my course asks why. Are probabilities more important than values when making a decision? What is the relationship between the accuracy of probability estimates and the quality of the decision made? Such questions can be addressed in class with a simple computer simulation to accompany the following story or a variant.

Suppose Fred is faced with a decision among a certain number of alternatives and outcomes shown in a standard Alternative-

by-Outcome matrix. Suppose his values and the true probabilities of each outcome occurring for each alternative are known, allowing him, in principle, to calculate the Expected Value of each alternative and choose the highest one. But suppose as well that Ned has no time, ability or interest to learn the true probabilities, so he relies instead on the *equiprobable* heuristic: every alternative has an equal chance of occurring. He calculates his expected values based on the equiprobable heuristic and chooses the highest one. What are the chances that Fred will choose the same alternative as that prescribed by the Expected Value rule?

The question is easily answered with a computer simulation. I have written a simple version below in the wonderful little programming language *Euler*, similar to Matlab, Scilab, Gauss, Ox, Octave, O’Martix and the like. I highly recommend Euler. It occupies less than one megabyte

on your PC, has great graphics, and is free. Rene Grothmann kindly wrote it, gave it to the world, and is known to modify it quickly upon request. You can obtain Euler at <http://mathsrv.ku-eichstaett.de/MGF/homes/grothmann/euler/>

The function *decide*, shown in the listing below, creates and analyzes 1,000 decision situations. Each situation has the same number of alternatives and outcomes. But each situation is given a different set of values (numbers randomly sampled from a normal distribution mean=0, S.D. = 10) and different probabilities that outcomes will occur (randomly sampled from a uniform distribution, different probabilities for each row=alternative). Once a decision situation is created, the programme (a) finds the alternative with the highest Expected Value, calculated in the usual prescriptive way, and (b) finds the outcome with the highest Equiprobable Expected Value, calculated by adding up the values in each row and dividing by the number of outcomes. If the two alternatives are the same, the variable "samechoice" is incremented by 1. The result shows how many of the 1,000 choice

situations created by the programme result in the same choice.

Why do this at all? Judging from the volume of research on probabilities, those little numbers from 0 to 1 are extremely important in life. Their accurate estimation should thus be worth the effort. The equiprobable heuristic requires no mental effort beyond listing possible outcomes. So we would like to predict that it would rarely lead to the same choice as the one prescribed by accurate probability estimates. If such a lazy heuristic often resulted in the same decision, there would be less reason to be evermore accurate or unbiased in estimating probabilities – why bother? I leave it to you or your students to try the simulation as a test of this desired prediction, saying only that the results can make for lively class discussion.

The programme below can be entered using Euler's internal editor (F9 key), and run (1-3 seconds) by pressing Euler's *Interpret* button. My comment on each line of code begins with two dots. Further reading: Thorngate, W. (1980). Efficient decision heuristics. *Behavioral Science*, 25, 219-225.

```
function decide
  nalts=input("How many alternatives? "); ..ask user for # of alternatives
  noutcomes=input("How many outcomes? "); ..ask user for # of outcomes
  seed=time(); ..give random number generator a new seed
  samechoice=0; ..set counter to zero
  for decision=1 to 1000 ..simulate 1,000 decisions
    values=10*normal(nalts,noutcomes); ..create normally distributed values
    p=random(nalts,noutcomes); ..create uniformly distributed numbers then...
    probabilities= p/sum(p); ..turn them into probabilities
    ev=sum(values*probabilities); ..calculate expected values
    bestalt=nonzeros(max(ev')==ev'); ..find alternative with highest EV
    sev=sum(values)/noutcomes; ..calculate equiprob expected values
    bestepalt=nonzeros(max(sev')==sev'); ..find alt with highest equiprob EV
    samechoice=samechoice+(bestalt==bestepalt); ..increment if choices same
  end
  "Number of times same choice was made ="
  return samechoice
endfunction
```

Passages



Janet A. Sniezek, 51, died of cancer on Tuesday, May 27, 2003 at her home in Champaign, Illinois.

