ANNUAL MEETING COVERAGE

Inside ASIS&T

6] Photo Montage
8] 2012 ASIS&T Award Winners
14] Third ASIS&T Student Design Competition: The “Truthiness” Challenge by Candy Schwartz
16] ASIS&T Online Education Initiatives: Driving the Future by Diane M. Rasmussen and Linda C. Smith
19] James Cretsos Leadership Award: What ASIS&T Means to Me by Naresh Agarwal

SPECIAL SECTION

ASIS&T Annual Meeting Pre-conference Activities

25] SIG/SI 8th Annual Research Symposium a Success! by Pnina Fichman and Howard Rosenbaum
33] The History of ASIS&T and Information Science and Technology by Karen Miller
38] Evolving and Emerging Research Methods: 2012 ASIS&T SIG/USE Symposium by Lorri Mon and Jeanine Williamson
44] From Vision to Reality: The Emerging Information Professional by Sandra Hirsh

ASIS&T Annual Meeting Plenary Speaker

46] Edward Chang: Mobile Opportunities by Steve Hardin

ASIS&T Annual Meeting Award Winners

49] Award of Merit Acceptance Speech by Michael K. Buckland
52] A Career in Information Retrieval Research by Kalervo Järvelin
The ASIS&T 2012 Annual Meeting – the 75th anniversary meeting of the group – in Baltimore is the focus of this issue. Coverage includes an expanded Inside ASIS&T, as well as a special section reporting on many of the meeting’s pre-conference workshops and seminars, a report on the plenary session and articles by winners of two of the Society’s most prestigious awards. Our three regular columns, the President’s Page, the IA Column and the RDAP Review also appear.

As reported in the last issue, the meeting events and attendance seem not to have taken a big hit from Sandy. As the meeting itself has been shortened in recent years, pre-conference activity has become increasingly important. Many pre-conferences are now established annual events, and some have extensive presentations, awards, associated publications and other activities. This year, the pre-conference on the history of ASIS&T and the field was particularly anticipated as it celebrated the 75th anniversary of the Society. In addition to that event, we report on pre-conferences sponsored by SIG/CR, SIG/SL and SIG/USE. We also cover the ongoing Society task force promoting the recognition of information professionals, whose activities were reported at a session on the emerging information professional.

Inside ASIS&T includes photos, coverage of 2012 award winners and extended reports on the ASIS&T Online Education and the Third ASIS&T Student Design Competition as well as the insights of Naresh Agarwal, winner of the 2012 James M. Cretsos Leadership Award, who shares his views on how new members can get more value from their ASIS&T experience and how ASIS&T might offer more value to members.

This year’s ASIS&T president, Andrew Dillon reports on the President’s Page on progress toward implementing the Society’s name change and on his attendance at the annual meeting of the Council of Scientific Society Presidents, in which ASIS&T, given many interests in common with other societies, might play a greater role.

Our plenary speaker this year was Edward Chang, who spoke about mobile opportunities, while Michael Buckland reflected on the purpose of information science and librarianship and the role they have played in his life in his acceptance speech for ASIS&T’s highest honor, the ASIST Award of Merit. We also asked this year’s Research Award honoree, Kalervo Järvelin, to tell us about his research career and findings, which he does in the article “A Career in Information Retrieval.”

In his IA Column Thom Haller challenges information architects to extend their work with another example of the dangers of poor design and the remedial insights offered by the principles of user affordance, while Katherine Goold Akers, this month’s RDAP columnist, urges librarians to pay attention to “small data,” which is often important and which will most likely be preserved only if local institutions undertake that responsibility.

Finally, I’d like to thank the many contributors whose reports and reflections have made this issue possible.
The name change for ASIS&T, as you will now know, was overwhelmingly supported by members last fall in what turned out to be one of the largest ballot returns in recent ASIS&T history. As I write this, we are in the process of dealing with all the necessary legal and logistical aspects that must be addressed. The clear signal from members is that this is the right move for the Society at this time, and I hope we can leverage this enthusiasm in the months and years ahead to forge a greater international association for all our members.

Name changes are not new to many professional societies, and neither are dwindling memberships, financial challenges and threats from outside. This much was brought home to me vividly when I attended the Council of Scientific Society Presidents annual meeting last month in Washington, DC. This gathering of society presidents is described as the primary science policy organization in the world, and I was honored to represent ASIS&T. Given the problems discussed, we need to participate actively and regularly in this gathering, and I am of the view that our society can bring a unique perspective to bear.

Two concerns in particular dominated the discussion sessions I attended: publication revenues and predatory conference practices. The former, obviously enough, is driven by the recognition that increasing amounts of any society’s budget come from publication revenues. With library bundling practices and membership drops, several presidents spoke of the proactive steps their societies are taking to ensure their ongoing funding streams. The range of options employed is wide, from author
In the coming year we will examine all forms of involvement in ASIS&T so as to engage as many members as possible in the major events of the society: the Annual Meeting, summits, webinars and so forth.

Charges to developing dedicated endowment funds to support publications, but the most exciting suggestion I heard was for the Council to facilitate a consortium process to handle the mechanics of publishing, probably through a service provider, which could be leveraged by individual societies as needed. The dream is to allow each member society the ability to retain full benefits of ownership for their journals but with the negotiating strength of the collective. Clearly there is some distance between the idea and its implementation, but it suggests that scholarly societies need not view themselves as passive or powerless in the scholarly publication economy. From the lively discussion that ensued at the meeting, it was clear that many professional societies believe this option is seriously worth exploring.

The predatory practices issue is something that we’ve not experienced with ASIS&T, but some society presidents reported competitors starting up conferences that are scheduled to coincide with or run in parallel to their major conventions and which are often titled and described ambiguously to suggest a relationship or official endorsement. The goal is to attract revenues by capturing the attention and resources of a legitimate association’s members. We’ve not had too many competitors try this with the ASIS&T Annual Meeting, but it is clear that the number of information-related conferences, often in attractive locations, is growing as businesses see the prospect of profits. And profits there are to be made, but the costs are more than financial: young faculty need to be very mindful of where they publish as they build their research records, and professionals seeking the best exposure to new ideas and practices can ill-afford to waste resources attending second-rate conferences. We all think we can tell the difference ourselves, but it’s clear that some outside interests feel there is an ambiguity here to be exploited.

All told, the Council of Scientific Society Presidents’ meeting confirmed for me the importance of looking outside our society for guidance and benchmarking. As the Association for Information Science & Technology, we should be exploring not only greater international coordination and activities but we should also be examining how our society can shape dialog and forge productive relationships with other disciplines that are impacted by the core concerns of our field. If you have not attended a business meeting at our Annual Meeting recently, you might not realize that our membership is small and is shrinking and that we are heavily reliant on publication contracts to ensure our financial survival. In this sense, we are no different than many other scholarly associations. What we do have, however, is an intellectual core that has relevance far beyond any single disciplinary boundary and by acting on this strength and our clear desire to grow internationally, ASIS&T can have a healthy future and in so doing, really live up its claim to be “the information society for the information age.”
ASIS&T Changes Its Name, Enhances Its Global Mission

With nearly 90% of all ballots cast voting in favor of a name change, the American Society for Information Science and Technology will soon become the Association for Information Science and Technology. While the ASIS&T acronym stays the same, the name change recognizes the growing influence of ASIS&T in the international arena. The opportunities and challenges with respect to the science and technology of information are increasingly international in focus and scope. ASIS&T supports members around the globe in addressing these opportunities and challenges.

When 2012 ASIS&T president Diane H. Sonnenwald, in collaboration with 2012 immediate past president Linda C. Smith and president-elect Andrew Dillon, called for a membership vote on the name change issue, she said, “The word American in our name often makes it difficult for individuals outside the United States to receive recognition for belonging to and participating in ASIS&T. It also fails to recognize the important contributions members outside the United States make to our association and to our discipline.”

In addition, Sonnenwald noted that increasing international participation in ASIS&T will provide additional opportunities for all members to learn from and share expertise and knowledge with colleagues who have different expertise and knowledge.

Currently 18% of ASIS&T members reside outside the United States in 52 different countries. At the recent 75th Anniversary ASIS&T Annual Meeting, attendees came from 25 countries, with 22% coming from countries other than the United States. In addition, ASIS&T runs successful international conferences, notably the annual European Information Architecture Summit, and will hold its 2013 Annual Meeting in Montreal, Canada.

The new name reflects the commitment of our members to international cooperation and global efforts to increase the influence of information science in education, research and applications to ensure the best access, management and use of information in an increasingly interconnected world.
In the December/January issue of the *Bulletin of the American Society for Information Science and Technology*, we provided a brief news report of our 75th Anniversary Annual Meeting and the impact hurricane Sandy had on attendance and activities. But the timing of both the meeting and this publication’s deadlines kept us from providing full photographic and text coverage of the fun, the substantive, the social and the ridiculous at the successful anniversary confab of ASIS&T.

So join us throughout this issue of the *Bulletin* for a look at some of the work and fun that members and guests enjoyed in Baltimore at the 2012 ASIS&T Annual Meeting. Following a photo montage from the meeting, you’ll find coverage of the ASIS&T Annual Awards presented at the conference and news about the winners of the ASIS&T Student Design Competition. Also in this issue, other Annual Meeting coverage includes reports from many of the pre-conference workshops and seminars; the plenary session headlined by Edward Chang; the Award of Merit acceptance speech delivered by former ASIS&T president Michael Buckland; and an article by our 2012 Research Award recipient Kalervo Järvelin.
2012 ASIS&T Award Winners

One of the highlights of each year’s ASIS&T Annual Meeting is the presentation of the prestigious ASIS&T Annual Awards. This year’s winners are featured in this section. Because of travel difficulties associated with hurricane Sandy, many winners were unable to attend the meeting, but their awards were noted nonetheless.

**Award of Merit**

**Michael K. Buckland**, professor emeritus in the School of Information at the University of California, Berkeley, is the 2012 recipient of the ASIS&T Award of Merit, the highest honor presented by ASIS&T. The award goes to an individual who has made a noteworthy contribution to the field of information science, including the expression of new ideas, the creation of new devices, the development of better techniques and outstanding service to the profession.

Professor Buckland is internationally recognized for his many publications encompassing topics in library services, history of information science, information retrieval, classification, metadata and concepts and theories in information science. Among his most notable articles are “Information as Thing” and “What Is a Document?” – both published in the *Journal of the American Society for Information Science and Technology*.

**Watson Davis Award**

ASIS&T’s Watson Davis Award recognizes the contributions of someone who has shown continuous dedicated service to ASIS&T. In 2012, the person who most effectively lives up to that ideal is **KT Vaughan**, University of North Carolina at Chapel Hill. KT is an outstanding information science professional who has provided exceptional service to the ASIS&T organization. She has done an incredible job of demonstrating her impressive commitment to the profession of information science. KT brings a high level of dedication and quality not only to her career position that includes sharing her wealth of knowledge with students, faculty and colleagues, but also to the overall profession by working and leading multiple groups and committees from SIG/STI to the ASIS&T Constitution and Bylaws and Leadership Development Committees. She has previously served on the ASIS&T Board of Directors as SIG Cabinet Director.

KT’s generosity in sharing her leadership talents for the good of ASIS&T, while demonstrating her continuous dedication as a driven member and leader makes her highly deserving of this award.

