

SCiP 2008 Program

*38th Annual Meeting of the
Society for Computers in Psychology*



Chicago, IL, USA
Thursday, November 13, 2008

SCiP 2008

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Notes from the Program Chair

Welcome to Chicago. It has been a privilege for me to oversee the organization of this year's program. With 41 talks, including a symposium, and 8 posters, this year's program covers a broad range of topics relating to the use of computers in Psychology. I want to thank our assistant program chair, David Waller, and Webmaster, Xiangen Hu, for their help in organizing the conference and conference Web site. I am also grateful for the help and support from Roman Taraban, Past President of SCiP, and Andrea Rotterman, a student volunteer, who helped assemble the printed program. I would also like to thank Gary Bradshaw, Xiangen Hu, Michael Jones, Kay Livesay, Joseph Magliano, Robert Proctor, Ulf-Dietrich Reips, Michael Schulte-Mecklebeck, Roman Taraban, David Waller, Katja Wiemer-Hastings, and Chris Wolfe for reviewing submissions to this year's conference. Finally, I want to thank the Psychonomics Society for their assistance with the conference venue. Please enjoy your time at SCiP and be sure to visit our vendors!

Kim Vu

Welcome from the President



Welcome to the 38th annual meeting of the Society for Computers in Psychology. Over the years the Society has stayed true to its primary mission to “increase and diffuse knowledge of the use of computers in psychological research” – and this year is no exception!

Welcome to Chicago and to our 38th annual meeting of the Society for Computers in Psychology. The Society’s mission, to “increase and diffuse knowledge of the use of computers in psychological research,” remains as important and timely as ever. Our program this year continues our tradition of offering a broad range of high-quality talks that cover the spectrum of computer applications in psychology.

We are honored to have Frank Durso as our keynote speaker. In addition, we will feature 36 talks, a symposium with five additional talks, and 8 posters from our members. Thanks to all of you who are sharing your research and insights at this conference. I’m sure you will find much of interest at our meeting!

Organizing our conference is more difficult and challenging than it appears to be. Kim Vu and David Waller, Conference Chair and Assistant Chair, respectively, have done a fantastic job for us this year. Please join me in thanking them for their hard work and meticulous attention to detail! Thanks are also due to Xiangen Hu, our President-Elect and Webmaster. Xiangen has done a marvelous job of updating our website and streamlining society procedures, as well as keeping the Society visible to the world over the Internet. Finally, thanks go out to the Society Officers, Steering Committee Members, and Associates for their assistance and guidance throughout the year.

The Society sincerely appreciates the support given to our conference by the vendors. Be sure to visit their tables and say hello.

Enjoy SCiP 2008 and your visit to Chicago!

Gary Bradshaw

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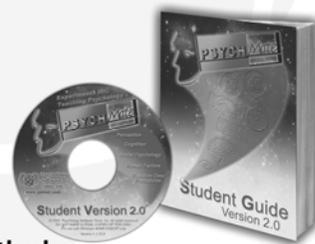
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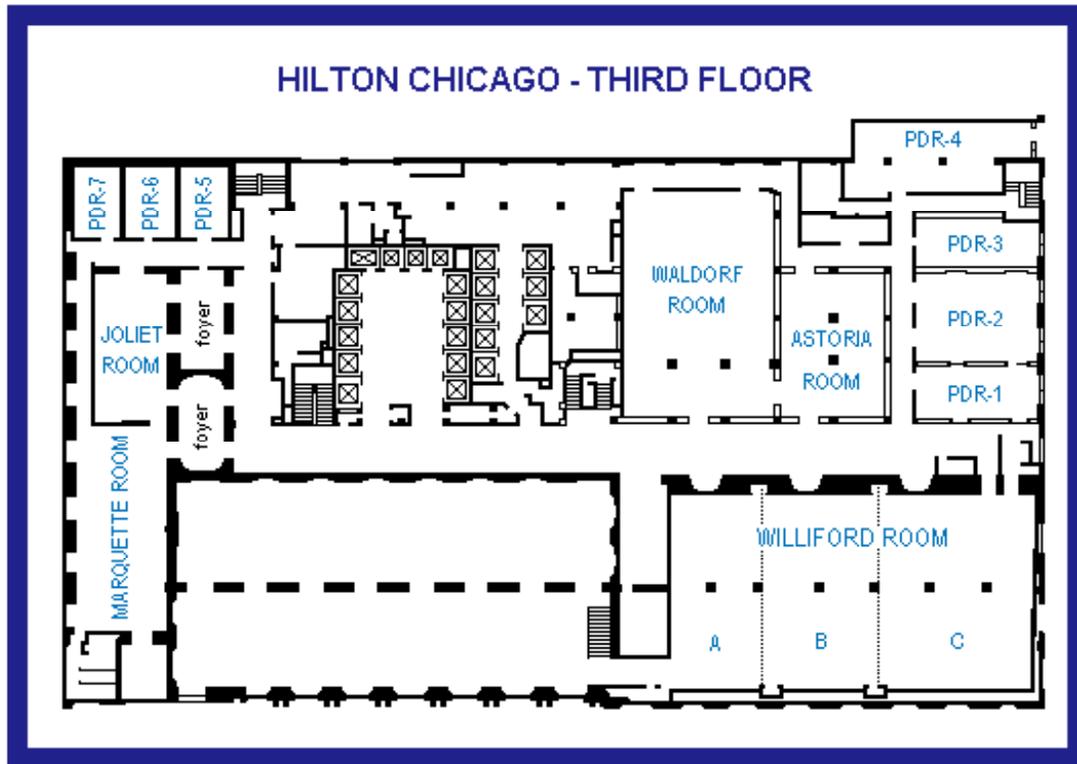