Janet was born in 1951 in Amherst, Ohio. She got her undergraduate degree in Mathematics and Psychology at Bowling Green State University in 1972, and her Ph. D. degree in Experimental/Quantitative Psychology from Purdue University in 1977. Her PhD research, on single- and multiple-cue probability learning, was completed under the direction of Professor James Naylor.

Janet held positions at St. Joseph's College (1978-82), Ithaca College (1982-84), Cornell University (1984-86). Since 1986 Janet was with the Department of Psychology at the University of Illinois at Urbana-Champaign. At Illinois, she also affiliated with the College of Business Administration, and the Beckman Institute for Advanced Science and Technology. In recent years Janet held visiting appointments

at the University of Chicago and Stanford University.

Janet was Associate Editor of the International Journal of Forecasting, and served for many years on the editorial boards of the Journal of Behavioral Decision Making (JBDM), and Organizational Behavior and Human Decision Processes (OBHDP). She was an active and visible member of several professional societies, served on many committees of the *Society for Industrial and Organizational Psychology*, and was a member of the Executive Board of the *Society of Judgment and Decision Making* (1993-1995). She was a regular participant at the annual SJDM meetings, and the bi-annual SPUDM conferences.

Janet's work is well known to JDM researchers from her numerous and influential publications in our leading journals. A citation analysis performed by E. Weber (OBHDP, 1998, 76, 209-222) listed two of Janet's paper among the 10

most cited OBHDP publications in the JDM area between 1988 and 1997. She has published important papers on individual decision-making, with special emphasis on over-confidence. Among my favorites in this area are her papers, on what she liked to call, the over- under-confidence paradox, (see Sniezek & Buckley, JBDM, 1991, 4, 263-272). These papers show that over-confidence at the individual item level does not necessarily imply global over-confidence. The evolution of her work lead Janet to the belief that judgment and decision making is best understood by adopting a social perspective. In recent years she turned her attention and energy to research in the Judge Advisor System (JAS) paradigm. A JAS consists of a set of interdependent individuals who are involved in a decision, but have different roles and responsibilities in the decision process. Janet considered the JAS to be a perfect framework to develop and test a general model of decision making in social and organizational contexts. A recent example of her work in this paradigm is the Sniezek & vanSwol (OBHDP, 2001, 84, 288-307) paper.

Janet took great pride in her work and interaction with students. At Illinois she supervised almost thirty M.S. theses and Ph.D. dissertations, and has maintained close professional and personal ties with many of her former students. She was a great colleague, respected and admired by everyone in the department and the JDM community, and she was a good friend to many of us.

Outside her work Janet enjoyed spending time with her family and athletic activities. She particularly enjoyed running, hiking, mountain biking and skiing.

She is survived by her husband, David Wilkins, and her children, Alina Reeves and Galen Reeves.

She will be missed by all her friends, colleagues and family.

David V. Budescu
Monday, June 09, 2003

Book Review: Biblical Games

Review of *Biblical Games: Game Theory and the Hebrew Bible*. By Steven Brams
Cambridge, MA: MIT Press. 2003. ISBN 0-262-02531-0. Paperback.

Margaret Foddy, Carleton University

I found this book thought provoking. Brams has revised his earlier (1980) edition of this book, which, according to the publicity, “applies the mathematical theory of games to the Old Testament” In fact, it also applies Brams’ theory of moves to the same subject matter. Brams has a well-regarded book, “Theory of Moves” which argues for a more

contingent and time-dependent version of game theory. In “Biblical Games” he makes use of his game theory extension.

This review will not consider the utility of Brams’ theory of moves, which has been assessed elsewhere . Rather, I will consider issues that the book raises for me as a social scientist, interested in theories of rationality and decision making. It may give Newsletter readers an idea of whether they should bother to read the book.