**2012 ASIS&T Research Award**

**Kalervo Järvelin**, Tampere University, Finland, is the recipient of the 2012 ASIS&T Research Award. During the last
decade his rich research has contributed to bridging naturalistic information-seeking behavior and classic information retrieval theory and experiment. His contributions to IR evaluation alone would warrant this award. His theoretical foundation and strive for methodological rigor are always present in his publications and presentations. He integrates cognitive and other theoretical approaches and advanced mathematical models in his often longitudinal and laborious information studies. In addition, his pioneering work on task complexity, his research work on how to bridge the gap between user needs and information systems in context as well as his contribution in natural language IR and cross-lingual IR are also of long-standing value to the LIS community.

Kalervo Järvelin is an exceptional scholar: he has a rare talent to solve problems by joining together apparently incompatible ideas. He is very creative and the most inspirational supervisor. He has formed several long-term influential research teams that have pushed the boundaries of traditional IR research and produced innovative and well-tested methodological breakthroughs, e.g., the generalized measures for non-binary (scaled) relevance assessments. He is an internationally recognized scholar and his work has had a huge impact as evidenced by his 1600 citations in Scopus and 1200 citations in Web of Science.

Kalervo Järvelin is one of those few visionary scientists who can not only reflect upon their own ground-breaking work, but also pin it down experimentally using state-of-the-art computational and advanced mathematical models. This has continuously placed him at the forefront of international information science research. Furthermore, his scientific integrity combined with his energetic and wonderful attitude make him a great role model to many younger researchers and a living inspiration to all.

**THOMSON REUTERS OUTSTANDING INFORMATION SCIENCE TEACHER**

The 2012 Thomson Reuters Outstanding Information Science Teacher Award goes to Dietmar Wolfram, who has been teaching at the University of Wisconsin-Milwaukee School of Information Studies for 22 years. Over the course of his career he has held a variety of positions including professor, acting associate dean, coordinator of the BS program, director of PhD studies and interim dean.

Dr. Wolfram is responsible for many initiatives aimed toward the advancement of information science in higher education. He was instrumental in developing the bachelor’s degree program in information science and technology, was a pioneer in the school’s online MLIS program and most recently was awarded $815,000 in IMLS funding to support the school’s doctoral program in information studies – a program he worked for years to establish and which began admitting students in 2008.

As an instructor, he has taught at all three levels of study. He teaches courses in library and information science research methods, foundations and information retrieval where his course evaluations are consistently rated as second to none and reflect an extraordinary ability to inspire and foster true love for the field. He has published widely with his students in national and international journals in the areas of informetrics and information retrieval and has presented his research on six continents.

He is a committed and active member of several information science organizations at varying levels. In ASIS&T, he has held numerous board, chapter and SIG positions since 1988.

Professor Wolfram stands as a role model for students and staff alike. His multiple decades’ worth of service and experience combined with his vast knowledge of the field, personal sacrifice and utmost integrity have resulted in significant benefits to his peers, his school, his associations and especially his students to whom he exemplifies exactly what constitutes an outstanding information science teacher.

**BEST JASIST PAPER**

The 2012 Best JASIST Paper Award goes to Sukomal Pal, Mandar Mitra and Jaap Kamps for their article, “Evaluation Effort, Reliability and Reusability in XML Retrieval,” *JASIST* 62(2): 375-394 (2011). The awards jury calls this a “very satisfying” paper, which is very readable, logically presented, does an excellent job of situating itself with respect to prior work and provides a thorough and
comprehensive analysis. A solid IR piece, it is a large-scale investigation that contributes to an understanding of how XML retrieval differs from standard ad hoc evaluation and whether it is better to spend resources judging a few queries deeply or many queries using shallow pools. It also focuses the community’s attention on methods to evaluation passage-retrieval, which is an important extension of the document-centric model that has been the primary target of research in IR and information science for so long. Committee members commented favorably on the paper’s utility: it has clear implications for IR evaluation and for the operation of INEX-type evaluations, giving it the potential for long term impact.

**PRATT SEVERN BEST STUDENT RESEARCH PAPER AWARD**

The 2012 Pratt Severn Best Student Research Paper goes to **April Lynne Earle**, St John’s University, for her paper entitled, *Design of an Application Profile for the St. John’s University Oral History Collection*.

Completed as a semester project for a metadata course at St. John’s University, the paper describes the creation of an application profile that uses both MARC and Dublin Core. As her nominator stated in his submission papers, the project “represents a significant contribution towards getting the project catalogued and ultimately accessible online.” Jurors cited the paper for its original topic, demonstration of “superior technical competence in information science” and provision of interesting implications for practice.

**JAMES CRETOS LEADERSHIP AWARD**

**Naresh Agarwal**, assistant professor in the Graduate School of Library and Information Science at Simmons College, is the recipient of the 2012 James Cretsos Leadership Award, honoring a new ASIS&T member who has demonstrated outstanding leadership qualities in professional ASIS&T activities. Naresh joined ASIS&T as a student member in 2008 and, as a result of an interview at his first ASIS&T Annual Meeting that year, landed the job he currently holds. Naresh also launched his ASIS&T career during that conference when he took the initiative to ask various members how he could get involved. By the next year,
**BEST INFORMATION SCIENCE BOOK AWARD**

The jury members offered numerous supportive comments about the book. One juror noted that this book is “obviously of high importance and relevance to information science. It is the definitive text on information retrieval, much improved over the earlier edition.”

Another juror noted this is “[a] textbook by some of the most expert authors in the field… cohesive and well-written… a classic, rewritten and restructured.”

Finally, one notation was that this book “… expands what was already a good work… an important resource both for current and new members of our profession…. [I]t lives up to the interdisciplinary nature of IR and LIS.”

**THOMSON REUTERST DOCTORAL DISSERTATION PROPOSAL SCHOLARSHIP**
The 2012 Thomas Reuters Doctoral Dissertation Proposal Scholarship goes to Lori McCay-Peet for her proposal entitled *At the Intersection: Investigating the Qualities of the Serendipitous Digital Environment and the Serendipity-prone Person*. McCay-Peet proposes an ambitious, multiphase project that will examine the factors involved in, and develop a holistic model of, the process of serendipity within the digital environment.

Further, the study proposes to identify the qualities of serendipitous-prone individuals and the inter-relationships among the qualities of the serendipity-prone person, the content of the system and the facets of the digital environment.

Lori McCay-Peet, right, receives Doctoral Dissertation Scholarship Award from June Abbas, left, as Diane Sonnenwald looks on.

McCay-Peet’s study will add to traditional methods previously used to study serendipity by proposing a novel approach – that of measuring the link between working memory capacity of individuals as an indicator of serendipitous facilitation. Lori’s faculty advisor notes, “Lori has developed a solid research idea, a conceptual model to support it and a preliminary pathway to follow. . . . She has a natural ability to identify a problem, voraciously consume the background research and propose a solution or direction. To every project, she has brought a logical and analytical approach with novel and innovative ideas.”

**PROQUEST DOCTORAL DISSERTATION AWARD**
The 2012 ProQuest Doctoral Dissertation Award is presented to Jaime Snyder, Syracuse University, for the dissertation entitled, *Image-Enabled Discourse: Investigating the Creation of Visual Information as Communicative Practice*. Jaime was previously honored in 2010 with the Doctoral Dissertation Proposal Scholarship for this topic. This dissertation positions the creation of images during small group interactions as a specific type of information-driven communicative behavior, separate from doodling or artistic practice. This creative and
thoughtful study raises many interesting questions that have not previously been studied within library and information science and brings in research from such fields as linguistics, psychology, sociology and communications theory. The study will likely lead to interdisciplinary research that combines visual communication and interaction studies. The exploratory study achieved the objectives set out in the research and added novel findings in the area of image creation in relation to information behaviors. The methodology and theoretical framework are sound and the literature review is excellent.

CHAPTER AWARDS
Winners of several 2012 ASIS&T chapter awards were not yet announced by press time for this printed program. They will be presented at the 2012 ASIS&T Annual Meeting.

Isabella Peters, left, and Fidelia Ibekwe-SanJuan, right, accept Chapter-of-the-Year honors on behalf of the European Chapter from Diane Sonnenwald.

CHAPTER-OF-THE-YEAR
The European Chapter of ASIS&T is the worthy recipient of the 2012 ASIS&T Chapter-of-the-Year Award. It can be difficult to operate in such a distributed geographic area, but this chapter continues to excel at its activities while engaging members throughout the area. Chapter members are especially to be commended for their work with European conferences, their excellent collaboration with sister societies and their role in facilitating the development of new chapters in other areas with distributed membership. In addition to these activities, the chapter conducted an oral history project, organized a doctoral forum and re-energized its communication channels using social media tools. Perhaps most notable, however, was the detailed action plan submitted with the chapter’s annual report for the ongoing strength and development of ASIS&T in Europe. In all things, this chapter has demonstrated extraordinary organization, commitment and spirit.

STUDENT CHAPTER-OF-THE-YEAR
The 2012 Student Chapter-of-the-Year Award goes to the San Jose State University (SJSU) Student Chapter, a group that started from scratch and achieved incredible results in less than a year. The Chapter is a virtual chapter connected to a fully online program at SJSU, yet it has excelled as an active and communicative chapter for its members offering a great variety of activities, all of which were well promoted. Among 14 online events in the past year are a Second Life Mixer and academic or professional experience sharing talks on YouTube. The Chapter utilizes many virtual communication tools and creative approaches, including email, web conferencing and social media, as part of its outreach and membership activities.

The SJSU Student Chapter is a most worthy recipient of the 2012 Student Chapter-of-the-Year Award.

Naresh Agarwal presents Student Chapter-of-the-Year honorsto Melissa Hunt-Glickman and her colleagues at San Jose State University.

SIG AWARDS
SIG-OF-THE-YEAR
The ASIS&T 2012 SIG-of-the-Year Award is presented jointly to SIG/Education for Information Science (SIG/ED) and SIG/Metrics (SIG/MET). SIG/ED is recognized for its excellence in organizational infrastructure and use of social media to facilitate planning and development; its outreach to its members through a re-designed website and new quarterly newsletter; outreach to the information science community through a successful series of webinars; for proposing
and hosting an online meeting of student chapter officers and advisers; and for instituting a new graduate student travel award. In addition to its many activities throughout the year SIG/ED was successful in having two panels and a workshop accepted for the 2012 ASIS&T Annual Meeting and has already conducted elections to select its leadership for 2012-2013.

SIG/MET is recognized for its transformation into an active and productive traditional SIG from a virtual SIG only two years ago. In the past year it has been successful in growing its membership, expanding its outreach through a wide variety of electronic and social media; offered a successful and well-attended webinar on information visualization from the perspective of researchers interested in incorporating visualizations into a research project within the fields of bibliometrics, scientometrics, informetrics and webometrics; was the a co-sponsor of Doctoral Forum 2012 “Quantitative Research in Information Science” held at the University of Wolverhampton, UK; held a successful student paper contest for original research, with the prize winners presenting at a workshop at the ASIS&T 2012 Annual Meeting; had two panels accepted for inclusion at the ASIS&T

2012 Annual Meeting; sponsored a panel at the iConference; and, in honor of the 75th anniversary of ASIS&T’s founding, produced a special section on metrics for the August/September 2012 issue of the Bulletin of the American Society for Information Science and Technology.

For these excellent reasons both SIG/ED and SIG/MET are recognized as ASIS&T SIGs-of-the-Year.