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Conference Floor Map

Hilton Chicago - THIRD FLOOR



**The Poster Session will be held in the
Northwest Hall, Lower Level**

7:30 am Registration, Refreshments (coffee and treats) – Williford Foyer	
Williford B	Williford C
<p style="text-align: center;">8:00 – 9:45 – Web Based Applications & Tools</p> <p><i>chair: Christopher Wolfe</i></p> <p>8:00 He 8:15 Walk 8:30 Plant & Craig 8:45 Reimers 9:00 Wade, Oberjohn, Burkhardt, & Greenberg 9:15 Wolfe, Britt, Petrovic, Albrecht, & Kopp 9:30 Reips</p>	<p style="text-align: center;">8:00 – 9:45 – Semantic Modeling</p> <p><i>chair: Michael Jones</i></p> <p>8:00 Riordan & Jones 8:15 Crossley, Miller, McCarthy, & McNamara 8:30 Jones, Hills, Recchia, Dawson, & Todd 8:45 Durda, Buchanan, & Caron 9:00 Yang 9:15 Humphrey 9:30 Recchia & Jones</p>
9:45 – 10:30 Posters in Northwest Hall, Lower Level and Exhibits in Waldorf	
9:45- 10:30am	<p>Posters (Northwest Hall, Lower Level)</p> <ol style="list-style-type: none"> 1. Recchia: STRATA: A Search Tool for Richly Annotated and Time-Aligned Data 2. Liu, Hao, Shu, & Li: Timed Picture Naming Norms in Chinese 3. Koch: Clickers in the Classroom: Appropriate Uses for Student Engagement 4. Cheng, Paré, & Joordens: Does Participation in an Online Forum contribute to an Improvement in Class Performance? Yes, but Only a Little. 5. Paré & Cree: Web-Based Image Norming: How do object familiarity/complexity ratings compare when collected online vs. in-lab? 6. Chen, Zhang, Schultz, & Washburn: A Hybrid Machine Learning Method for Word Sense Disambiguation 7. Schultz & Washburn: How restful is a resting baseline? Recommendations for the transcranial Doppler sonography paradigm 8. Landers: ViziStats: Instructor-less Animated Statistics Instruction with Real Data in Real Time <p>Vendors and Exhibits (Waldorf)</p> <ol style="list-style-type: none"> 1. Psychology Software Tools, Inc. 2. Empirisoft
<p style="text-align: center;">10:30 – noon – Statistics and Randomization Techniques</p> <p><i>chair: Shari Wade</i></p> <p>10:30 Tang, Mei, You & Hu 10:45 Erdfelder, Faul, Buchner, & Lang 11:00 Pierce & Barr 11:15 Funke & Reips 11:30 Mewhort & Johns 11:45 Wetzels, Lee, & Wagenmakers</p>	<p style="text-align: center;">10:30 – noon - Computer-Based Research Tools</p> <p><i>chair: Stian Reimers</i></p> <p>10:30 Reimers & Stewart 10:45 Schulte-Mecklebeck, Murphy, & Hutzler 11:00 Cheng, Sheu, & Yen 11:15 Proctor, Pick, & Wang 11:30 Ray & Miraglia 11:45 McClelland & Reips</p>

12:00-1:00pm – Lunch

Williford B	Williford C
<p>1:15 – 2:45 – Symposium on Intelligent Tutoring Systems (ITS) With Agents: Creating Enhanced Learning Environments with Cognitive Principles <i>Organizer and chair: Xiangen Hu</i></p> <p>1:15 Graesser 1:30 Azevedo, Witherspoon, Graessser, McNamara, Rus, Cai, & Lintean, 1:45 Millis, Wallace, Cai, Graesser, Halpern, & Magliano 2:00 Arnott, Hastings, & Allbritton 2:15 Hu, Han, & Cai 2:30 Discussion</p>	<p>1:15 – 2:45 – Statistics and Modeling <i>chair: Michael Schulte-Mecklebeck</i></p> <p>1:15 Duran, Dale, & McNamara 1:30 Taraban 1:45 MacLin, Peterson, Hashman, Stone, & Young 2:00 Johns & Jones 2:15 McCarthy, Guess, Myers, & McNamara</p>

2:45- 3:00pm – Break in Waldorf

3:00-4:00 – Keynote Address in Williford C

Frank Durso

For Better and Worse: Marrying Humans and Technology Under the Cognitive Huppa

4:10-5:10 – Presidential Address in Williford C

Gary Bradshaw

ePsych, SCiP, and the (R)Evolution of the Textbook

5:10-5:30 – Business Meeting (Williford C)

8:00 SurfLogger: A Logging Browser and Data Processing Method In Web-based Studies

Jibo He, University of Illinois, jibohe2@uiuc.edu

Despite of the increasing interest in web-based studies, researchers lack a convenient tool for data collection. The existing tools have constraints in the data they could collect or in the availabilities to the study environment. SurfLogger, described in this paper, is an automated data logging tool, free, open-source, cross-platform, and easy to modify. SurfLogger is expected to meet the increasing needs of web-based studies.

8:15 A Case-Study of a Web-Based Method for Repeated-Measures and Multi-Source Research

Michael J. Walk, University of Baltimore, michael.walk@ubalt.edu

A web-based method for conducting repeated-measures (e.g., test reliability) and multi-source (e.g., self and rater agreement) research was developed and tested on a group of 28 students. The method uses a database to track each participant's progress through the online study and directs him/her to the appropriate unfinished tasks. Participants can log in and out of the study to complete tasks at a later time. Current participants reported very few problems with the website. The website also integrates many of the recommendations concerning ethical and methodological issues relevant to internet research. Implications for web-based research and possible directions for improving the method are discussed.

8:30 What can psychologypracticals.com offer the average lecturer?

Richard R. Plant, University of York, r.plant@psych.york.ac.uk

Naomi Craig, University of York

psychologypracticals.com is a website that provides access to materials and resources to support student practical work and the teaching of research methods at all levels. Coverage includes: experiment scripts; materials; data sets; reading materials; exemplar lab reports; video-based tutorials covering common tasks in major statistical packages; and tutorials covering the basic building blocks of constructing paradigms in leading experiment generators. In this paper we highlight some of the benefits the site provides for lecturers and students alike; stress the importance of making use of expertly peer reviewed resources over search engines such as Google; and showcase content in relevant areas.

8:45 Mobile phones as response devices in lectures and practical classes: An example of SMS and WAP-based responding.

Stian Reimers, University College London, s.reimers@ucl.ac.uk

Psychology lectures tend to be passive affairs, largely because demonstrating many psychological phenomena would require students all to have access to a networked computer. But most students bring their own networked computer to lectures in the form of a mobile phone. I demonstrate a system that allows students to take part in experiments during a lecture by responding to stimuli using SMS text messages or running Flash Lite experiments on their phone using WAP. I also show how responses can be processed and displayed in real time, allowing hands-on demonstrations of important psychological principles. Applications of this procedure for gathering experimental data will also be discussed.

9:00 Delivering Parent Skills Coaching via the Web: A Pilot Study

Shari L. Wade, Cincinnati Children's Hospital Medical Center, shari.wade@cchmc.org
Karen Oberjohn, Cincinnati Children's Hospital Medical Center, karen.oberjohn@cchmc.org
Abby Burkhardt, Cincinnati Children's Hospital Medical Center, abby.burkhart@cchmc.org
Ira Greenberg, Miami University, greenbi@muohio.edu

To determine if parenting skills training with live coaching could be implemented online for families of children with traumatic brain injury (TBI). Six families of children with TBI received computers, web cameras, Bluetooth earpieces and internet access. Treatment involved nine web-based sessions followed by videoconferences to practice skills via live coaching through the earpiece. Outcomes included ratings of content and changes in parent and child behaviors. Coaching was successfully completed with all families. Positive parenting behaviors (praise) increased. Child behavior problems also decreased. Coaching parenting skills online is feasible, resulting in improved parent and child behaviors.