Why would someone want to articulate game theory, or a modification in the theory

of moves, with the Bible? Here are a few possibilities. 1) The Bible is a historical record of things that actually happened. Decision scientists do not have a strong history of analyzing historical events, because they are dubious about selection biases, interpretations and so on. A problem for potential readers is that one cannot go back and check on the adequacy of Brams' interpretations. 2) The Bible represents a "possible world", of great interest to philosophers as well as social scientists, where one can do thought experiments about how the principles of rational choice might have worked their way out. You have to accept the assumptions (e.g. the ones about god's omniscience etc.), but once accepted, you can then trace the consequences of the set of assumptions and initial conditions, a little like doing computer simulations. The shortcoming of this for decision scientists is that the construal of the possible world is in the hands (or words) of the author, and so we believe him or not, but there is no way to

arbitrate. 3) The Bible is a cultural representation that is consistent with rational choice theory –for whatever reason. I believe this is probably Brams' view. That means that the same cultural forces produced the Bible as produced rational choice theory, so we should be able to find consistency between them. In my view, this does not amount to "evidence" in the way normally understood by social scientists, but makes fairly good sense from a more interpretive stance.

If readers are interested in Brams' theory of moves, they would be better advised to read his book on this topic. If they have broader interests, are whimsical, or like to consider the nature of the relationship between theory and real and possible worlds, then this book is, as noted at the beginning of this review, thought-provoking. It may be of more interest to people with good knowledge of the Bible (which this reviewer does not have).

Boring but important announcements

Warren Thorngate

1. Early in June, our expert webmaster, Alan Schwartz, circulated a Call for Content asking all SJDM members on the Society e-mail list to contribute something to the newsletter you are reading now. A few of you kindly replied; I thank you for what you sent to me and hope you find it here. If you did not contribute to this issue of the newsletter, please contribute to the next one! Send to: warrent@ccs.carleton.ca Due date = 10 September.
2. When Alan distributed the Call, about 100 "No such e-mail address" error messages came back to me, indicating that about 100 of you have dysfunctional e-mail address on our mailing list. If you cannot remember receiving my Call, please assume that your e-mail address on the Society mailing list is wrong and send the correct address to Bud Fennema who will forward a list of such corrections to Alan. Bud's e-mail address is: bfennema@garnet.acns.fsu.edu
3. Are you: (a) balding, (b) bearded, (c) over 40 or (d) none of the above? If your answer is (d), then your contributions are under-represented in the newsletter. Relieve your guilt now by dashing off a short contribution for the next issue (see Item 1, above). Introduce yourself. Tell colleagues about your current research. Ask questions. Enjoy the benefits of a low rejection rate (currently 0%). Then buy yourself a beer.

Conferences

Call for papers: SJDM annual conference, 10-11 November 2003

Submission Deadline: July 1, 2003

The J/DM program committee invites proposals for symposia, individual papers, and posters on any theoretical, empirical, or applied topic related to judgment and decision-making. This year's conference will be held in Vancouver, British Columbia-November 10-11, 2003, immediately following the Psychonomics Conference. The keynote speaker will be Daniel Kahneman, 2002 Nobel Laureate.

For hotel details, please see <http://www.psychonomic.org/meet.htm>.

More conference details are available at <http://www.sjdm.org>

Conference submissions should be made through the SJDM Submission System website located at: <http://sql.sjdm.org>. After completing a web-based submission you will receive a confirmation message via e-mail. For any technical problem with the submission process please contact our web masters Alan Cooke and Alan Schwartz at www@sjdm.org. Any other inquiries can be addressed to the chair of the organizing committee.

The members of the organizing committee for this year are:

| | |
|------------------------|--------------------------|
| Julie Irwin (Chair) | jirwin@mail.utexas.edu |
| Craig Fox | cfox@Duke.edu |
| Rami Zwick | mkzwick@ust.hk |
| Dan Ariely | dandan@MIT.EDU |
| Sandy Schneider | sandra@chuma.cas.usf.edu |

Eligibility

- At least one author of each submitted presentation must be a J/DM member. Joining the J/DM Society at the time of submission will satisfy this requirement. (A membership form can be downloaded from the society website at <http://www.sjdm.org/>).
- Any individual may present at most one paper (but may be a co-author on multiple papers).
- Any individual may be the first author of at most one poster (but may be a co-author on multiple posters).

Students' poster competition

A US \$100 prize will be given to the best poster presentation whose first author is a student member of the J/DM Society. Joining the J/DM Society at the time of submission will satisfy the membership requirement.