SIG Member-of-the-Year
Karen Miller of SIG/Education for Information Science (SIG/ED) is the worthy recipient of the 2012 SIG Member-of-the-Year Award. Karen joined ASIS&T and SIG/ED at the 2011 Annual Meeting and immediately assumed an active role. Her nomination letter states “She was instrumental in transforming SIG/ED into the vibrant, active organization it has become over the past year. This transformation simply would not have happened without Karen’s energy, dedication and hard work as the SIG’s program coordinator.” Karen exhibited leadership in developing a successful series of webinars for SIG/ED, including a virtual meeting for student chapter leaders and advisers. She was also instrumental in instituting the student travel award being offered by SIG/ED and in shepherding SIG/ED’s contributions to the Annual Meeting in Baltimore. Quoting again from the nomination letter, “Karen is a shining example of willingness to do things ‘for the good of the order’ rather than for personal credit.” And thus, we are pleased to honor Karen Miller as the 2012 ASIS&T SIG Member-of-the-Year.

SIG Publication-of-the-Year
The 2012 SIG Publication-of-the-Year Award is awarded jointly to SIG/Arts and Humanities (SIG/AH) and SIG/Visualization, Images and Sound (SIG/VIS) for their collaboration in co-editing the April/May 2012 special issue of the Bulletin of the American Society for Information Science and Technology. The issue, dedicated to current developments in the fields of digital humanities and information visualization, highlighted innovative areas of research and practice not previously covered in such breadth, and its availability was broadly tweeted and publicized. In addition to bringing research issues to the attention of the Bulletin readership, the publication also communicated the value of participating in SIG/AH and SIG/VIS and is an outstanding exemplar of how SIGs can collaborate to produce quality work that embraces multiple approaches.
Third ASIS&T Student Design Competition: The “Truthiness” Challenge
by Candy Schwartz

EDITOR’S SUMMARY
For the third year, students attending the ASIS&T Annual Meeting were invited to compete in a design challenge, this time focusing on “truthiness.” The task was to devise a user opinion site that would distinguish fake reviews from valid and trustworthy ones. Students settled into four teams, based partly on the similarity of their shoes, and chose topics for their sites. Over two days, grabbing time between conference sessions, the teams gathered to plot out aspects of their site including system architecture, input and output features and user interaction. Teams then described the hypothetical sites to a panel of four judges, who considered creativity, impact on the problem, feasibility, contribution to humanity and quality of the presentation. As members of the winning team of Pratt + S. Carolina + Mizzou, Matt Miller, Jeff Mixer, Ben Richardson, Dinara Saparova, Andy Steinitz and Yao Zhang will receive free registration for the 2013 ASIS&T Annual Meeting in Montreal.

KEYWORDS
web sites credibility
information architecture competition
sentiment analysis graduate students

Despite any number of difficulties imposed by the arrival of hurricane Sandy, the annual Student Design Competition (co-chaired by Stephanie Haas, Candy Schwartz and Katie Shilton) enjoyed its third successful year at the ASIS&T Annual Meeting in Baltimore.

At the opening session, held on Sunday evening, the design topic was introduced. It was characterized as the “Truthiness” challenge:

Assessing veracity and trustworthiness, whether of people, organizations or documents, are difficult challenges in technologically mediated settings. Fake online product reviews, book reviews, restaurant and vacation reviews, Twitter followers, etc., are a growing problem [1]. The gaming of reputation has consequences for a range of online interactions, including commerce, social networks, political discussion and debate, and crisis management. How do we separate the wheat from the chaff? Develop a preliminary design for a review site or crowd sourced information aggregator for the setting of your choice that makes trustworthiness and reputation primary design criteria.

The designs were slated for presentation to a distinguished panel of judges only two days later. Between Sunday and Tuesday students had to develop their ideas to solve the design challenge (considering system architecture, input/output and interaction) and prepare a presentation for the panel. Students were also strongly encouraged to participate in the rest of the conference and not spend all of their time working on the challenge.

The last step on Sunday night was to form groups. The rules require that no group contain more than two people from the same program. To get to know each other, students formed groups first by a numbered count-off and then by shoe similarity (which led to some amusement). The ice having been broken, they then formed final groups and started exchanging contact information and picking a team name. Following some late arrivals and early departures, four teams emerged: iTruth (Jase Alston, Sean Burns, April Earle and Hassan Zamir), Multiple Choice (Sara Chizari, Houda El Mimouni, Glen Farrelly, Christopher ...

Candy Schwartz is a professor in the School of Library and Information Science at Simmons College. She can be reached at candy.schwartz<at>simmons.edu.
Throughout the next two days, small clumps of competitors could be seen huddled in corners in hallways and bars, working on the challenge. On Tuesday morning they gathered together to present their design to the panel of judges: Nick Belkin, Rutgers; Pnina Fichman, Indiana; Ken Fleischmann, Texas; and Soo Young Rieh, Michigan. Teams were allowed seven minutes for their presentations and five minutes for questions from judges.

Points were allocated for creativity of design (30), impact on solving the problem (20), feasibility of solution (20), contribution to humanity (20) and quality of presentation, including answering judges’ questions (10). All the entries were creative and thought-provoking, and the winning spot was closely contested as judges scribbled and erased notes on their score sheets and asked tough questions. Finally a winner emerged: Pratt + S. Carolina + Mizzou. Each member of the team receives free registration for the 2013 ASIS&T Annual Meeting in Montreal. Having proven that nothing can stop the Student Design Competition, the organizers are already looking forward to the 2013 competition, and who knows what the challenge will be? Stay tuned!

The winning student team in the ASIS&T Student Design Competition at the ASIS&T Annual Meeting, Pratt + S. Carolina + Mizzou includes from left to right, Emma Zhang from the University of South Carolina; Dinara Sparaova, University of Missouri; Andy Steinitz, Pratt Institute; Ben Richardson, University of Missouri; and Matt Miller, Pratt Institute.
ASIS&T Online Education Initiatives: Driving the Future
by Diane M. Rasmussen and Linda C. Smith

At the ASIS&T 2012 Annual Meeting, SIG/Education for Information Science (SIG/ED) sponsored a panel session entitled “ASIS&T Online Education Initiatives: Driving the Future.” The panelists included Diane M. Rasmussen, Linda C. Smith, Jacob A. Ratliff and Julia Khanova. They updated panel attendees on the activities of the Webinar Task Force (2011) as well as the Online Education Task Force (2011-2012) and led discussion about the future of ASIS&T’s online education offerings. Unfortunately, Diane and Jacob could not attend the panel session due to hurricane Sandy, but Linda and Julia graciously presented on their behalf. This article presents a summary of the panel and related discussion.

Background and Context
One of Linda Smith’s goals during her term as ASIS&T president in 2010-2011 was to develop a program of online education offerings in order to further the roles of SIGs and chapters as well as to reach a broader scope of members. ASIS&T “encourages and supports personal and professional growth through opportunities for members to extend their knowledge and skills, develop and use professional networks, pursue career development goals and assume leadership roles in the Society and in the information community” (www.asis.org/about.html). Linda believed that webinars, defined as “live online educational presentations during which participating viewers can submit questions and comments,” (from web+seminar) (www.merriam-webster.com/dictionary/webinar), were one way to further develop this purpose of the Society.

Speakers present ASIS&T’s webinars using software called GoToWebinar. The Headquarters office has a contract with the vendor, Citrix Online, LLC, and the software is free for members’ use. Headquarters also supports the promotion, registration and technical aspects of the webinar program. Webinars are presented live, but archives of all past presentations are available for members to access anytime at www.asis.org/conferences/webinars.

Diane M. Rasmussen (formerly Neal) is an assistant professor at the University of Western Ontario and ASIS&T director-at-large. She can be reached at infogirl99<at>gmail.com or dneal2<at>uwo.ca.

Linda C. Smith is professor and associate dean at the University of Illinois at Urbana-Champaign and a past president of ASIS&T. She can be reached at lcsmith<at>illinois.edu.
Are Webinars a Good Idea?
In early 2011 Linda appointed Diane Rasmussen, then co-chair of the Information Science Education Committee, to serve as chair of the Webinar Task Force. Other task force members included Education Committee co-chair June Abbas, SIG representative Daniel Alemneh, Chapter Assembly deputy director Remlee Green and New Leaders Award winner Alex Garnett. Linda charged the group with exploring how to develop a beneficial webinar program that would raise ASIS&T’s profile.

The task force utilized a number of data sources, including web statistics, competitive intelligence scans and surveys distributed to ASIS&T members as well as to members of other organizations. The group found that webinars in their current form (short, one-time presentations) are a preferred format of online education, their main audience is practitioners and that the developing ASIS&T webinar program was generally well received. At the 2011 Annual Meeting the task force recommended to the Board of Directors that the webinar program continue to develop in current and additional directions. The Webinar Task Force’s final report can be viewed at www.asis.org/Conferences/webinars/TaskForceOnWebinars.pdf.

Since the Webinar Task Force determined that many SIG and chapter leaders were interested in presenting their own webinars but hesitated due to unfamiliarity with the organizing process and the technology, Diane presented a meta-webinar called “The ASIS&T Webinar on Webinars: How to Propose, Organize and Present a Webinar” in January 2012. It is available at www.asis.org/Conferences/webinars/2012/webinar-on-webinars.php.

Webinars Are a Good Idea, But What’s Next?
Also at the 2011 Annual Meeting, incoming president Diane Sonnenwald formed the Online Education Task Force. This task force was charged with making additional policy and implementation recommendations, as well as with exploring other potential modalities for presenting online education and membership networking offerings. Members included chair Diane Rasmussen, immediate past president Linda Smith, Education Committee co-chair Kathleen Burnett, New Leaders Award winner Jacob Ratliff, immediate past SIG/Cabinet director KT Vaughan and student member Ian Burke. Discussions explored how the future of ASIS&T’s online education program should unfold.

Ultimately, the group’s recommendations to the Board included that ASIS&T develop a unified online platform for all things ASIS&T: webinars and related discussions, Annual Meeting session topics, informal chat spaces for members, links to events and so on. The Online Education Task Force’s final report can be accessed at www.asis.org/Online_

Education_Task_Force_Report_final.pdf. The task force may have ended with more questions than answers; the most effective way to develop this needed platform is still under consideration, but the opportunities signal an optimistic future.

At the panel session, Julia Khanova reviewed current online education trends that provided ideas for potential directions. Trends include a constant change in technology tools, an emphasis on collaborative learning and knowledge creation and the development of learning communities. Most online education programs utilize learning management systems such as Blackboard and Sakai that tend to exist in a closed, static environment unless other elements are introduced in conjunction with them. These additional tools might include blogs, discussion boards, web conference tools such as GoToWebinar, videos created with screen capture tools such as Jing, social networks like Facebook or LinkedIn, presentation software such as Prezi and collaborative content creation tools like the office productivity software offered through Google Drive. Julia suggested that ASIS&T’s online learning could further engage members by including formal offerings such as webinars in conjunction with a new learning community that could utilize the above-mentioned tools together.

If Online Unification Is Next, How Can It Be Realized?
Suggestions from audience members at the panel session included the following:
Offer online education opportunities in collaboration with related organizations.

- Add text-based chat opportunities for Webinar attendees.
- Determine how to maintain the activity level of online spaces.
- Consider what tools ASIS&T members would prefer the most before they are developed.
- Further utilize post-webinar evaluation surveys. Perhaps ASIS&T could ask webinar attendees about their preferred tools for continued communication on the webinar topic.
- Determine the best platform option for ASIS&T’s needs through additional discussion. It is important to remain mindful that technologies evolve, and that online presences require resources to maintain them.
- Explore how to “repackage” the one-hour webinars might increase ASIS&T’s visibility, such as placing “microcontent” from them on YouTube or Vimeo. ASIS&T could consider whether to publish learning objects for information science.
- Continue to consider formats other than webinars to support professional development.