9:15 The Efficacy of a Web-based Counterargument Tutor

Christopher R. Wolfe, Miami University, wolfecr@muohio.edu
M. Anne Britt, Northern Illinois University, britt@niu.edu
Melina Petrovic, Miami University, petrovmm@muohio.edu
Michael Albrecht, Miami University, albrecmj@muohio.edu
Kristopher Kopp, Northern Illinois University, kkopper@yahoo.com

Applying two experiments, we developed an interactive Web-based tutor to help students identify and evaluate counterarguments. Experiment 1 determined the extent to which participants skilled and less skilled in argumentation can isolate and evaluate counterarguments. We tested the effectiveness of having participants read didactic text on counterarguments and highlight the claim. Both had some positive effects that were often limited to skilled participants. The Web-based intervention included interactive exercises on the identification and use of counterarguments. In Experiment 2, the tutor was effective in teaching participants to identify counterarguments, recognize responses, and determine whether counterarguments were rebutted, dismissed, or conceded.

9:30 Web software to conduct experiments: WEXTOR 2.5

Ulf-Dietrich Reips, University of Zurich, u.reips@psychologie.uzh.ch

The present paper describes WEXTOR (<http://wextor.org>), a 10 step Web service to design, create, and conduct experiments on the Web and/or in the lab. Since we first presented WEXTOR (Reips & Neuhaus, 2002) it has evolved to a widely used software for Web-based experimentation (nearly 2000 registered users), rich in features and built-in precautions against typical errors frequently seen in Internet-based experimenting. A step-by-step example for creating and implementing an experiment is provided.

8:00 Modeling the space of children’s word meanings: Feature vectors versus distributional models

Brian Riordan, Indiana University, briordan@indiana.edu

Michael N. Jones, Indiana University, jonesmn@indiana.edu

Proponents of distributional models of semantic similarity (e.g. HAL, LSA) assume that distributional models tap the same components of word meaning as feature-based models. However, distributional models assume that semantic components are reflected in how words co-occur in the linguistic environment. This assumption was evaluated in the context of modeling children’s semantic representations using caregiver speech from children’s linguistic environments. On the task of clustering words into semantic categories, only one of the distributional models tested performed comparably to a feature-based model. Distributional information, when represented in certain ways, can be correlated with many components of word meaning.

8:15 Distinguishing between Low and High Proficiency Essays Using Cognitively Inspired Computational Indices

Scott A. Crossley, Mississippi State University, sc544@msstate.edu

Nicole C. Miller, Mississippi State University, ncm39@colled.msstate.edu

Phillip M. McCarthy, University of Memphis, pmmccrth@memphis.edu

Danielle S. McNamara, University of Memphis, dmncnamara@memphis.edu

In this paper, we demonstrate how linguistic indices related to text difficulty and cohesion can be used to discriminate between low- and high- proficiency essays. This research has important implications for the development of computational algorithms for automatic essay scoring and for facilitating feedback to users of intelligent tutoring systems that focus on essay writing and writing strategies. The findings also provide evidence to the types of linguistic and cohesive features in text that may affect human text assessment.

8:30 Modeling Transition Latency in the Semantic Fluency Task

Michael N. Jones, Indiana University, Bloomington, jonesmn@indiana.edu

Thomas Hills, University of Basel, Switzerland

Gabriel Recchia, Indiana University, Bloomington

Jason Dawson, Indiana University, Bloomington

Peter Todd, Indiana University, Bloomington

The semantic fluency task (SFT; e.g., “name all the animals you can in one minute”) is commonly used in both clinical and experimental setting. However, most applications of the task only tabulate the number of items correctly produced. We describe a study with 140 subjects performing SFT for six categories in which we recorded the time in seconds that each item was produced. Using a co-occurrence model to represent the structure of semantic memory we test process models of memory search in their ability to simulate transition time data and specific word transitions in SFT, and discuss applications of the models to impaired populations, such as Alzheimer’s patients.

8:45 Grounding co-occurrence: Identifying features in a lexical co-occurrence model of semantic memory

Kevin Durda, University of Windsor, durda1@uwindsor.ca
Lori Buchanan, University of Windsor, Buchanan@uwindsor.ca
Richard Caron, University of Windsor, rcaron@uwindsor.ca

Lexical co-occurrence models of semantic memory represent word meaning by vectors in a high-dimensional space. These vectors are derived from word usage in a large corpus of written text. Typically, these models are fully automated, an advantage over models that represent semantics based on human judgments (i.e., feature-based models). A common criticism of co-occurrence models is that the representations are not grounded: concepts exist only relative to one another in the space produced by the model. Feature based models offer an advantage in this regard. In this paper, we take a step toward grounding a co-occurrence model. A feed-forward neural network is trained using backpropagation to provide a mapping from co-occurrence vectors to feature norms collected from subjects. We show that this network is able to retrieve the features of a concept from its co-occurrence vector with high accuracy and is able to generalize this ability to produce an appropriate list of features from the co-occurrence vector of a novel concept.

9:00 POLARIUM: A new categorization model for individual differences in categorization

Lee-Xieng Yang, National Chengchi University, lyang@nccu.edu.tw

Categorization is characterized by large individual differences. That is, a categorization task can be solved by many different strategies and different people use different strategies to solve the same task. However, many models do not capture those individual differences. In this study, a neural network model – POLARIUM is proposed, with the assumptions that in a task, different rules are learned, chosen for categorization in different circumstances and that the choosing of rules varies between people. The success of POLARIUM on accommodating the different response types reported by Yang and Lewandowsky (2004) underscores the importance of mixture of experts approach in categorization.

9:15 A Web-based Experiment on Creative Language on the Net

Amy L. Humphrey, Miami University, humphral@muohio.edu

This empirical study of creative language on the Web examines LOLspeak, an emerging type of Netspeak gaining in popularity. The goal of this study is to determine the place LOLspeak has within the broader context of creative language, and tradeoffs between perceived creativity and comprehensibility. Participants answer questions on how well they understand, and how creative they find phrases. Thirty-six phrases are presented in six blocks of six. After each block, participants pick one phrase as the best photo caption, the most “matter of fact,” and the most creative. Results are explained in terms of Lakoff’s model of metaphoric language.

9:30 More Data Trumps Smarter Algorithms: Training Computational Models of Semantics on Very Large Corpora

Gabriel Recchia, Indiana University, Bloomington, grecchia@indiana.edu
Michael N. Jones, Indiana University, Bloomington, jonesmn@indiana.edu

Computational models such as Latent Semantic Analysis are used as tools for determining semantic similarity between words for experimental stimulus selection and approximating human semantic representations in cognitive models. Generating similarity ratings that closely match human data is essential in both domains. Despite the availability of very large corpora, practical constraints restrict the amount of text such models can learn from. We demonstrate better correspondence to human data with a “dumb” algorithm trained on a lot of text vs. sophisticated algorithms trained on less. We present a tool for extracting such similarity ratings from extremely large corpora quickly and efficiently.