Other Conferences

Society for the Advancement of Behavioral Economics, “Behavioral Economics: The Next Step?” 28-31 July 2003, Cal-Neva Resort, Lake Tahoe, Nevada
<http://www.usask.ca/economics/SABE>

10th Annual Conference on Social Dilemmas, 19-23 August 2003, Marstrand, Sweden.
<http://www.icsd2003.net>

The 19th Research Conference on **Subjective Probability, Utility and Decision Making** (SPUDM-19), 25-27 August 2003, Zürich, Switzerland. Local organisers are Roland Scholz and Renate Schubert. For more information, submission of paper proposals and registration visit the SPUDM-19 web site: <http://www.uns.umnw.ethz.ch/spudm>

The 25th Annual Meeting of the **Society for Medical Decision Making**, 19-22 October 2003, Hyatt Regency on the Riverwalk, Chicago Illinois. <http://www.smdm.org>

19th Annual Meeting of the **Brunswik Society**, 6-7 November 2003, Vancouver (BC), Canada.
<http://www.brunswik.org>

The **Decision Sciences Institute** 7th International Conference to be held jointly with the 8th Annual Meeting of the Asia Pacific Region of the DSI. The joint meeting will be held on the campus of the China Europe International Business School in Shanghai, China, 04-08 July 2003.
<http://www.decisionsciences.org/intl03.htm>

The 17th International Conference of the **International Society on Multiple Criteria Decision**, 6-11 August, 2004, Vancouver, British Columbia, Canada.
<http://www.mit.jyu.fi/MCDM/conf.html>

2004 Family Group Decision Making Conference and Skills-Building Institutes Hilton. Harrisburg & Towers. June 6-9, 2004. Sponsored by American Human’s National Center on Family Group Decision Making.
http://www.americanhumane.org/site/PageServer?pagename=pc_fgdm_conference

Ninth International Conference on Principles of Knowledge Representation and Reasoning. June 2 - 5, 2004. http://magic.it.uts.edu.au/KR2004/call_papers.html

Filler, but still important

Are your Society dues paid for 2003? 2002 or before? Probably not easy to recall. So, as we try to develop an automated means of reminding each of you about dues due, why not play it safe and pay up now? If you are already paid, your new payment will extend your membership. So you have nothing to lose by paying, eh? See the last page of this newsletter for the relevant form.

Jane Beattie Memorial Scholarship
for travel to the United States

The Executive Board of the Society for Judgment and Decision Making again invites applications for awards from the Jane Beattie Memorial Fund. This fund was established in memory of SJDM member Jane Beattie and her contributions to judgment and decision research. The purpose of the fund is to provide scholarships to subsidize travel to the U.S. for purposes of scholarly activity by a foreign scholar in the area of judgment and decision research, broadly defined. Attendance at the annual SJDM meetings is one example of an activity that would be appropriate for support, but by no means the only one.

Applications will be accepted until 20 July, 2002.

The required application form appears in this Newsletter, and can also be downloaded from:
<http://gsbwww.uchicago.edu/fac/joshua.klayman/more/Beattie2003p2.htm>

Submit applications via E-mail (as regular text, or via attachments in .rtf or Word format) to
JOSHK@UCHICAGO.EDU, with the subject "Beattie Application".

Alternatively, applications may be sent via post to
 JBMF / Joshua Klayman
 University of Chicago Graduate School of Business,
 1101 East 58th Street, Chicago, IL 60637 U.S.A.
 or by fax (addressed to Joshua Klayman / JBMF) to +1 773 702 0458.

The JBMF Committee (Peter Ayton; Joshua Klayman, chair; and Martin Weber) plans to make all award decisions by 15 August. The committee anticipates making one or two awards annually, in amounts ranging from approximately \$250-\$750 U.S.

About the Beattie Scholarship

Applicants should be scholars living and working in a country other than the U.S. who will use the award to help pay for travel to the U.S. for scholarly activities associated with research in judgment and decision making. It is anticipated that most awards will be granted to faculty or graduate students at colleges and universities, but others will also be considered.