At the Board of Directors meeting that took place after the 2012 Annual Meeting, the Board discussed the Online Education Task Force’s recommendations. Given the discussion that ensued at the panel session as well as the points raised at the Society’s annual business meeting in Baltimore, incoming president Andrew Dillon suggested the need for another task force to explore ASIS&T’s web presence holistically and how it can present content, services and resources in a more centralized manner. Diane will again chair the task force, Linda will continue to serve as a member and other members will be recruited.

Your Thoughts Are Essential to This Project!

As of December 2012, ASIS&T had almost 40 successful and informative webinars archived on its website, but much more content can be offered. The efforts of the task forces discussed in this article as well as the conversations among the membership about the Society’s online future suggest that tremendous potential exists for the creation of a vibrant online community of information science practitioners, researchers, teachers and students. The vision for and realization of this unified presence has complete support from Headquarters and the leadership, but it cannot be accomplished without participation from current and future members. Please send your thoughts and questions on this initiative to Diane at infogirl99<at>gmail.com, and she will incorporate them into the planning of ASIS&T’s online future. The Board looks forward to your contributions.
A professor’s advice to “find your community” started Naresh Agarwal as a doctoral student on a path to discovering and connecting to others with similar interests and goals. After visiting other conferences, Agarwal felt welcome at ASIS&T’s Annual Meeting in 2008 and made the most of the connections he made. He got involved in several SIGs and with other roles and increased his level of participation over the years. His advice to new members includes continually expanding your circle of connections, finding ways to contribute, focusing on one thing at a time and even trying frugal strategies to attend ASIS&T events. Regular communications help reinforce contacts and are essential for SIG and chapter sharing and continuity. Communications and collaboration are key criteria for the SIG/Chapter-of-the-Year Award, which Agarwal helped SIG/ED to win in 2012. Agarwal hopes to see ASIS&T become more open, agile and responsive to members, supporting collaboration and interaction through social media on the association’s website.

**KEYWORDS**
information associations social networking communities meetings

**EDITOR’S SUMMARY**
 When I was pursuing my Ph.D. at the Department of Information Systems, School of Computing, National University of Singapore, my professor and mentor Dr. Pan Shan Ling told me, “You need to find your community.” When I inquired further, he explained that I needed to find a group of people across the world that is interested in and working on things that I’m interested in, a group that I could identify with. I, perhaps, didn’t fully understand him at the time; however, I went to a number of conferences and tried to mingle and fit in. Then, in 2008, I got to attend the ASIS&T Annual Meeting in Columbus, Ohio. Starting at the New Member and First Conference Brunch and continuing through all the sessions I attended and the meetings I had and noting the way I was made to feel welcome at every step, I instantly knew what Dr. Pan had meant about finding my community. ASIS&T was my community, and I knew it – the way I knew that this person was the one I was going to marry when I first met my wife years before. During that first meeting, I tried to soak in as much as possible about ASIS&T and its primary mission. I haven’t missed any meeting since then; that’s how I’ve come to know many of my favorite people who’ve been involved with ASIS&T for a long time. Like a bee attracted to flowers, I quickly got involved in a number of SIGs and in other roles within ASIS&T, such as being the Student Chapter Representative to the Chapter Assembly, leading to my current role as its Deputy Director. As chair of SIG/ED last year, my biggest sense of joy was to see it win SIG-of-the-Year (along with SIG/MET) in 2012, something that only became possible because I had such a great team. I see myself being involved in ASIS&T for a long time to come.

Naresh Agarwal, immediate past chair of ASIS&T SIG/ED and deputy director of Chapter Assembly, is the recipient of the 2012 James M. Cretsos Leadership Award. He is an assistant professor at the Graduate School of Library and Information Science at Simmons College, Boston. You can find out more about him at www.nareshagarwal.co.nr. He can be reached at agarwal<at>simmons.edu.
What I wish to share below is my advice for new members, some dos and don’ts, and my thoughts on some of the changes I would like to work toward and see implemented.

If you are a new member, the first thing you want to do is to try and attend the Annual Meeting. There are funding opportunities provided by different universities. Many SIGs (special interest groups) offer travel awards. You can also make use of online communities such as couchsurfing.org to find a local host in the city where the conference is being hosted. Other options include making use of the ASIS&T listservs to find people to share accommodations. The conference organizers could also help facilitate this undertaking – a need I’ve heard some students express.

Once you’re at the meeting, make sure you talk to people about your research and goals, about ASIS&T and about how you could get involved. Almost every person you talk to will be very helpful and will give you invaluable tips that will serve you for a long time to come. In addition to attending technical sessions and other open events, don’t miss the new members brunch, the leadership session and the secret students’ party (yes, there is one!). Say, “Hi” to many people but get to know three to five people well. In each subsequent conference, get to know a few more people, and soon you’ll feel yourself a part of the community.

The best way to feel at home is to find a way to contribute. Attend the planning meeting of one or more SIGs you’re interested in. I’ve also found it very helpful to attend the SIG Cabinet and Chapter Assembly meetings as well as the Annual Business Meeting. These meetings are very helpful in understanding the governance structure of ASIS&T. It is also helpful to get involved in the student chapter of your university and/or the regional chapter closest to you.

If you are a new officer in a SIG or chapter, it is easy to get lost. Since we are often busy with our studies, research or teaching, finding time to contribute requires discipline. One thing that I’ve learned through experience is it is best not to stretch ourselves too thin. It is best to get involved in one thing at a time. Each year, we can take on something else and gain experience over time.

Also, regular communication among team members is important. Often, a statement I’ve heard is that we come to the Annual Meetings and plan for the year, and then we come again the following year and plan. To avoid this syndrome, I’ve found it helpful to do two things right at the outset: 1) set up an email listserv such as Google Groups to easily email all officers (such sites also help archive all communication among officers for future committees); 2) set up monthly Skype calls to communicate among officers and to plan and carry out ongoing webinars and other activities through the year. Since most team members are dispersed geographically and often in different time zones, having avenues for synchronous communication, either through phone or Skype, is extremely important in helping establish a common context.

Each SIG and chapter should also think about issues of continuity and establish a mechanism whereby outgoing officers fill out a form with two columns to be passed on to new officers: 1) best practices (things that went well and that new officers would benefit from continuing) and 2) lessons learned (things that didn’t go well and that would benefit from change).

If a SIG or chapter aspires to win the SIG- or Chapter-of-the-Year award, it is helpful to go through the award criteria (available at the ASIS&T website) right before the first planning meeting and then plan your activities during the year accordingly. In order to enhance greater collaboration and knowledge sharing within and among chapters, SIGs and other bodies, the Chapter Assembly approved the following three changes at the 2012 Annual Meeting (something that officers of Student and Regional Chapters need to note):

1. Judging criteria for student and regional Chapter-of-the-Year awards will be modified to have 5 points allocated for collaboration with any SIG, chapter or a body within or outside ASIS&T. For the student chapter award, these points would be taken from the 40 points allocated for Chapter Activities.

2. We will create an opt-out (instead of opt-in) to the various lists for leaders. If you are a chapter leader,
you are automatically added to the key lists such as the list for all chapters and any other list.

3. From this point forward, all student and regional chapter annual reports will be made public (instead of them being viewed only by the jury), but only after the jury has decided on the award. A chapter submitting a report will have an opt-out option in the submission form if it doesn’t want the report to be made public.

In order to take on new challenges in an ever-changing world, I’d like to see ASIS&T become more agile and responsive to change, while retaining its core values. One area which I think requires urgent attention is the ASIS&T website. It needs to evolve from Website 1.0 to Website 2.0, making use of Web 2.0 functionalities such as Wikis, social networking, blogs, photos, videos and other collaborative features in the way it is envisioned, built and used. From a platform of information dissemination, it should evolve into a platform of information creation, contribution and shared participation. The various listservs are also largely used for occasional information dissemination by SIG and chapter officers. The members are often not aware of their potential for use for questions such as those related to their research, research methodologies or career advice. Logging on to the ASIS&T website (behind the walls of which lie many of the benefits of membership, including access to the archives of past webinars) requires remembering one’s membership ID, which may be hard for many members to recall easily. Members often don’t fully realize the benefits they gain by joining a SIG related to their research area or they don’t know the breadth of such benefits. By calling for and facilitating increased collaboration and participation, we’ll find ways to provide members with their money’s worth in being a part of ASIS&T, as well as specific SIGs and chapters. I wish to contribute to this process of change and would like to invite all members to participate actively in taking ASIS&T to even greater heights.

I would like to thank all my letter writers and all those from within and outside ASIS&T who’ve inspired me. Thank you for accepting me as a part of this wonderful community and being a part of mine. As I try to pass on some of the kindness that I’ve received, I’d implore new members to do the same. If I can be helpful in any way to you or I can do anything to make your life any easier than it is, I’d be glad to help. Last, but not the least, remember to be happy always.
Special Interest Group/International Information Issues (SIG/III) announces its 13th international paper competition for authors who are citizens and residents of developing countries. Winning papers are submitted for the 2013 Annual Meeting, which will take place in Montreal, Quebec, Canada, November 1-6, 2013.

Building on the Annual Meeting theme, this year’s paper contest is looking for papers addressing Beyond the Cloud: Rethinking Information Boundaries. Papers may discuss issues, policies and case studies on specific aspects of the theme from a global and/or international perspective. Topics include, but are not limited to, the following core areas:

- **Human Information Interaction**: information retrieval; information behavior; human computer interaction; usability; e-science and distributed collaboration; virtual organizations; user modeling; mobile technologies
- **Information Organization and Representation**: metadata; taxonomies; information visualization; information architecture; digital libraries; indexing and abstracting; classification; social tagging; semantic web and ontology; social media
- **Information Use & Analysis**: information seeking and user studies; strategic, security and competitive intelligence; information and knowledge management; comparative analysis of information practices; information metrics (bibliometrics/informatics/webometrics)
- **Information Preservation & Access**: digital curation; big data; e-book; information quality; copyright, intellectual properties and related issues; information literacy
- **Information Environments & Socio-Cultural Aspects**: organizational and contextual issues; security & privacy; economics of information; social informatics; information policy; foundation of information science; digital humanities; Web 3.0 and related technologies; cloud computing

**Selection Criteria**
Up to three winners who will be selected by a panel of judges that includes Maqsood Shaheen, IRC, U.S. Embassy, Islamabad; Alma Rivera, Universidad Iberoamericana Ciudad de México; and Fatih Oguz, University of North Carolina at Greensboro.

The judging criteria will be based on the following elements:
- Originality of paper in the developing world and global information ecosystem (originality of the project described, etc.)
- Relevance to the paper contest theme
- Quality of argument, presentation and organization

**Eligibility & Information for authors**
Only papers by a principal author who is a citizen of and resides in a developing country are eligible. Winners in the 2009-2012 contests are not eligible. The papers should be original, unpublished and submitted in English.

**Award**
The award for each winner is a two-year individual membership in ASIS&T. In the case of multiple authors, the principal author will be awarded the ASIS&T membership. In addition, depending on SIG III/fundraising for this competition, the first place winner will be rewarded a minimum of $1,000 toward travel, conference registration and accommodations while attending the ASIS&T Annual Conference in Montreal, Quebec, Canada, November 1-6, 2013.