1. STRATA: A Search Tool for Richly Annotated and Time-Aligned Data

Gabriel Recchia, Indiana University, grecchia@indiana.edu

The notion that corpus studies can contribute to psycholinguistic modeling is relatively new in the literature (Gries, 2005). Despite interest in interactions between the syntactic and temporal characteristics of naturally occurring speech, such as corpus-based studies of syntactic priming (Szmrecsanyi, 2005; Bresnan et al., 2007), no tools explicitly allow researchers to search for syntactic constructions and retrieve temporal or phonological characteristics of matching utterances. This paper presents STRATA, a tool that aligns multiple levels of analysis--syntactic, temporal, and the acoustic speech signal--to facilitate psycholinguistic research using the Switchboard corpus. STRATA is currently in active use at Stanford University.

2. Timed Picture Naming Norms in Chinese

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The present study reports timed norms for 435 object pictures in Mainland Chinese. These data include naming latency, name agreement, concept agreement, word length, and age of acquisition (AoA) based on children's naming and adult rating, and several other adult ratings of concept familiarity, subjective frequency, image agreement, image variability, and visual complexity. Furthermore, we examined factors that influence the naming latencies of the pictures. The results show that concept familiarity, AoA, concept agreement, name agreement, and image agreement are significant predictors of naming latencies, whereas subjective frequency is not a reliable determinant. These results are discussed in light of previous findings.

3. Clickers in the Classroom: Appropriate Uses for Student Engagement

Chris Koch, George Fox University, ckoch@georgefox.edu

Clickers (handheld devices) provide opportunities for students to engage in the classroom. However, such devices may not be as effective as they are entertaining for certain applications. This study examined the use of clickers for administering quizzes. Chapter quizzes in an upper division psychology course were given using clickers and paper formats. Quiz scores were significantly higher for paper-based quizzes. A follow-up questionnaire revealed that students liked using the clickers for responding to opinion questions in class but felt pressured using the clickers for quizzes. In particular, students disliked the inability to change an answer to a previous question.

4. Does Participation in an Online Forum contribute to an Improvement in Class Performance? Yes, but Only a Little.

Cho Kin Cheng, University of Toronto Scarborough, timmy.cheng@utoronto.ca

Dwayne E. Paré, University of Toronto Scarborough, dpare@psychexperiments.com

Steve Joordens, University of Toronto Scarborough, joordens@utsc.utoronto.ca

The purpose of this study was to investigate the relation between discussion forum participation and class performance. This was achieved by implementing an online discussion forum in an Introductory Psychology course and comparing assignment grades and exam grades, before and after the forum was implemented. The impact of different types of forum participation on class performance was also investigated. Our results showed a weak but reliable correlation between improvement in exam scores and participation in the discussion forum related to number of forum logins and page views.

5. Web-Based Image Norming: How do object familiarity/complexity ratings compare when collected online vs. in-lab?

Dwayne E. Paré, University of Toronto Scarborough, dpare@psychexperiments.com
George S. Cree, University of Toronto Scarborough, gcree@utoronto.ca

Previous studies have shown that web-based research can replicate lab-based results (Birnbaum, 2004; Krantz & Dalal, 2000), but questions remain as to what type of research can be reproduced - and where the resulting differences may exist. The current study examines the effects of research environment (laboratory vs. web) on object ratings of 1) familiarity and 2) visual complexity. Specifically, variability in object ratings, do-not-know (DNK) responses, and response latencies were compared across conditions. Our results suggest that although norming data collected online are reliable, interesting interactions between study-type and research environment have to be accounted for.

6. A Hybrid Machine Learning Method for Word Sense Disambiguation

Yan Chen, Georgia State University, ychen44@student.gsu.edu
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Natural language is commonly ambiguous because words may have different meanings in different contexts. In order to determine an appropriate sense of a polysemous word within a specific context, collecting all the senses for the polysemous word and selecting one appropriate sense among them are needed. In this poster, a hybrid machine learning method for word sense disambiguation (WSD) is proposed. The WordNet Semantic Trees are used as knowledge databases for calculating the semantic relations between the all senses related to the polysemous word and its context. The sense that has highest semantic relation with the context will be selected as the interpretation of the polysemous word, only if that semantic relation is higher than a threshold value. Otherwise, the WordNet databases can not determine an appropriate sense related to the polysemous word. In that situation, Support Vector Machine (SVM), a supervised machine learning technique, is used for disambiguating words. The rules for WSD can be extracted from training data-- manually sense-tagged contexts. Then, those rules will select correct senses of polysemous words in new contexts. Based on the facts that different users may have different understandings for polysemous words, users may give different feedbacks for disambiguation results. If the results are different from user's feedbacks, rules for WSD will be re-extracted, which make the results satisfy users' preferences.

7. How restful is a resting baseline? Recommendations for the transcranial Doppler sonography paradigm

Natasha B. Schultz, Georgia State University, nbarrett78@yahoo.com
David A. Washburn, Georgia State University, dwashburn@gsu.edu

The transcranial Doppler sonography (TCD) paradigm (like the fMRI paradigm and many others) uses a subtractive technique to characterize task-related brain activity relative to some resting baseline. In the present study, we consider the pitfalls of this procedure by collecting multiple resting baselines before, during, and after a vigilance task. Cerebral bloodflow velocity differed significantly between these baseline samples. Examining these differences and the changes they produce in the pattern of behavioral results, we make recommendations about the timing, duration, and content of a resting baseline measure for TCD.

8. ViziStats: Instructor-less Animated Statistics Instruction with Real Data in Real Time

Richard N. Landers, University of Minnesota, rlanders@umn.edu

In this new freely-available statistics education software being developed, students are able to input their own data and watch as statistics are computed based upon it. Each statistic or statistical test conducted is stepped through mathematically, conceptually, and graphically with full learner control over sequencing of content. Each module is broken down into steps and sub-steps. Learners may travel between steps at will, while sub-steps are animated and timed to present instruction at an optimal speed for absorbing the material.

Join us in Boston next year!



SCIP 2009 — November 19th–22nd

10:30 MPT in R

Quan Tang, The University of Memphis, quantang@memphis.edu
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Yuan You, The University of Memphis, yuan.you.hust@gmail.com
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The class of Multinomial Processing Tree (MPT) models (Riefer & Batchelder 1988, Hu & Batchelder 1994) is a family of categorical models for psychology and social sciences. The impact of MPT models relies heavily on the availability of tools for data analysis. In the past 15 years, computer programs such as SOURCE.EXE(Hu, 1990), MBT.EXE (Hu, 1993), AppleTree (Rothkegel, 1999), and GPT (Hu & Phillips, 1999) have been used by researchers for analyzing data from different domains within psychology and the social sciences (see Batchelder & Riefer, 1999, for details). In the past a few years, new theories and algorithms have been developed (Baldi & Batchelder, 2003). Earlier versions of computer programs were designed for order computer operating systems such as MSDOS, earlier versions of MAC OS and earlier versions of Microsoft windows. The capacity and user interface was limited for users of today. It is important to create new computer software that 1) incorporate new algorithms, 2) can be used in current operating systems of computing platforms.