Applicants should submit the application form, along with a one page (single-spaced) description of the planned scholarly activity and a copy of their curriculum vitae. The activity may consist of attendance at a relevant conference in the U.S., or a visit to a U.S. institution. The description of activities should indicate the nature of the planned scholarly activity, with whom the applicant plans to work (if applicable), what the applicant hopes to accomplish with the visit, and why travel to the U.S. is important to its accomplishment.

Awards will be granted on the basis of the committee's estimate of the prospective value of the proposed activity, its relevance to the field of judgment and decision research, the scholarly credentials of the applicant, and the extent to which the award would contribute to the applicant's success (including considerations of financial and academic need).

Help to keep the Beattie Scholarship going

The committee invites continuing support for the Jane Beattie Memorial Fund. With the contributions we have collected so far, we hope to provide one or two awards annually for about the next five years. Your continued support will allow us to continue or expand the scholarship program. Please send contributions to Joshua Klayman (address below) via check (U.S. funds) made out to "SJDM--Beattie Memorial Fund." Your contribution is tax deductible in the U.S.

If you have any further questions, please e-mail Joshua Klayman at joshk@uchicago.edu

Application for 2003 Jane Beattie Memorial Scholarship

Attachments: In addition to the information on this form, please attach a one-page (single-spaced) description of the planned scholarly activity and a copy of your curriculum vitae.

Applicant's Name _____

Home Institution _____

Address _____

E-mail _____ Phone _____

Current position _____

Nature of proposed scholarly activity in the U.S. (brief description here; attach further details)

Location(s) of proposed activity _____

Dates and duration of proposed activity _____

Please provide an estimated budget for the major expenses associated with the proposed activity, and indicate the source(s) and amount(s) of financial support anticipated from other sources.

Optional: People we may contact regarding anticipated collaborations in the U.S.

Name _____

Institution _____

E-mail _____ Phone _____

Name _____

Institution _____

E-mail _____ Phone _____

Name _____

Institution _____

E-mail _____ Phone _____

The National Cancer Institute seeks your research opinion

The Basic Biobehavioral Research Branch of the Behavioral Research Program, Division of Cancer Control and Population Sciences at the National Cancer Institute is developing an initiative, Decision Making Related to Cancer Control. Our hope is that this initiative will evolve into a Request for Applications (RFA) or Program Announcement (PA), and thereby stimulate research in this important area in the academic and medical communities. In developing this initiative we have solicited input from behavioral scientists and clinicians at the National Cancer Institute. We would now like to solicit input from the extramural scientific community and would appreciate help from the members of the Society for Judgment and Decision Making. The feedback we receive from you will help shape the initiative and, most likely, the final RFA or PA.

The overarching goal of our decision making initiative is to better understand human decision making processes so that individuals can make more informed choices regarding their health care. To accomplish this it is necessary to draw upon research in both the basic and applied decision making arenas. This initiative seeks to encourage research that integrates both basic and applied decision making research. The focus of the research is decision making at the level of the individual patient or health care provider. This may involve the patient/provider dyad, the patient/caregiver dyad, the patient/partner dyad, or the patient/family system.

The following paragraph constitutes the basis of our initiative. We would appreciate it if you would **rank order (from 1-7)** the following items, from what you view as the most important area of research (#1) to what you view as the least important area of research (#7). "Importance" might be influenced by several factors, including what we know or don't know about the particular area of research, or how critical you feel an area is in moving the science of decision making forward. We would also **very much appreciate any general feedback** that could help direct this initiative. The general feedback could be provided in the text of the email.

This initiative seeks to encourage research that expands our knowledge of basic cognitive and affective processes in decision making as they relate to cancer control. Such research might examine the following:

- _____ Processes and mechanisms underlying health communication
- _____ Developing and testing theoretical models of informed decision making
- _____ Developing and testing decision aids and decision support systems
- _____ Construction and stability of preferences for treatment or treatment outcomes
- _____ Ecological validity and naturalistic decision making: understanding how the dynamics of real-world settings influence judgment and decision making
- _____ The role of heuristics, biases, counterfactual thinking, and risk perception in decision making
- _____ The role of personality, mood, and affective processes in decision making

Please send your feedback to: powellsb@mail.nih.gov.

Thank you for your time.