**Deadline**
Authors are invited to submit manuscripts, not to exceed 5,000 words, by May 31, 2013, to Maqsood Shaheen at ShaheenMA<at>gmail.com, preferably as Microsoft Word or PDF attachments.

**News about ASIS&T Members**
Chirag Shah, assistant professor in the Department of Library and Information Science at the Rutgers University School of Communication & Information, received a $273,000 grant from the IMLS Laura Bush 21st Century Librarian Early Careers program. His project, CIS3: Collaborative Information-Seeking Support and Services in Libraries, employs a user-focused approach to investigate information seekers’ behaviors while working collaboratively.
**News about ASIS&T Members, cont.**

**Tomas Lipinski**, most recently executive associate dean and professor at Indiana University-Purdue University, is the new director of the School of Library and Information Science at Kent State University. Lipinski holds a Ph.D. from the Graduate School of Library and Information Science, University of Illinois, Urbana-Champaign; master’s degree in library and information science from the University of Wisconsin-Milwaukee; master of laws degree from The John Marshall Law School in Chicago; and a J.D. from Marquette University Law School. Issues related to copyright, information law and intellectual property are the focus of his ongoing research.

---

**In Memoriam**

**Don R. Swanson**

Don R. Swanson, three-time dean at the University of Chicago Graduate Library School (GLS) and professor emeritus in the humanities division, died in November of 2012 at the age of 88. Don won the ASIS&T Award of Merit in 2000 for his trailblazing work in the relationship between natural and computer language and his belief that electronic databases held the keys to medical knowledge.

Among many groundbreaking discoveries, Don used his theory of undiscovered public knowledge to identify key relationships between dietary fish oil and Raynaud’s disease and between magnesium deficiency and common migraine headaches. With these findings inspiring his effort, Don and Neil Smallheiser developed Arrowsmith, software that assists in identifying connections between two sets of clinical research; this model has been adapted to study the correlations of genes with diseases and find possible new uses for medications.

Swanson began his career in physics with degrees from California Institute of Technology, Rice University and the University of California at Berkeley. After working for a while as a computer systems analyst and research scientist, Swanson joined the University of Chicago faculty as dean of the now-closed Graduate Library School. His background as a physical scientist led his GLS focus on computer-aided information retrieval which was a new area of study at the time.

Swanson is survived by his wife Patricia, son Richard and daughter Judith. Another son, Douglas, predeceased him.
The continuing development of computing and mobile technology and the ongoing evolution of the web environment provide new ways for accessing, acquiring, retrieving and storing information which constantly defy traditional boundaries. With the growth of digital content, information objects are blurred, and they challenge information organization. As more people interact and exchange knowledge and information on the web and in the cloud, information environments are transformed and human interactions with information are shifting. As information use increases and becomes more complex, the need for meaningful integration and analysis is growing.

The ASIS&T Annual Meeting is the main venue for disseminating research on advances in information science, information technology and related topics. The theme of the 2013 gathering offers an opportunity to reflect on all the changes that impact on human information interaction and their implications for information science and technology. Submissions are solicited for, but not limited to, the five tracks below.

**Tracks**

**TRACK 1: Human Information Interaction** – information retrieval; information behavior; human computer interaction; usability; e-science and distributed collaboration; virtual organizations; user modeling; mobile technologies

**TRACK 2: Information Organization and Representation** – metadata; taxonomies; information visualization; information architecture; digital libraries; indexing and abstracting; classification; social tagging; semantic web and ontology; social media

**TRACK 3: Information Use & Analysis** – information seeking and user studies; strategic, security and competitive intelligence; information and knowledge management; comparative analysis of information practices; information metrics (bibliometrics/informetrics/webometrics)

**TRACK 4: Information Preservation & Access** – digital curation; big data; e-book; information quality; copyright, intellectual properties and related issues; information literacy

**TRACK 5: Information Environments & Socio-Cultural Aspects** – organizational and contextual issues; security and privacy; economics of information; social informatics; information policy; foundation of information science; digital humanities; web 3.0 and related technologies; cloud computing

**Types of Submissions**

As always, Annual Meeting organizers are soliciting contributions of the following types: original papers with unpublished research results; panels on topics either research- or practice-oriented; face-to-face presentations – i.e., posters presenting late-breaking results or work in progress; demonstrations of novel technology; videos presenting research or demonstrating technology – related to the tracks and that lend themselves to interactive discussion and feedback in an evening session; and workshops and tutorials to be offered after the Annual Meeting technical sessions conclude.

For full information on topics and submission process, please visit the ASIS&T website at www.asis.org.

**Conference Chairs**

Chairs of the 2013 ASIS&T Annual Meeting are France Bouthillier, McGill University, who can be reached at france.bouthillier<at>mcgill.ca; and Boryung Ju, Louisiana State University, bju1<at>lsu.edu.
The 8th Annual SIG/Social Informatics (SIG/SI) Research Symposium, held on October 27, 2012, at the 75th Anniversary Annual Meeting of the American Society for Information Science and Technology in Baltimore, was a great success. The theme of the symposium was the past, present and future of social informatics. Eleven thought-provoking presentations addressed this theme; several posters and two best-paper awards were also included. The symposium, organized by the authors of this report, was co-sponsored by the Rob Kling Center for Social Informatics. Many of the papers presented at the symposium will be published in a volume entitled Social Informatics: Past, Present and Future, edited by the organizers.

Two of the 11 papers describe the history of social informatics. Howard Rosenbaum began with a historical overview of social informatics, tracing its roots to Scandinavia in the early 1980s. Lori Hoeffner led off the second paper session with a domain analysis using bibliometric techniques to argue that over the last decade social informatics has evolved into a coherent albeit loosely affiliated domain.

Five papers describe current research in social informatics. Sean Goggin presented a case study, co-authored with Christopher Mascaro, of a rural IT firm that illustrates fundamental social informatics insight about the importance of context, arguing that its workers’ uses of information and communications technologies (ICTs) shape their experiences of distance as physical, informational and cultural, which, in turn, influence collaborations with urban customers. Kristin Eschenfelder’s paper, written with Andrew Johnson, describes the emerging patterns of controlled data-sharing in web-based repositories, illustrating the complex interplay between organizational policies and practices and the technological infrastructure of knowledge commons. Noriko Hara, writing with Pnina Fichman, argues that social

KEYWORDS
social informatics, collaboration
social networking, information dissemination
social web, information use
socioeconomic aspects
informatics researchers should attend to technologically mediated phenomena taking place outside of organizational boundaries. They propose a typology of boundary types as a sociotechnical framework to study knowledge sharing across boundaries by members of open online communities. Beth St. Jean presented a paper written with Katie Shilton and Brian Butler that describes an analysis of self-tracking or the recording, manipulation and sharing of data about one’s own bodies and activities, casting it as a new sociotechnical practice and form of information behavior mediated by ubiquitous and interactive mobile technologies. Bringing social informatics to scholarly communication, Ying Sun and Joseph Meloche describe the use of Q methodology to empirically determine the factors that support research collaborations in Web 2.0 environments.

Four of the papers propose future directions for social informatics research. J.P. Allen speculates on the significance of social informatics for mounting a critique of conventional utopian thinking about the role of information and communication technologies in the economic order. Andrew Cox followed with an analysis of the practice approach, focusing on several of its main concepts including materiality, embodiment, process, identity construction and emergence to argue that social informatics can be strengthened by attending to these neglected elements of the contexts of information activity. Grant Leyton Simpson explores the theoretical intersection between textual studies and social informatics by focusing on the sociotechnical investigation of technological objects seen as both cultural artifacts and the products of research. Lysanne Lessard proposes the integration of critical realism into social informatics, arguing that it would allow a reframing of the core sociotechnical problem motivating the discipline and point to a way forward for social informatics research.

During a break following the first paper session, the 30 or so participants viewed four posters provided by Razep Echeng Egbe, Emad Khazraee, Ophelia Morey and Hua Wang, and Miriam Sweeney.

During the last session in the symposium, the 2011 Social Informatics Best Paper Award was given to Kristin Eschenfelder, University of Wisconsin at Madison, and her coauthors Anuj Desai and Greg Downey for their paper “The Pre-Internet Downloading Controversy: The Evolution of Use Rights for Digital Intellectual and Cultural Works,” published in The Information Society. The 2011 Social Informatics Best Student Paper Award was given to Jessica Lingel for her paper “Information Tactics of Immigrants in Urban Environments,” published in Information Research. Full citations are provided below.

The purpose of this annual research symposium is to disseminate and discuss current research and research in progress that investigates the social aspects of ICTs across all areas of ASIS&T. Building on the success of past years, the symposium includes members of many SIGs and defines social broadly to include critical and historical approaches as well as contemporary social analysis. It also defines technology broadly to include traditional technologies (that is, paper), state-of-the-art computer systems and mobile and pervasive devices. In light of the theme for the anniversary Annual Meeting – Information, Interaction, Innovation: Celebrating the Past, Constructing the Present and Creating the Future – the 8th Annual Social Informatics Research Symposium solicited work focusing on the past, present and future contributions and challenges in social informatics – using the rear view mirror to navigate the present and guide us into the future. We asked: What can we learn from the history of social informatics? What are the forces currently shaping the field? In what theoretical and empirical directions is social informatics moving? We were particularly interested in work that assumes a critical stance towards the interplay between people’s uses of information and ICT in society and in the workplace. Critical analyses are useful because they question our established assumptions about information and ICTs and their role in society and the workplace.

The symposium was a success with high quality papers, lively discussion and an international audience; the papers and posters were presented by authors from Europe, Canada and the United States. We are pleased to report that the state of research and theorizing in social informatics is healthy and exciting. SIG/SI is already planning the symposium for the 2013 ASIS&T Annual Meeting, and we expect to have another stimulating event.
### Full Conference Schedule, Paper Titles and Co-Authors

- **Introduction:** Howard Rosenbaum – *Comments on the history of social informatics*
- J. P. Allen, University of San Francisco – *A business reform agenda for social informatics*
- Andrew Cox, University of Sheffield – *Turning to practice in social informatics*
- Kristin Eschenfelder, University of Wisconsin-Madison, and Andrew Johnson, University of Colorado at Boulder – *Governing the data commons: Controlled sharing of scholarly data*
- Sean Goggins and Christopher Mascaro, Drexel University – *Context matters: The experience of ICTs, physical, informational and cultural distance in a rural IT firm*
- Grant Leyton Simpson, Indiana University – *Projects and Objects: Points of contact between textual studies and sociotechnical investigations*
- Lori Hoeffner, Adelphi University – *The current state of social informatics: A domain analytic perspective*
- Noriko Hara and Pnina Fichman, Indiana University – *Frameworks for understanding knowledge sharing in open online communities: Boundaries and boundary crossing*
- Beth St. Jean, Katie Shilton and Brian Butler, University of Maryland, College Park – *Self-tracking is social: Toward a model of the technologically mediated information behavior of self-trackers*
- Ying Sun, University at Buffalo, the State University of New York, and Joseph A. Meloche, North Carolina Central University – *A Q methodological study on what is important to support collaboration in Web 2.0*
- Lysanne Lessard, University of Toronto – *Reframing the sociotechnical problem: A way forward for social informatics*

### Posters

- Razep Echeng Egbe, University of the West of Scotland – *Learners can sustain cognition with the use of social networking tools: Examining user acceptance and critical challenges in the use of Web 2.0 tools and applications for learning in HE*
- Emad Khazraee, Drexel University – *Information recording in archaeological practice: A sociotechnical perspective*
- Ophelia Morey and Hua Wang, State University of New York at Buffalo – *Mapping the social informatics web for women at high risk of poor pregnancy in Buffalo*
- Miriam Sweeney, University of Illinois at Urbana-Champaign – *A familiar face: Critical analysis of Microsoft’s “Ms. Dewey”*

### 2011 Social Informatics Best Paper Award


### 2011 Social Informatics Best Student Paper Award


### Full Symposium Schedule

www.asist.org/asist2012/SIG_SI_Workshop.html

SIG/SI (Facebook)

www.facebook.com/groups/134354579994052/?fref=ts

Rob Kling Center for Social Informatics

http://rkcsi.indiana.edu
EDITOR’S SUMMARY
The 23rd SIG/CR workshop on classification research featured papers, lightning talks, brief presentations of doctoral projects and two keynote talks, all exploring what's new in the field. Under the theme of new approaches with a historical focus, presenters explored novel theories, models and applications, approaches to building classificatory structures, methods and criteria for evaluation and much more. Classification theory, concepts and terminology were considered from a historical perspective, and new theories and changes in conceptualization and classification structures were raised. Modern perspectives on classification include folksonomies, personal classification practices, power structures captured through classification and the limitations of standardization. Researchers discussed cognitive processes involved in classifying, the evolution of concepts associated with terms and sources for new terms in a domain. Through the variety of presentations, it was clear that classification encompasses a broad array of topics, ultimately serving information retrieval and access.