10:45 Statistical power analyses using G*Power 3: Tests for correlation and regression analyses

Edgar Erdfelder, Universitat Mannheim, Germany, erdfelder@psychologie.uni-mannheim.de
Franz Faul, Christian-Albrechts-Universitat Kiel, Germany, ffaul@psychologie.uni-kiel.de
Axel Buchner, Heinrich-Heine-Universitat Dusseldorf, Germany, axel.buchner@uni-duesseldorf.de
Albert-Georg Lang, Heinrich-Heine-Universitat Dusseldorf, Germany, albert.lang@uni-duesseldorf.de

G*Power is a free power analysis program for a variety of statistical tests. We present improvements of the program version introduced by Faul, Erdfelder, Lang, and Buchner (2007) in two different areas. First, we extend the range of statistical tests for correlation and regression analyses by (1) tests comparing dependent correlations, (2) tests for linear regression coefficients, and (3) tests for logistic regression coefficients. Second, although G*Power was designed to be mostly self-explanatory, user feedback showed that a manual is nevertheless indispensable. We therefore developed a flexible web-based manual that will also be described in our presentation.

11:00 Listwise shuffling: A simple, robust procedure for hypothesis testing on clustered experimental data

Russell S. Pierce, University of California, Riverside, rpier001@ucr.edu
Dale J. Barr, University of California, Riverside, dale.barr@ucr.edu

Experimental data often have repeated observations over subjects and/or items. Linear mixed-effect regression models make it possible to test hypotheses while controlling for subject and item variability. However, these models make several assumptions (e.g. independence and normality) that limit their generality. We present listwise shuffling, a randomization approach that estimates the distribution of parameters under the null hypothesis in a manner that respects the clustering in the data set. We introduce the technique and demonstrate that it provides comparable Type I error rates and power to mixed-effect approaches.

11:15 A Formula for Psychologically Equivalent Recoding of Data from Visual Analogue Scales to any Number of Categories

Frederik Funke, University of Tübingen, Germany, email@frederikfunke.de

Ulf-Dietrich Reips, University of Zurich, Switzerland, u.reips@psychologie.uzh.ch

Data from visual analogue scales (VASs) -continuous graphic rating scales- have to be recoded into categories to make them comparable to frequencies (not just to means) collected with discrete categorical scales. A motivation for such a transformation may be the wish to compare results with those from previous research or from different studies. The most intuitive way of recoding VASs (forming categories from equal intervals) leads to serious bias (Funke, 2006), categorical scales do not measure on interval level (Reips & Funke, 2008), while Web based VASs do (Reips & Funke, in press). In this paper we describe an elaborate formula for recoding data from VASs. It is deduced from empirical data collected in several Web experiments and allows recoding of VASs into any desired number of categories.

11:30 Randomization tests and the unequal-N/unequal-variance problem

D. J. K. Mewhort, Queen's University, mewhortd@post.queensu.ca

Brendan T. Johns, Indiana University, johns4@indiana.edu

When both the variance and the N are unequal in a two-group design, the probability of a Type-1 error shifts from the nominal 5% error rate. The direction of the shift depends on whether the small cell has the larger of the unequal variances. We have developed an algorithm to circumvent the problem when the smaller group has the larger variance. We show, by simulation, that the algorithm brings the error rate back to the nominal value without sacrificing the ability to detect true effects.

11:45 Bayesian Inference Using the WinBUGS Development Interface (WBDev): A Tutorial for Social Scientists

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Michael D. Lee, University of California, Irvine, mdlee@uci.edu

Eric-Jan Wagenmakers, University of Amsterdam, ej.wagenmakers@gmail.com

Over the last decade, the popularity of Bayesian graphical modeling has greatly increased. This is partly due to the availability of WinBUGS—a free and flexible statistical software package that comes with an array of pre-defined functions and distributions, allowing users to build complex models with ease. For certain applications, however, it is highly desirable to be able to define one's own distributions and functions. This functionality was added through the WinBUGS Development Interface (WBDev). This tutorial illustrates the use of WBDev by means of concrete examples, featuring the ALCOVE categorization model and the shifted Wald distribution.

10:30 Can we run reaction time experiments on mobile phones?

Stian Reimers, University College of London, s.reimers@ucl.ac.uk

Neil Stewart, University of Warwick, neil.stewart@warwick.ac.uk

Mobile telephones have significant potential for use in psychological research. We examine whether it is possible to measure reaction times (RTs) accurately using Adobe Flash Lite on mobile phones. We ran simple and choice RT experiments on two widely available mobile phones, a Nokia 6110 Navigator and a Sony Ericsson W810i, using a wireless application protocol (WAP) connection to access the internet from the devices. RTs were compared within-subjects with those obtained using a linux-based millisecond-accurate measurement system. Results show that measured RTs were significantly longer on mobile devices, and that overall RTs and distribution of RTs varied across devices.

10:45 Flashlight- an outline eye-tracking tool

Michael Schulte-Mecklenbeck, University of Bergen, micheal@shulte-mecklenbeck.com

Ryan O. Murphy, Columbia University, rom2102@columbia.edu

Florian Hutzler, University of Salzburg, florian.hutzler@sbg.ac.at

A flashlight enables us to see a part of the world in the dark. Our application 'Flashlight' uses this metaphor and shows the participant a pre-defined section of a stimulus. Flashlight uncovers the area underneath the mouse cursor while recording the mouse position 10 times a second. To evaluate the data delivered by Flashlight we compared a set of four different stimuli (reading, algebra, visual search and gambles) run in a standard eye-tracking system in the laboratory and online with Flashlight. Differences between the two approaches in terms of completion time and accuracy are discussed.

11:00 On Estimating Parameters of a Mixed-Effects Expectancy- Valence Model for the Iowa Gambling Task

Chung-Ping Cheng, National Chengchi University, cpcheng@nccu.edu.tw

Ching-Fan Sheu, National Cheng Kung University, csheu@mail.ncku.edu.tw

Nai-Shing Yen, National Chengchi University, nsy@nccu.edu.tw

The Iowa Gambling Task (IGT) is a cognitive task designed to explore possible deficits in decision making under uncertainty. Busemeyer and Stout (2002) proposed the expectancy-valence model to account for participants' performance in IGT and interpreted the model parameters in correspondence to the components of psychological processes underlying the task. In this study, we propose a mixed-effect formulation of the expectancy-valence model and assume a multivariate normal distribution for subject-specific parameters. This formulation enables us to efficiently estimate parameters and test hypotheses in a single step. The advantages of the procedure over the traditional analysis are demonstrated with an analysis of a real data set.