Michael Stefanek, Ph.D.
 Chief, Basic Biobehavioral Research Branch
 Behavioral Research Program
 Division of Cancer Control & Population Sciences
 National Cancer Institute
 6130 Executive Blvd.
 Bethesda, MD 20892
 301/496-8776
stefanem@mail.nih.gov

Wendy Nelson, Ph.D.
 Basic Biobehavioral Research Branch
 Behavioral Research Program
 Division of Cancer Control & Population Sciences
 National Cancer Institute
 6130 Executive Blvd.
 Bethesda, MD 20892
 301/435-4590
nelsonw@mail.nih.gov

Recent publications of our members & others

Compiled by (in reverse alphabetical order):

Matthew Young, Zhigang Wang, Mahin Tavakoli, Maria Rasouli & Shamima Khan

O'Loughlin, James (2003). *The real Warren Buffet: Managing capital, leading people.* London: Nicholas Brealey Publishing Ltd. ISBN: 185788308X

“Don't be misled by the title: the subtext of the work examines how Warren Buffett makes decisions in the face of uncertainty and the psychology of doing so in a complex system.” (authors remarks to WT). See www.therealwarrenbuffett.com for a sample chapter. Contact the author at jim.oloughlin@cis.co.uk

Mousavi, Shabnam (2002). *How to Develop Bounded Rationality as a Primary Framework.*

Second Annual Symposium on the Foundation of the Behavioral Sciences, Behavioral Research Council at American Institute for Economic Research, Great Barrington, MA, July 19-21, 2002.

<http://www.econ.vt.edu/~smousavi/alternative-abstract.pdf> Contact the author at smousavi@vt.edu

Weiss, David & Shanteau, James (Spring 2003, in press). *Empirical Assessment of Expertise.*

The paper contains a full discussion of CWS, an observable ratio that David and Jim argue captures the essence of expertise without reference to correctness. Two necessary characteristics of expertise are: (1) discriminating the various stimuli in the domain and (2) consistent treatment of similar stimuli. We combine measures of these characteristics to form a ratio we call the CWS (Cochran-Weiss-Shanteau) index of expertise. The acronym merely combines initials of those who contributed to the index: Weiss, Shanteau and William Cochran, a noted statistician, published something using a similar idea in the 1940s. Contact the senior author at dweiss@calstatela.edu or see <http://www.ksu.edu/psych/cws/>

Schneider, S. & Shanteau, J. (Eds.), *Emerging Perspectives on Judgment and Decision Research.* (Not yet published, available from August 2003). Cambridge, England: Cambridge University. (ISBN 052152718X).

Offers answers by a top group of experts to the question, “Where is judgment and decision research heading as we forge into the 21st century?” It is organized around five themes: fortifying traditional models of decision making, elaborating cognitive processes in decision making, integrating affect and motivation in decision making, understanding social and cultural influences on decision making, and facing the challenge of real-world complexity in decision research. <http://titles.cambridge.org/catalogue.asp?isbn=052152718X>

Chapman, G. B. & Sonnenberg, F. A. (Eds.). *Decision Making in Health Care.* (Not yet published, available from September 2003). Cambridge, England: Cambridge University. (ISBN 0521541247).

Includes quantitative theoretical tools for modeling decisions, psychological research on how decisions are actually made, and applied research on how physician and patient decision-making can be improved. <http://titles.cambridge.org/catalogue.asp?isbn=0521541247>.

Shanteau, J., Johnson, P., & Smith, K. (Eds.). *Psychological Investigations of Competence in Decision Making.* (Not yet published available from January 2004). Cambridge, England: Cambridge University. (ISBN 0521583063).

Explores the proposition that meta-cognitive processes (i.e. thinking about the kind of thinking that a task requires) give structure to otherwise ill-structured tasks and proposes that metacognition is an enabler of competence at decision-making. Such meta-cognition facilitates performance. <http://titles.cambridge.org/catalogue.asp?isbn=0521583063>

Shapira, Z. (Ed.) (2002). *Organizational Decision Making.* Cambridge, England: Cambridge University. (ISBN 0521890500).