KEYWORDS
classification categories
classification theory mental processes
classification schemes information science history

Jonathan Furner is an associate professor in the Department of Information Studies, which is part of the Graduate School of Education and Information Studies at the University of California, Los Angeles. He can be reached at Jonathan Furner furner<at>gseis.ucla.edu.

large and appreciative audience gathered in Baltimore, Maryland, on Friday, October 23, 2012, for the 23rd Annual SIG/CR Classification Research Workshop. The day’s program had been coordinated by the workshop co-chairs, Kathryn La Barre, University of Illinois at Urbana-Champaign, and Joseph Tennis, University of Washington. Ten full papers were accepted for presentation, with 15 minutes allocated to each, along with nine “lightning talks” of seven minutes each and a doctoral mini-symposium in which five Ph.D. students introduced their research projects. Fran Miksa, University of Texas at Austin, and Shawne Miksa, University of North Texas, collaborated on a keynote panel, and Marjorie Hlava, Access Innovations, Inc., provided a second keynote presentation.

If I had to pick the one big theme of the day – and this choice should not be surprising given the thrust of the original call for papers – it would be the utility of new approaches with a historical focus. It is very appropriate in the year of ASIS&T’s 75th anniversary that we should consider it important to remember and learn the many lessons taught by the past. Simply to lump all the historically oriented approaches in a single category, however, would serve only to hide the variation in the kinds of histories that are being constructed and in the innovations being made among them.

Keynote Address
In his keynote address, Observations on Historical Aspects of Classification
Theory, for instance, Fran Miksa’s emphasis was on the history of ideas about classification, whereas both David Dubin, University of Illinois at Urbana-Champaign, and Kathryn La Barre focused on different aspects of the history of the field of classification research. Presentations by Melissa Adler, University of Wisconsin–Madison, and K. R. Roberto, University of Illinois at Urbana-Champaign, were concerned with the histories of the concepts and terms that are the elements of classification schemes and crucially with the primary role played in shaping those histories by the decisions and actions of particular individuals. Grant Campbell, University of Western Ontario, talked about changes in classificatory structures over time, while Tennis’s interest was in the history of conceptualizations and definitions of classification. All these speakers prioritized the temporal, but in rather different ways.

More generally, I think we are continuing to see growth in the use of humanistic approaches (all imported from other disciplines, of course, but I’m not sure it could be any other way). When there is talk at the SIG/CR workshop of “the classificationist’s gaze,” you know things are going rather well in that direction. In this context the paper by Daniel Martínez-Ávila, Universidad Carlos III de Madrid, and Richard Smiraglia, University of Wisconsin-Milwaukee, on the integration of a phenomenological approach with discourse-analytic methods describes a very interesting development, and it was a disappointment that neither speaker could attend on the day.

New Theories and Understandings

Many new theories and understandings, or relatively recently developed ones, were introduced in the papers accepted for the workshop: theories of the ways in which power structures are unavoidably reflected in classification structures (Patrick Keilty, University of Toronto; Melodie Fox, University of Wisconsin-Milwaukee); of how folksonomies have emancipatory potential (Keilty); and of the cultural, social and historical specificity of definitions of classification (Tennis), of classification schemes (lots of people) and of classification practices (Eva Hourihan Jansen, University of Toronto). We learned that standardization is not always beneficial, since its effects include undesirable decontextualization (Jansen); that personal classificatory practice is heavily influenced by social factors (Kyong Eun Oh, Rutgers University); that user-generated folksonomies are more similar to top-down schemes than previously thought (Andrea Scharnhorst, Royal Netherlands Academy of Arts and Sciences, and Richard Smiraglia); that classification (and thus information retrieval) based on analysis of the probability – or likeliness – with which a searcher will judge two objects to be related at any given moment is effective (Charles van den Heuvel, Royal Netherlands Academy of Arts and Sciences, and Richard Smiraglia); and that in any given domain many different classification structures are possible, and many of those are potentially equally useful in different ways – in other words, there is no single correct classification, even in science (Rebecca Green, OCLC Online Computer Library Center, Inc., and Giles Martin, independent consultant).

New Models and Methods

Similarly, we were treated to presentations of several new models: of the cognitive processes involved in classifying – in lumping and splitting (Oh), for example – and in learning how to classify (Shawne Miksa); of the relationship between classifying, as the act of assigning labels to classes, and other cognitive activities such as counting and writing (Tennis); of knowledge organization systems as artificial languages rather than as hierarchical trees (Scharnhorst and Smiraglia); of classes as situated in rhetorical space (Fox); and of the relationship between bibliographic/docum entary classification and the scientific classification of naturally occurring phenomena (to which both Dubin and Green & Martin alluded).

Hlava reminds us how the explanatory role of theory is significant not only for the design of new kinds of classificatory structures, but also for new kinds of uses of those structures – new applications of theory to practice, in other words – in systems designed for the improvement of search, retrieval and related tasks. Meanwhile, Nicholas Weber and Andrea Thomer, both University of Illinois, Urbana-Champaign, and Gary Strand, National Center for Atmospheric Research, demonstrate the use of what Birger Hjørland calls pragmatic classification – in which classes are identified on the basis of usage – for identifying the elements in a metadata schema for
climatology; while Jansen reviews the use of the concept of “boundary object” to understand classification practices. Such work may be characterized as the application of otherwise well-understood methods in new domains.

Did we hear about any new methods of building classificatory structures and knowledge organization schemes? Methods that prioritize the needs of specific groups (for example, Martínez-Ávila and Smiraglia) and that involve crowdsourcing (for example, Jane Greenberg, Angela Murillo, both University of North Carolina at Chapel Hill, and John Kunze, California Digital Library) were discussed, and part of Adler’s contribution was her account of the history of methods of dealing with new topics and subjects. But the methods discussed probably should not be counted as innovations.

It is similarly difficult to identify, among the contributions to the workshop, any new principles for the construction of classification schemes. Smiraglia’s domain analysis (not presented) shows that we’re comfortable with a plurality of methods and approaches, and what is more, comfortable with the extent to which those approaches are compatible if not complementary. We may well still seek principled answers to questions like the following: Should classification schemes be theory-driven or based on empirical observation? Should classification researchers in the information sciences (broadly defined) be concerned with classification of natural kinds or just of artifactual kinds? Whatever new principles are proposed, which of them (if any) reach the status of ethical principles? The possibilities might include principles that emphasize flexibility and pluralism (Campbell); that recognize that classification practices should be participatory and classification schemes, thus, user-centered (Adler); and that such approaches require that all voices should be heard in the construction of classification schemes (Fox, Roberto). These latter proposals essentially would be a re-affirmation of the principle of user warrant – to wit, the terms and structures that are used by the members of groups who share a social identity are the ones that should be included in classification schemes (Roberto). Greenberg, Murillo and Kunze further suggest that there should be full participation in the evaluation of candidate terms/concepts for inclusion in classification schemes, thereby giving participants a sense of ownership.

In alignment with the already-noted emphasis on the temporal and historical, the new method of analysis of the moment seems to be ontogenesis. This method derives from Tennis’s suggestion that we can and should explore “the life of the subject over time” – an empirical method that enables better understanding of the factors that influence the course of a classification scheme’s development (for example, Fox; Scharnhorst and Smiraglia). Campbell wants to combine ontogenetic analysis with principles of flexibility and pluralism, partly in order to predict future changes in classification schemes. Martínez-Ávila and Smiraglia talk about new extensions of discourse analysis as methods of ontogenetic analysis that “[reveal] knowledge as artificially constructed by social factors.” Workshop participants were also introduced to methods of analyzing the discourse of domains to identify terms for inclusion in specialized vocabularies (Christine Marchese, Nassau Community College, and Richard Smiraglia), and the use of diaries and interviews rather than direct observation as a way of collecting data about personal classificatory practices (Oh).

New empirical data that were reported in workshop papers include Smiraglia’s data (not presented) on citedness, rates of self-citation and disciplinary association of classification researchers; Elizabeth Milonas’s (Long Island University) data that will inform the designers of the faceted search features of web search engines; Oh’s data on the ways in which people organize personal files, which leads her to propose a new model of such practice as a five-stage process, which is intended to be useful for designers of new tools and interfaces supporting such practice; the results of Scharnhorst and Smiraglia’s ontogenetic analysis, showing the gradual evolution of intension over time; and Fran Miksa’s findings from his investigations of ancient, medieval and Islamic classifications. New methods of presenting data included Scharnhorst and Smiraglia’s visualizations of classifications over time, and Lori Ann Rung Hoefner, Adelphi University, and Smiraglia’s visualizations of the results of domain analyses.

Workshop participants heard much about new methods of evaluation. With respect to methods of evaluating the field of classification research, Dubin points to the ever-increasing specialization of scholarly communities and asks: Is that a sign of success or an indication that we’re missing the
opportunities for progress that come with interdisciplinarity? Jansen discusses critical-analytic methods of evaluating the theoretical frameworks that underlie classification research; Hoeffner and Smiraglia’s method of evaluating domains uses coherence as a criterion; Green and Martin demonstrate the need for effective methods of evaluating and choosing among different scientific classification structures; and Milonas’s study of the relationship between expert inspection and users’ perceptions of usability could even be considered as a contribution to the literature on the evaluation of methods of evaluation! Several of these methods apply new criteria for evaluating classification schemes (and other products of classification theory and research) and/or classificatory practices. From Habermas (via Martínez-Ávila & Smiraglia), we’re reminded that theory is used to predict, to explain or understand, to emancipate and to deconstruct. I think we’re clearly seeing a shift towards the latter half of this list in our prioritization of criteria for evaluating the products of classification research. Greenberg, Murillo and Kunze additionally propose the use of sustainability as a criterion for evaluating classification schemes.