11:15 Examination of Strategy Changes as a Function of Individual-Task Payoffs in a Synthetic Work Environment

Robert W. Proctor, Purdue University, proctor@psych.purdue.edu
David F. Pick, Purdue University Calumet, pick@calumet.purdue.edu
Dong-Yuan Debbie Wang, University of North Florida, dwang@unf.edu

SYNWORK1 software allows examination of how payoffs affect strategies people adopt to perform multiple tasks. Previously, we showed that participants adopted strategies appropriate to payoff differences between math and memory tasks but exhibited residual effects of prior payoffs. Here, we varied the payoff for one of these tasks in two experiments. The implicit payoff change for the other task had less effect on performance than did the explicit payoff manipulations used previously. Also, the change in effort on a task resulting from explicitly increasing its payoff was less than that from decreasing the payoff. A limitation of SYNWORK1 is discussed.

11:30 Simulation-Based Affirmations of Descriptive Behavioral Analyses: CyberRat as a “Turing Test”

Roger D. Ray, Rollins College, rdray@rollins.edu
Kevin M. Miraglia, Rollins College, kmiraglia@rollins.edu

This presentation explores the relevance of visually enhanced computer simulation and modeling as an affirmation test of the accuracy and comprehensiveness of descriptive behavior research methods and the analyses these methods prescribe. This is a process somewhat analogous to Turing’s (1950) famous proposed test for simulation authenticity, except in addition to a focus on the authenticity of the simulation itself, I include an additional focus on confirming the authenticity and completeness of the original data that underlie that simulation. Both the methodology and an exemplar computer simulation, called *CyberRat* (Ray, 1996a, 2003), will be described in detail.

11:45 An applet for web-based teaching of counterbalancing effects on impact of confounds in within designs

Gary McClelland, University of Colorado, Boulder, gary.mcclelland@colorado.edu
Ulf-Dietrich Reips, University Zurich, u.reips@psychologie.uzh.ch

We present a web application designed to fulfill the criteria of parsimony, usability, and availability (platform independence) in the teaching of an important concept in research methods. Effects of confounded variables may bias results in within-subjects designs, and can be avoided or exaggerated by counterbalancing of order. The presented web site seeks to illustrate underlying concepts and relationships between true effects, confound effects, and choice of counterbalancing schemes by letting the user continuously manipulate the relevant variables. The site can be viewed at <http://www.bolderstats.com/within/index.html>

“Intelligent Tutoring Systems (ITS) With Agents: Creating Enhanced Learning Environments with Cognitive Principles”***Organizer and chair: Xiangen Hu***

Introduction: This symposium presents one of the fastest growing research and development areas in cognitive psychology is the use of cognitive principles to enhance computerized learning environments. This symposium offers several talks that exemplify such R&D efforts that involve animated pedagogical agents. There will be total of 5 talks, beginning with a keynote presentation of Art Graesser from the University of Memphis. The keynote address by Art Graesser will offer theoretical, historical, and future directions of the AutoTutor ITS framework. The five presentations will focus on the effectiveness of existing ITS implementations with agents (Web-based Counterargument Tutor, Research Methods Tutor) and variations of AutoTutor (MetaTutor, ARIES, and AutoTutor Lite). One unique feature of this symposium is to allow participants to interact with the computer implementation before and after the SCiP symposium. The presenters will make the systems available during the SCiP conference so related research and implementation questions can be answered by cognitive psychologists and computer scientists who developed the systems.

1:15 AutoTutor and Its Progeny: Intelligent Tutoring Systems with Natural Language Dialogue

Art Graesser, The University of Memphis, a-graesser@memphis.edu

AutoTutor is a computer tutor that helps students learn concepts in science and technology by holding a conversation in natural language. Students input their contributions through a keyboard or speech, whereas AutoTutor communicates through an animated conversational agent with speech, facial expressions, and some rudimentary gestures. A recent version tracks and responds to learner emotions. Another version is integrated with an interactive simulation environment. Assessments of AutoTutor on learning gains have been quite promising (nearly a letter grade) compared with reading a textbook. This presentation describes AutoTutor and some of its offspring with animated pedagogical agents.

1:30 MetaTutor: An adaptive hypermedia system for training and fostering self-regulated learning about complex science topics.

Roger Azevedo, The University of Memphis, razevedo@memphis.edu

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Vasile Rus, The University of Memphis, vrus@memphis.edu

Zhiqiang Cai, The University of Memphis, zcai@memphis.edu

Mihai Lintean, The University of Memphis, mclinten@memphis.edu

MetaTutor is a multi-agent, adaptive hypermedia learning environment that trains and fosters high school and college students' use of self-regulatory processes in the context of learning about science topics such as human body systems. The purpose of the MetaTutor project is to examine the effectiveness of animated pedagogical agents as external regulatory agents used to detect, trace, model, and foster students' self-regulatory processes during science learning with multiple representations of information. The multi-agent system provides adaptive tutoring based on the students' evolving conceptual understanding of the topic and their strategic use of cognitive and metacognitive processes. Current challenges include the (1) dynamic assessment of students' evolving conceptual understanding of the topics, (2) assessment of the selection and quality of self-regulatory processes used during learning, and (3) coordination and management of dialogue interactions between the learner and embedded agents.

1:45 Using AutoTutor to Promote Scientific Inquiry Skills in Game Environments

Keith Millis, Northern Illinois University, kmillis@niu.edu
Patricia Wallace, Northern Illinois University, tj0pxw1@wpo.cso.niu.edu
Zhiqiang Cai, The University of Memphis, zcai@memphis.edu
Art Graesser, The University of Memphis, a-graesser@memphis.edu
Diane Halpern, Claremont McKinna College, diane.halpern@cmc.edu
Joe Magliano, Northern Illinois University, jmagliano@niu.edu

Project ARIES! is an education game that teaches concepts central to scientific inquiry. The game is powered by AutoTutor which allows the player to hold mixed-initiated conversations with animated agents using natural language. The player proceeds through the game with two agents, one who is a fellow student, and one who is a teacher. Students learn by reading (and being tested on) an on-line text, by evaluating research, and by interrogating scientists. The talk will focus on how the animated agents will hold different types of dialogs with the human player in order to promote learning.

2:00 Research Methods Tutor in a Non-Traditional Student Environment

Elizabeth Arnott, Chicago State University Department of Psychology, earnott@csu.edu
Peter Hastings, DePaul University School of Computer Science, Telecommunications, and Information Systems, peterwh@cs.depaul.edu
David Allbritton, DePaul University Department of Psychology, dallbrit@depaul.edu

Research Methods Tutor (RMT) is a dialog-based intelligent tutoring system designed for use in introductory research methods courses. RMT has been shown to result in average learning gains of .75 SDs above classroom instruction in traditional college environments. One of the goals of the RMT project is to provide greater access to tutoring for students in research methods courses, particularly non-traditional students. Therefore, we further tested RMT's effectiveness at a university that enrolls primarily non-traditional students. A few key outcome differences between traditional and non-traditional environments emerged, including perceptions of the pedagogical agent and the utility of tutorial dialog. Future directions based on these findings are discussed.