Brings together studies that focus on cognitive aspects of decision processes, and those that study organizational aspects such as conflict, incentives, power, and ambiguity. It draws from the tradition of Herbert Simon, who studied organizational decision-making's pervasive use of bounded rationality and heuristics of reasoning. <http://titles.cambridge.org/catalogue.asp?isbn=0521890500>

Anderson, C. J. (2003). *The Psychology of Doing Nothing: Forms of Decision Avoidance Result From Reason and Emotion.* *Psychological Bulletin.* 129(1), 139-167.

Several independent lines of research bear on the question of why individuals avoid decisions by postponing them, failing to act, or accepting the status quo. This review relates findings across several different disciplines and uncovers 4 decision avoidance effects that offer insight into this common but troubling behavior: choice deferral, status quo bias, omission bias, and inaction inertia.

Kenrick, D. T., Li, N. P., Butner, J. (2003). Dynamical Evolutionary Psychology: Individual Decision Rules and Emergent Social Norms. *Psychological Review*. 110(1), 3-28.

Three series of simulations examining trade-offs in cooperation and mating decisions illustrate how individual decision mechanisms and group dynamics mutually constrain one another, and offer insights about gene-culture interactions.

Hilton, D. J. (2001). The psychology of financial decision making: applications to trading, dealing, and investment analysis. *Journal of Psychology and Financial Markets*. 2(1), 37-53.

Offers a range of areas in which the latest work on psychology, social psychology and behavioral finance could offer competitive advantage both to financial markets as well as individual firms. The aim is to identify potential applications of experimental and organizational psychology to improve the efficiency of financial institutions.

Levy, J. S. (2003). Applications of prospect theory to political science. *Synthese*. 135(2), 215-241.

Considers some of the implications of Prospect Theory for American politics, international relations, and the law including a brief discussion of some of the conceptual and methodological problems confronting the application of prospect theory to the study of politics.

Berejikian, J. D. (2002). Model building with prospect theory: A cognitive approach to international relations. *Political Psychology*. 23(4), 759-786.

Despite the growing call for new models of politics grounded in the capacities of real-world decision-makers, much international relations theory still incorporates rationalist assumptions. This paper provides an analysis demonstrating that prospect theory can produce deductive models for empirical comparison with those already manufactured under rational choice. The result is a new set of propositions concerning international politics securely anchored to the actual capacities of human actors.

The April issue of the *Journal of Economic Psychology* (Volume 24, Issue 2) is devoted to The Economic Psychology of Herbert A. Simon, edited by Mie Augier and Jim March. Titles include:

- The economic psychology of Herbert A. Simon: Introduction to a special issue. Mie Augier and James G. March
- Bounding rationality to the world. Peter M. Todd and Gerd Gigerenzer
- Cognitive comparative advantage and the organization of work: Lessons from Herbert Simon's vision of the future. Richard N. Langlois
- Games and phone numbers: Do short-term memory bounds affect strategic behavior? Giovanna Devetag and Massimo Warglien
- Entrepreneurship as a science of the artificial. Saras D. Sarasvathy
- Herbert Simon and the concept of dispersed entrepreneurship. L. Minkes and Gordon R. Foxall
- Simon's selection theory: Why docility evolves to breed successful altruism. Thorbjørn Knudsen
- Bounded rationality in the economics of organization: "Much cited and little used". Nicolai J. Foss
- Herbert Simon. Artificial intelligence as a framework for understanding intuition. Roger Frantz

Animal group decision making (of all things!)

Conradt, L., & Roper, T. (2003). Group decision-making in animals. *Nature*, 421, 155 – 158.

Groups of animals often need to make communal decisions, for example about which activities to perform, when to perform them and which direction to travel in; however, little is known about how they do so. Here, we model the fitness consequences of two possible decision-making mechanisms: 'despotism' and 'democracy'. We show that under most conditions, the costs to subordinate group members, and to the group as a whole, are considerably higher for despotic than for democratic decisions. Even when the despot is the most experienced group member, it only pays other members to accept its decision when group size is small and the difference in information is large.