The potential for new definitions of the nature of classification, of classification theory and of classification history was mentioned by both Fran and Shawne Miksa. Dubin considers the relationship between aboutness and topicality and asks: Is a topic a thing, or a concept? Possibly new methods of creating definitions include domain analysis and bibliometrics (Smiraglia), and methods based on the kind of phenomenon being classified (Tennis). Echoing the parallels drawn by Fran Miksa between the history of writing and the history of classification, Tennis asks: Are counting and writing themselves kinds of classification? Fran Miksa reminds us that people became interested in the classification of the elements of knowledge (that is, subjects) only relatively recently, and that the classification of both physical objects and informational entities has a longer history. Steven MacCall’s (University of Alabama) model of the relationships among works, texts and artifacts (rather than the more familiar combination of works, expressions, manifestations and items) could be viewed as a specification of new kinds of objects to be classified; Lei Zhang and Hur-Li Lee, University of Wisconsin-Milwaukee, advocate for genre as a new dimension or facet by which objects are to be classified.

Accompanying new principles and practices are new problems to address. These challenges include not only the problems that are due to “life happening” and to the fact that the information explosion has only just begun (Hlava), but also those that emerge as unintended consequences of the application of innovative methods. The crowdsourcing of tags for use as class labels, for instance, may lead to undesirable results such as a “tyranny of the majority” or a “Matthew effect” in which less-popular classes are less likely than more-popular ones to grow in popularity in the future. Questions about the extent to which such methods are “fair” or “just” may be conceived as having an ethical dimension. I’m not sure that the ethical ramifications of the decisions made by classification-scheme designers (as distinct from those made by classifiers) were adequately covered at this particular workshop.

**New Goals and Paradigms**

Did workshop participants characterize classification research as having any new goals? Fran Miksa proposes a framework for understanding how the goals of designers of classification schemes have changed over time, distinguishing among the pragmatic, scientific and aesthetic functions of such schemes that have been prioritized in different ways in different periods and cultures. Shawne Miksa provides a list of questions that serves well as a comprehensive statement of the various goals of classification research – one stand-out being the goal of creating “living” classification schemes. Tennis’s emphasis on the temporal reminds us of the importance of the goal of understanding the dynamic intensions and extensions of concepts, and Hoeffner and Smiraglia demonstrate the value of classificatory practices in defining the boundaries of a domain or discipline. Otherwise, the assumptions that appear to underpin much of the work presented were that classification is a means to the end of resource discovery, and thus the appropriate goal of classification research is to contribute to improvements in the design of retrieval and access systems.

Neither was it clear that any radically new paradigms or theoretical frameworks were identified on the day. Certainly, several speakers made
reference to a (seemingly ongoing) battle between positivists and constructivists, and this tension was explored in different ways in different papers (for example, by Jansen, and by Martínez-Ávila and Smiraglia). The closest we came to something that amounts to a whole new way of thinking about classification research, I think, was Campbell’s suggestion that classification schemes should be understood as living, breathing organisms that change rhythmically over time. To my mind, however, the most valuable innovation of the day was Fran Miksa’s conception of the history of classification theory. He distinguishes among three historical periods – we might call them the periods of unificationism, specialism and pluralism, although Miksa doesn’t use these labels himself – in a framework that provides an illuminating backdrop to the current turn in classification studies towards the generation of theories, principles and methods that emphasize both the cultural and historical specificity of classification practices and their emancipatory function.

Rebecca Green and Giles Martin explained, “A rosid is a rosid is a rosid,” and in doing so received special commendation in the 1st Annual SIG/CR Award for Best Workshop Paper Title. But the winner of this prestigious new award was K. R. Roberto, for his paper, “Description Is a Drag, and Vice Versa.” Kathryn La Barre drew praise for her reference to Mr. MITS (the “Man In The Street”), as did Jane Greenberg for her analogy between toothbrushes and metadata standards (we all think they’re great, but ideally we’d like one of our own), and Andrea Thomer for her realization that hours in climate centers are like cigarettes in prison. (At least, I think that’s what Andrea said …)

Since we heard about so many different aspects of classification research during the workshop, we might have been forgiven at the end for reeling and asking afresh: What is classification research? or What should it be? or even What can it be? My personal response is that there is little need for concern. Classification research is “all of the above” and more. So long as it stays that way, the field is in excellent shape. On behalf of all the participants, I’d like to extend many thanks to the presenters and to the organizers, Kathryn and Joe, for making our 23rd workshop an exceptionally productive one.

A workshop schedule, including all presentation titles, is available at http://mail.asis.org/pipermail/sigcr-l/2012-October/000898.html, and full papers are set to appear in SIG/CR’s annual publication, Advances in Classification Research Online, at http://journals.lib.washington.edu/index.php/acro/index.■
The History of ASIS&T and Information Science and Technology
by Karen Miller

EDITOR’S SUMMARY
A highlight of the 2012 ASIS&T Annual Meeting, the pre-conference session on the History of ASIS&T and Information Science and Technology Worldwide drew presenters and attendees from around the globe. The day featured papers on four historical themes, starting with the institutional roots of ASIS&T and recognizing decades of research presented in the Annual Review of Information Science and Technology. The evolution of the field was apparent through a review of information revolutions prompted by the printing press, the post-World War II information crisis and the Internet, as well as through presentations on digital curation, ongoing work on relevance, sense-making theory and developments from Croatia to France. Discussion of the historical contexts of technology innovations and impacts considered photographic documentary techniques, binary computing and networking standards. The development of foundational ideas was explored through presentations on pioneering document indexing methods, the semantic challenge of term-oriented retrieval, early European perceptions of classification systems and the French view of communication and information science. Efforts to deepen the historical understanding of information science and technology will continue through oral history interviews, funded research and awards for outstanding papers.

KEYWORDS
information science history innovation classification
information science information retrieval international aspects
information technology

Karen Miller is a second-year doctoral student at the School of Library & Information Science at the University of South Carolina. She presented the paper, How Binary Became Ubiquitous, at the special 75th Anniversary pre-conference on the history of our Society and the field of information science. She is also the recipient of the 2012 ASIS&T SIG Member-of-the-Year Award. She can be reached at millerkaren<at>mindspring.com.

The 2012 ASIS&T Annual Meeting pre-conference celebrating the international history of ASIS&T and information science and technology was one of the many projects undertaken by the ASIS&T 75th Anniversary Task Force co-chaired by Toni Carbo and Robert V. Williams. History of ASIS&T, Information Science and Technology Worldwide drew contributors and attendees from several continents. The event also attracted non-ASIS&T members from within and outside the field of information science and technology. Overall, attendance exceeded Toni Carbo’s expectations, who had “hoped that we would attract 60–65 participants.” “I was absolutely delighted when more than 90 people attended the pre-conference,” said Carbo. The diversity of seasoned scholars, new historians, professionals and students attending the event indicates that the “historical turn,” as Rayward names it [1, p. 5], has a dynamic future.

Of the 27 abstracts received in response to the international call for papers, the comprehensive peer-review process led to the selection of 18 papers from authors in at least 10 countries. The papers reflect the four major historical themes used to organize the conference presentations and publication sections:
1. Development of ASIS&T
2. Evolution of the field of information science and technology
3. Historical contexts of technology innovations and impacts
4. Development of foundational ideas and theories in information science

Development of ASIS&T
After brief welcoming remarks from co-chairs Carbo and Williams, Kathryn La Barre introduced and moderated the presentations for the Development of ASIS&T theme. Trudi Bellardo Hahn, Drexel University, and Diane L. Barlow, University of Maryland at College Park, explored the
confluence between the National Science Foundation’s Office of Scientific Information (later, Office of Science Information Service) and the American Documentation Institute (ADI) in the 1950s and 1960s. That confluence, largely influenced by Helen Brownson, produced robust information research, the birth of the Annual Review of Information Science and Technology and the emergence of ADI as the American Society for Information Science (ASIS). Linda C. Smith from the University of Illinois at Urbana-Champaign paid tribute to the three editors of the 45 volumes of the Annual Review of Information Science and Technology, placing their work in historical context and defining their legacy as an archive of information science and technology research. Betsy Van der Veer Martens and June Abbas, both from the University of Oklahoma, portrayed the light-hearted side of ASIS&T in their fictional re-mix of ADI/ASIS&T conferences designed by time-traveling members of the Special Interest Group/Digital Libraries (SIG/DL), formed in 2001.

**Evolution of the Field of Information Science and Technology**

The presentations in the second theme, **Evolution of the Field of Information Science and Technology**, were moderated by Diane L. Barlow. Richard J. Cox of the University of Pittsburgh applied an archival science perspective to the future of information science and technology historical research in digital archives, suggesting that the digital curation field of study promotes historical research and provides a collaborative venue for librarians, archivists, technologists and information scientists. Tefko Saracevic, Rutgers University, convinced the audience that “no matter what, relevance is here to stay” through a fascinating, often amusing, historical review of relevance studies. Naresh Kumar Agarwal of Simmons College traced the development of Brenda Dervin’s Sense-Making methodology by illuminating the theories and philosophies that influenced Dervin and highlighting the “faulty assumptions” of information system stereotypes that she overcame during the development process. The historical origins and development of academic and research fields in Croatian information sciences were revealed by Franjo Pehar and Tatjana Aparac-Jelušić from the University of Zadar. The final presenter in this group, Fidelia Ibekwe-SanJuan from Jean Moulin University in Lyon, presented information science developments in France since World War II, describing the dwindling information science community within the broader information-communication sciences field and pondering whether there can be a more robust future for information science in France.

A highlight of the day was the keynote speech delivered by W. Boyd Rayward, professor emeritus in the Graduate School of Library and Information Science at the University of Illinois. Rayward took the audience through an historical review of three information orders or revolutions: the 500-year print revolution begun with Gutenberg’s press, the information crisis occurring after World War II and the information revolution launched by the Internet. Throughout, Rayward demonstrated the interconnectedness of each information order, stressing that each order built “on what went before” by reconfiguring “underlying . . . functions, systems and structures” [2, Slide 4]. Rayward’s message for future information science and technology historians is to explore interconnectedness, whether through broader historical analysis of information and society, inclusive applications of inter-disciplinary methodologies or collaboration with other historical disciplines. Led by the “convergence of diverse historical approaches to understanding how societies are constituted, sustained, reproduced and changed in part by information and the infrastructures that emerge to manage information access and use” [2, Slide 3], future information science and technology historians will reformulate old questions, ask new ones and help us better understand our present while pondering our future.

With Boyd Rayward’s demonstration of the interconnectedness of the historical information orders still in mind, it is impossible to miss the connection of the 2012 history pre-conference to past history conferences. Indeed, the significance of this most recent exploration of our history is best understood in its connection to the 1998 and 2002 history conferences. The connection is explained by Robert Williams, who considers the 2012 event the third in a series of history conferences on the history of information science and technology. The first was in 1998 [and] the second in 2002. All three conferences were held in connection with ASIS&T meetings, were well attended and produced excellent papers. Cumulatively, these conferences have produced the largest body of refereed literature on the history of
informationscience and technology and, simultaneously, involved the largest number of people with an interest in the history of the field.

Building on and grounded in the two prior conferences [3] [4], the 2012 event contributed to the expanding body of historical information science and technology literature. The event brought together experienced historians and new scholars and should generate new interest in the history of our field among the next generation of researchers. Williams’ challenge for the future is that “this is not the last of these kinds of conferences and that the young people presenting and attending them will take up and greatly expand the efforts we began 15 years ago.”