2:15 Semantic Decomposition of Student's Contributions: An implementation of LCC in AutoTutor Lite

Xiangen Hu, The University of Memphis xhu@memphis.edu
Louis Han, The University of Memphis lhan@memphis.edu
Zhiqiang Cai, The University of Memphis zcai@memphis.edu

AutoTutor Lite is a variation of AutoTutor implemented in Joint Knowledge Online (JKO) learning environment. We only use minimum set of features of AutoTutor in this application. The goal of AutoTutor Lite is to allow learner have intelligent Tutoring Systems (ITS) style interactions with online learning content. The key of AutoTutor Lite is the algorithm that decomposes learner's contribution semantically so student model of the learner can be created dynamically. In this talk, we will introduce the basic decomposition algorithm and its use in creating Learner's Characteristic Curve (LCC) as student model.

2:30 Discussion

1:15 The Continuous Dynamics of False Responding

Nicholas D. Duran, Institute for Intelligent Systems, nduran@memphis.edu

Rick Dale, University of Memphis, radale@memphis.edu

Danielle S. McNamara, Institute for Intelligent Systems, dsmenamar@memphis.edu

This study examines how the movement of the arm reveals the time course of false responding, a task akin to deception. Participants answered “Yes” or “No” to autobiographical questions by moving their arms towards either response choice (displayed simultaneously on a screen). When responding falsely, movements of the arm were accompanied by a strong attraction to answer truthfully. In particular, greater attraction to the truth was observed during false “Yes” responses compared to false “No” responses. We also show that properties of the arm movement systematically differ between response types. These results emphasize the importance of using novel methodology to uncover hidden processes that unfold in time.

1:30 Time on Task: A Useful Psychometric Concept

Roman Taraban, Texas Tech University, roman.taraban@ttu.edu

Time-on-task has played a modest role in educational theory. However, I suggest that may change due to advances in our understanding of the representation of knowledge and information. In my 2007 Presidential Address to SCiP I outlined the prospects for using time-on-task as a parameter in designing computer-based learning systems. In this presentation, I will use archival learning data in order to test Landauer’s estimate of an average input rate into memory of 2 bits per second, with consideration of how to quantify and measure information gain. A consideration of the implications of time-on-task to issues of global competitiveness as it relates to information and knowledge will round out this presentation.

1:45 PsychoPro 2.0: Incorporating a multidimensional scaling feature to an existing Visual Basic program used to examine the racial categorization

Otto H. MacLin, University of Northern Iowa, otto.maclin@uni.edu

Dwight J. Peterson, University of Northern Iowa, Dwight.peterson23@gmail.com

Cody Hashman, University of Northern Iowa, chashman@gmail.com

Ben Stone, University of Northern Iowa, benpstone@gmail.com

Jessica Young, University of Northern Iowa, jmy_1101@hotmail.com

Recently, researchers examining cognitive mechanisms involved in recognition for same and other-race faces developed a Visual Basic program called PsychoPro. The original PsychoPro allows researchers to collect psychophysical data using morphed stimuli. We present an updated version called PsychoPro 2.0 that includes an additional feature which allows researchers to collect paired-comparison data that can then be analyzed using multidimensional scaling (MDS). The participant in our study made paired comparisons to racial stimuli by rating pairs of faces based on perceived similarity. Paired comparison data were analyzed using MDS. Results indicate that ratings were made based on at least six different racial dimensions. Details of the software, the new paired-comparison feature, and its relevance in psychophysical studies in general, and racial categorization in particular is presented.

2:00 Using a Semantic Distinctiveness Count to Calibrate Retrieval Times: A Large-Scale Corpus Analysis

Brendan T. Johns, Indiana University, johns4@indiana.edu

Michael N. Jones, Indiana University, jonesmn@indiana.edu

Word frequency is an important variable used to calibrate word stimuli across many different experimental paradigms within psychology. However, a recent corpus analysis (Adelman, et al., 2006) has shown that the number of documents a word occurs in is a superior measure. We propose that this variable should depend on the uniqueness of the different documents in which a word occurs. We first develop a measure of similarity between documents, and then use the measure to create a document count weighted by how unique documents are to one another. We demonstrate that our semantic distinctiveness count is a better measure for stimulus calibration than a frequency or document count measure.

2:15 The Constituents of Paraphrase Evaluations

Philip M. McCarthy, University of Memphis, pmmccrth@memphis.edu

Rebekah H. Guess, University of Memphis, rguess@mail.psyc.memphis.edu

John. C. Myers, University of Memphis, jcmyers@memphis.edu

Danielle S. McNamara, University of Memphis, d.mcnamara@mail.psyc.memphis.edu

Two sentences are paraphrases if their meanings are equivalent but their words and syntax are different. Paraphrasing can be used to aid comprehension, stimulate prior knowledge, and assist in writing skills development. As such, paraphrasing is a feature of fields as diverse as discourse processing, composition, and computer science. In this study, we ask how humans evaluate paraphrase quality, and whether computational approaches can replicate those evaluations. Our results suggest that a two-stage process (rather than a parallel process) accounts for human evaluations, and that Semantic and Syntactical evaluations (in that order) are the primary constituents. Our results also demonstrate that computational approaches replicate human evaluations and can thus be used to assess paraphrase quality.

Keynote Address

Frank Durso

Georgia Institute of Technology

e-mail: frank.durso@psych.gatech.edu



“For Better and Worse: Marrying Humans and Technology Under the cognitive Huppa”

Human-technical systems are changing rapidly and rely increasingly on an understanding of cognitive processes. A number of new human-technical systems are on the horizon, some of them promising quite dramatic changes but also bringing a host of serious cognitive questions. I’ll talk about some of these domains (e.g., aviation, medicine) and about how a better understanding of the cognitive factors in these systems could lead to more satisfying and safer systems. I’ll offer some suggestions about how cognitive psychology can be imported successfully and where some of the pitfalls lie when attempting to bring cognitive psychology to bear on human-technical systems. I’ll end by arguing that niches that could be filled by cognitive psychologists are being filled by others to the detriment of both society and cognitive psychology.

4:10-5:10 pm

Williford C



Presidential Address

**Gary Bradshaw
University**

e-mail: glb2@ra.msstate.edu

“ePsych, SCiP, and the (R)Evolution of the Textbook”

I believe that powerful forces are in play that will shortly lead to the demise of the printed textbook in favor of an electronic textbook. To truly be effective, electronic textbooks need to fully exploit the ability of computers to deliver dynamic and interactive content with a user-friendly writing style and interface. I will discuss the factors that contribute to the extinction of the printed text and then will review ePsych, a developing electronic text that serves as an demonstration of an electronic text. Although ePsych is incomplete and under development, it includes more than 2000 .html > pages, several hundred video clips, nearly a hundred java applets, and a fast and convenient user-interface. ePsych draws heavily upon developments and findings reported at SCiP, including factors such as display timing, experimental program development, user interface designs, intelligent tutor design, and the like: The talk will pay homage to many SCiP giants on whose shoulders I stand.