Democratic decisions are more beneficial primarily because they tend to produce less extreme decisions, rather than because each individual has an influence on the decision per se. Our model suggests that democracy should be widespread and makes quantitative, testable predictions about group decision-making in non-humans.
http://www.nature.com/cgi-taf/DynaPage.taf?file=/nature/journal/v421/n6919/abs/nature01294_r.html

Environmental decision making

Karamouz, M., Kerachian, R., Zahraie, B., & Araghi-Nejhad, S. (2002). Monitoring and Evaluation Scheme using the Multiple-Criteria-Decision-Making Technique: Application to Irrigation Projects. *Journal of Irrigation and Drainage Engineering*, 128(6), 341-350.

Monitoring and evaluation (M&E) systems provide valuable information for managers and decision makers to assess agricultural projects. Different indicators are identified and the framework of an integrated evaluation system is demonstrated by using an analytical hierarchy process for multiple-criteria-decision making. The results have shown the significant value of such systems in providing information and input for different decision-making levels.

Villa, F., & McLeod, H. (2002). Environmental Vulnerability Indicators for Environmental Planning and Decision-Making: Guidelines and Applications. *Environmental Management*, 29 (3), 335-348.

This paper discusses models and theoretical frameworks for obtaining an approximate, standardizable vulnerability indicator of minimal subjectivity and maximum generality for environmental decision-making and policy-making. Issues of empirical testing and comparability between indicators developed for different environments are also presented.

Lamy, F., Bolte, J., Santelmann, M., & Smith, C. (2002). Development and evaluation of multiple-objective decision-making methods for watershed management planning. *Journal of the American Water Resources Association*, 38(2), 517.

The objective of this study was to illustrate the use of a multiple-objective decision-making methodology and an integrative geographical information system-based decision-making tool developed to help watershed councils prioritize and evaluate restoration activities at the watershed level. The results suggest that multiple-objective methods can provide a valuable tool in analyzing complex watershed management issues.

Consumer Decision Making

Ariely, D., Simonson, I. (forthcoming). Buying, bidding, playing or competing? Value assessment and decision dynamics in online auctions. *Journal of consumer Psychology*. Proposes an analytical framework with three key dimensions for studying bidding behavior in online auctions, and discusses the factors that influence consumers' value assessments and bidding decisions.

Sjöberg, L. (2003). Intuitive vs. analytical decision making: which is preferred? *Scandinavian journal of management*, 19 (1), 17- 29. Studies preferences for intuitive as against analytical decision making and preferences of judgments. It was found that control is positively related to preference for an intuitive mode of making decisions and the preference was most pronounced among private consumer decisions.

Liebermann, Y., Ungar, M. (2002). Efficiency of consumer intertemporal choice under life cycle cost conditions. *Journal of Economic Psychology*, 23 (6). Presents a conceptual framework for analyzing consumer life cycle cost (LCC) decision making with emphasizes on choice efficiency. Results show situational effects of monetary size, type of object and time horizon.

Vermeira, I., Kenhoveb, P. V., Hendrick, H. (2002). The influence of need for closure on consumer's choice behaviour. *Journal of Economic Psychology*, 23 (6), 703-727. Examines the influence of need for closure (NFC) on choice behaviour. Significant differences were found between high and low NFC participants with regard to the amount of information sought, the amount of information used, the use of decision rules and the level of confidence in their decisions made.

**Society for Judgment and Decision Making
2003 Dues and Address Corrections**

Name: _____

Address: _____

City: _____ State/Prov: _____ Zip: _____

Phone: _____ Fax: _____

Email: _____

Institution: _____

Student members must have the endorsement of a faculty member:

Faculty Signature: _____ Date: ____/____/____

| |
|---|
| <p>2003 Dues _____ \$35 Member _____ \$10 Student</p> <p>Past Dues: \$ _____ Amount _____ Year(s)</p> <p>Hard Copy Directory _____ # copies (\$10 each)</p> |
|---|

You may pay by check (must be in US dollars and payable through a US bank) or credit card.

If paying by credit card, please circle one of: **American Express MasterCard VISA Discover**

Credit Card Number: _____ Exp Date: _____

Mail this form and check to:
 SJDM c/o Bud Fennema
 College of Business
 Florida State University
 Tallahassee, FL 32306-1110

Or pay electronically by credit card (forward number & exp date) to sjdm@cob.fsu.edu