5:10-5:30 pm

Williford C

Business Meeting

Minutes for Steering Committee Meeting
Wednesday, November 14, 2007: Hyatt Regency Long Beach
7:30 p.m., Harbor A/B

Present: Gary Bradshaw, Michael Jones, Michael Schulte-Mecklenbeck, Ulf-Dietrich Reips, Roman Taraban, Jonathan Vaughn, Kim-Phuong Vu, Christopher Wolfe, Joe Young.

1. The Committee reviewed and approved the 2006 Steering Committee minutes.
2. Roman Taraban gave the vendor report, which showed participation by 11 eleven vendors since the last conference up to and including the current conference, with total contributions to the Society of \$1100.00.
3. Webmaster Xiangen Hu was unable to attend the conference. His significant contribution to maintaining the Society website, scip.ws, with the inevitable occasional glitch, was acknowledged. The Webmaster report, which was forwarded to the Steering Committee, indicated high levels of visitation and activity at the website. Xiangen proposed some ideas to change the website platform, for improving the website home page, and for changing website features in order to increase member interaction. A suggestion was made to explore the process of transferring the scip.ws to the Society. Michael Schulte-Mecklenbeck offered his assistance in further developing the website. The Steering Committee agreed that Michael should work with Xiangen as a webmaster assistant. A further suggestion was to develop an offline prototype of scip.ws using an alternative platform and to get feedback from the Steering Committee, if the webmasters thought this was a productive direction.
4. Steering Committee and officer election results were reported by Roman Taraban. Votes were emailed to Roman this year instead of to Secretary-Treasurer Kay Livesay because Kay was one of the candidates. Of the three candidates for president-elect, Xiangen Hu received the majority of votes and is president-elect for 2007-2008. Three members of the Steering Committee needed to be replaced this year in order to maintain the required nine elected members on the Committee. Of the nine candidates for Steering Committee, the three with the most votes were (alphabetically) Michael Schulte-Mecklenbeck (University of Bergen), Kim-Phuong Vu (California State University, Long Beach), and David Waller (Miami University). The Steering Committee welcomed the new members. A recommendation was made to contact all the candidates to thank them for running for office and to encourage them to remain active in SCiP.
5. The Secretary-Treasurer Report was not available at the time of the Committee meeting. A recommendation was made that the Secretary-Treasurer count the number of conference registrations that were not for presenters. The Committee agreed that members should be reminded to pay their annual dues, even if they do not attend the conference.
6. Gary Bradshaw, program chair for the 2007 conference, with assistant chair Kim Vu, reported on the status of the conference. Kim Vu volunteered to be program chair for the 2008 conference, with the hearty appreciation of the Committee. Candidates for assistant program chair were discussed.
7. Gary Bradshaw announced the Castellan Prize winner as Richard N. Landers (University of Minnesota) for his paper entitled "TREND: A tool for rapid online research literature analysis and quantification." The Castellan review committee felt that Richard was a deserving recipient of the prize. After brief discussion of whether the monetary award should be increased, the Committee decided to keep the award at the current level of \$100.
8. John Krantz forwarded the Behavior Research Methods (BRM) report to the Committee, noting the Journal's work to decrease lag time to publication, the generally strong submission rates to the Journal but the waning submissions for the SCiP proceedings issue. The deadline for proceedings submissions for the 2007 conference was extended to Dec. 6, 2007.
9. A report on the Psychonomics archive was given by Jonathan Vaughn. He noted that the SCiP website did not have a link to the archives. Jon indicated that he would provide a few sentences about the archives to be included with the link on scip.ws.
10. Joe Young gave a report on the Society's affiliation with the Federation of Behavioral, Psychological, and Cognitive Sciences. The Society's Federation dues would increase by \$1 per member in the

coming year. Joe also indicated a need for a better means for communicating with members about Federation issues. The Committee agreed that a listserv for the Society members could help in facilitating communication. There was agreement that a moderated listserv would be created for use in the coming year.

11. A report on SCiP Experts was given by Christopher Wolfe. Chris reaffirmed the value of SCiP experts to the Society and indicated a need to make the opportunity to become an expert more visible on scip.ws.
12. New business:
 - A. The Committee accepted an initiative from Michael Schulte-Mecklenbeck to develop a system for electronic voting for officers and steering committee members, to be launched for the 2008 election. Access to ballots by the webmaster was mentioned as an issue that needed to be discussed further.
 - B. A proposal was made to the SCiP membership at the 2006 Business Meeting to allow Steering Committee business to be conducted electronically during the year. The Steering Committee voted to approve the proposed change to the SCiP by-laws.
 - C. A proposal was made to the SCiP membership at the 2006 Business Meeting to change the bylaws to reduce ballot-posting to ballot-counting time to 30 days. The Steering Committee voted to approve the proposed change to the SCiP by-laws.
 - D. The Steering Committee discussed the adequacy of the current membership and conference fee, and voted to increase membership/conference fees to \$60 beginning with the 2008 conference. The Committee did not act on the suggestion to provide a half-day conference registration fee.
 - E. Roman Taraban noted that the By-Laws allowed the Steering Committee to award Honorary Life Memberships (see By-Laws III.6). The Committee agreed to discuss this issue during the coming year.
 - F. The possibility of a smaller mid-year SCiP workshop focusing on some aspect of computing or modeling was also discussed and left open for further input via the SCiP listserv.

Gary Bradshaw, conference chair, was congratulated on putting together an excellent conference program. The meeting was adjourned.

Business Meeting Notes from the 2007 Conference

The Business meeting followed a similar agenda to the Steering committee meeting, described above.

The SCiP membership approved two changes to the SCiP By-Laws:

1. Article VI. Elections. The time frame for ballot collection and count was changed from 60 days to 30 days. The new statement is: Thirty days after the distribution of the election ballot, the election shall be closed, and the ballots counted.
2. Article VIII. Meetings. A provision was added to the Steering Committee meetings to allow the committee to conduct society business electronically as well as at the annual meeting. The new statement: Meetings of the Society and the Steering Committee shall be held at such times and places and upon such notice as the Steering Committee may from time to time determine. The Steering Committee may also conduct society business electronically. Ten percent of members present in person shall constitute a quorum at meetings of the Society, and a majority of the elected members of the Steering Committee shall constitute a quorum at meetings of the Steering Committee or for the purpose of conducting society business electronically. The Steering Committee shall determine the order of business at meetings of the Society.

The Steering Committee approved and announced an increase in conference fee/membership to \$60, starting with the 2008 conference, due to extra costs to run the conference and increased Federation dues.

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News

October 5th, 2007

The 2008 versions are available for release!

[MediaLab v2008](#) and [DirectRT v2008](#)

October 5th, 2007

View and search the 2008 interactive user guides online: [MediaLab](#) and [DirectRT](#)

September 1st, 2007

Release of the sleek new DirectIN button boxes. Same super-fast circuitry but a fresh new look. [Read more](#)

January 7th, 2007

Users speak! The latest [public software review](#) from the SPSP list serve.

April 1st, 2006

Empirisoft develops the first circuit board that can be implanted in a standard keyboard to make it millisecond accurate. [more](#)