**Historical Contexts of Technology Innovations and Impacts**

Following a luncheon and the keynote speech, the presentations continued with the third conference theme, *Historical Contexts of Technology Innovations and Impacts*, moderated by Marcia Bates. As expected, Michael Buckland’s history of the photographic documentary techniques developed during the first half of the 20th century, with a focus on the work of Lodewyk Bendikson, both informed and captivated the audience. Buckland’s examples of the development of document forensics using varying light filters and wavelengths were particularly interesting and there was amusing mention of Bendikson’s eccentric experiment with an intoxicated bookworm. Unfortunately, Donald Hillman of Lehigh University was unable to present in person, but his account of the rise and fall of the Center for the Information Sciences at Lehigh University between 1962 and 1973 is available in the published proceedings. Karen Miller of the University of South Carolina led the audience through the emergence of the binary innovation from early electro-mechanical relays to the ubiquitous ones and zeroes that invisibly surround us. Andrew L. Russell of the Stevens Institute of Technology, whose research was funded in part by the ASIS&T History Fund, introduced us to Bancroft Gherardi of the Bell System, whose focus on the development of standards from 1920 to 1938 influenced the growth of information network systems within and outside AT&T into the 21st century. Finally, Xiaohua Zhu of the University of Tennessee related her case study of the evolution of digital legal information within one of the industry leaders, Lexis-Nexis.

**Development of Foundational Ideas and Theories in Information Science**

The presentations related to the fourth conference theme, *Development of Foundational Ideas and Theories in Information Science*, were moderated by Jennifer W. Arnš. Katharina Hauk and Wolfgang G. Stock of Heinrich-Heine-University in Düsseldorf, Germany, presented the pioneering work of Norbert Henrichs between the 1960s and 1990s to develop the text-word method of document indexing and his role as a leader in the German movement to develop specialized information centers for the delivery of scientific and technical literature. Colin Burke’s presentation, “The ‘Term’ in the Classifier’s Garden Or Dog, Man, Bites and Dollars,” uniquely disclosed the conflict between classifiers and proponents of term-oriented retrieval as electronic retrieval flourished, leaving the audience with the irony that the search for automated semantic meaning is really the need to return to “once condemned hierarchies and categories.” Charles van den Heuvel of the Royal Netherlands Academy of Arts and Sciences employed newly discovered archival material at the International Federation for Information and Documentation to explore European perceptions of the Universal Decimal Classification (UDC) and Dewey Decimal Classification Systems during the first-half of the 20th century through the work of Donker Duyvis, who became the secretary of the International Institute of Bibliography and one of the UDC revisers. Katherine W. McCain from Drexel University explored the influence of Derek De Solla Price’s 1965 “Networks of Scientific Papers” article in Science using citation-in-context analysis, concluding that citation growth over the last decade acknowledges Price as one of the first authors to describe social network power laws. The final paper of the 2012 history pre-conference was presented by Caroline Courbieres from the Université de Toulouse in France. Providing an understanding of “information as a signifying entity that is part of a situated process of communication,” Courbieres’ semiological approach to French documentation theory helps explain the linkage of French information science to communication science highlighted earlier by Ibekwe-SanJuan.

The 2012 pre-conference on the history of ASIS&T and the field was capped by a reception. Despite hurricane Sandy’s threatening turn towards
the northeast, the reception provided a relaxed venue for the dynamic exchange of ideas, comments and praise for the presenters. Toni Carbo notes, “The presentations exceeded even my high expectations, and the participants’ responses were extremely positive.”

The 18 peer-reviewed papers are compiled in a single volume beautifully edited by Toni Carbo and Trudi Bellardo Hahn. *International Perspectives on the History of Information Science and Technology: Proceedings of the ASIS&T 2012 Pre-Conference on the History of ASIS&T and Information Science and Technology* is available in print or e-book form from Information Today at [http://books.infotoday.com/asist/International-Perspectives.shtml](http://books.infotoday.com/asist/International-Perspectives.shtml). According to Carbo, “the publisher of the *Proceedings*, Information Today, went far beyond the usual effort and was a true partner with us on making the *Proceedings* available in print for the pre-conference and online soon after.” Asked about the publication, Carbo remarked, “We at ASIS&T have a valuable resource highlighting some of the top leaders and major developments of our field.”

The success of the 2012 pre-conference was due to the hard work and dedication of many individuals and organizations. Special recognition is due to the ASIS&T 75th Anniversary Task Force members: Toni Carbo (co-chair), Robert Williams (co-chair), Marcia Bates, Sarah Buchanan, Eugene Garfield, Trudi Bellardo Hahn, Kathryn La Barre, Michel Menou, Julian Warner and Dick Hill (ex-officio). Recognition is also due to the nine tireless reviewers of the abstracts, initial submissions and completed papers: Diane Barlow, Sarah Buchanan, Toni Carbo, Trudi Bellardo Hahn, Kathryn La Barre, Sameer Patil, Julian Warner, Robert Williams and Iris Xie.

ASIS&T SIG/International Information Issues (SIG/III) provided funds from the Elsevier Foundation to sponsor the keynote speech. The ASIS&T History Fund and the School of Library & Information Science at the University of South Carolina generously funded student registrations. The ASIS&T Board of Directors, Dick Hill and the ASIS&T staff provided valuable assistance and support. Toni Carbo noted that “the pre-conference took an enormous amount of work by many people, and I think I can speak for the entire task force and participants in saying that it was definitely well worth all of the effort.”

The *History of ASIS&T: Information Science and Technology Worldwide* pre-conference was the capstone event organized by the ASIS&T 75th Anniversary Task Force, but the hard-working members continue to be involved in a number of other projects. The task force is continuing for at least another year to work on conducting oral history interviews of pioneering leaders in the field. For more details on this project, including the ways you can help it succeed, access the *Doing Oral History Interviews* webinar by Kathryn La Barre and Robert Williams in the ASIS&T webinar archives. Trudi Bellardo Hahn is undertaking a project to digitize photographs from the ASIS&T archives with the assistance of students in the information management program at the University of Maryland, their instructor Katy Lawley and Kathryn La Barre. With the help of Sarah Buchanan, the task force oversaw special events in North American chapters and SIGs. The European Chapter (with special recognition due to Michel Menou, Diane Sonnenwald, Jonathan Levitt and Mike Thelwell, among others) added to oral interviews, conducted a conference workshop and organized a Doctoral Forum.

The history website was updated by Mark Needleman and Jan Hatzakos.

The ASIS&T History Fund was created several years ago to encourage research and publication in the history of information science and technology. The fund sponsors an annual small grant program for projects exploring the history of the field and an annual Best History Paper award. Demonstrating the fund’s success in meeting its goals, the historical research conducted by one of the young scholars who presented at the 2012 history pre-conference was sponsored by the fund. The fund also sponsored student registrations for the pre-conference, encouraging the professional development of the next generation of information science and technology historians. To make a tax-deductible contribution to the fund, send a check payable to ASIS&T designated for the ASIS&T History Fund directly to Dick Hill at ASIS&T. A future history conference may feature a researcher sponsored by your donation!

This author extends thanks to everyone involved in the success of the 2012 history pre-conference and looks forward to the next one. The author is grateful to Toni Carbo, Robert V. Williams and Trudi Bellardo Hahn for their comments (liberally quoted) and suggestions for this article.
Resources Mentioned in the Article


Evolving and Emerging Research Methods: 2012 ASIS&T SIG/USE Symposium

by Lorri Mon and Jeanine Williamson

EDITOR’S SUMMARY

SIG/USE celebrated members’ work and achievements in research methods at the 2012 ASIS&T Annual Meeting through a keynote speech, brief talks and awards. In her opening talk, professor Lisa Given challenged attendees to expand research methods to engage participants more fully, include qualitative findings and explore information behavior in nontraditional media. The topics of two-minute lightning talks ranged from research techniques for exploring young people’s information behavior to imaging brain activity related to relevance decisions. Others addressed incorporating mobile technologies in research, collaborative search, direct interaction with participants in contrast with background server log checks and working with data collections from social Q&A sites. Following the talks, small group discussions further explored topics such as cognitive approaches, content analysis and text analytics and usability. The symposium wound to a close with the 2011 Elfrieda A. Chatman Research Award presentation on information strategies of the homeless and a preview of the 2012 proposed study on refugees’ information seeking. Additional awards were presented for best paper and poster to support travel and further presentations. Pertti Vakkari was recognized for outstanding contributions to information behavior research and was inducted into the SIG/USE Academy of Fellows.

KEYWORDS

research methods information use cognitive models
user behavior user models honors

Lorri Mon is an associate professor in the College of Communication & Information, Florida State University and 2011-2012 chair of ASIS&T SIG/USE. She can be reached at lmon<at>fsu.edu.

Jeanine Williamson is an associate professor in the University of Tennessee Libraries. She can be reached at jwilliamson<at>utk.edu.

Lisa Given on New Research Methods

With more than 60 researchers in attendance, Dr. Lisa Given of Charles Sturt University, Australia, delivered a keynote presentation on new research methods incorporating photography, participant-driven methods and arts-based approaches. Given called for researchers to integrate methods that capture participants’ experiences in situ – holistic and multisensory approaches engaging participants directly and actively in the research through techniques such as autoethnography, participatory mapping and photovoice, which uses snapshots taken by research subjects as a visual record of information-related activities.

Given identified two major challenges confronting researchers in information behavior, seeking and use: first, how we see the scope and boundaries of information behavior, such as in considering the boundary areas of retrieval in relationship to information behavior research, and second, how information behavior can be represented in context.

Arguing that “our writing tends to be reductionist, functional, traditional and text heavy” or primarily text focused, Given challenged authors and journal editorial board members to push back for inclusion of qualitative
findings sections and for exploration of non-traditional representations in research such as poetry, dramatic scripts and imagery. Given also encouraged researchers to “push the writing envelope” by writing in other disciplines, and she argued for the need to produce more methodology papers.

**Lightning Talks**

With the challenge set by Given, SIG/USE Symposium participants responded by delivering two-minute lightning talks on new and emerging research methods (for lightning talk abstracts and photos from the symposium, see [http://siguse.wordpress.com/2012/10/11/sig-use-12th-annual-research-symposium/](http://siguse.wordpress.com/2012/10/11/sig-use-12th-annual-research-symposium/)). These brief presentations sought to push the boundaries of research in information behavior, seeking and use. Chirag Shah, assistant professor at Rutgers University, moderated two rounds of lightning talks, equipped with a digital klaxon to keep everyone in line, on time and on track. Topics for the lightning talks ranged across a wide spectrum of research approaches, from Foucauldian discourse analysis of rules, norms and power relations to magnetic resonance imaging for revealing neural processes in information seeking and evaluation.

Several researchers discussed new methods of working with youth. Eric Meyers, assistant professor at University of British Columbia, captured video of young people at play in virtual worlds using machinima for analysis of verbal and non-verbal information interactions (*Using Machinima to Study Information Exchange in Children’s Virtual Worlds*). Philip Fawcett of Microsoft Research worked with professor Karen Fisher of University of Washington (*Teen Design Days: Lightning and Enlightening*) to explore young people’s information behaviors as creators, remixers and intermediaries for both information and technologies via social network mapping tools and techniques such as storytelling, images, dramatic play, smartphones and other technology tools. Kyungwon Koh, assistant professor at Oklahoma State University, adapted Dervin’s Sense-Making to group interviewing in studying young people and their experiences and perceptions of information activities (*Exploratory Application of Dervin’s Sense-Making Methodology to Group Interviewing With Teenagers*).

Researchers traversed the boundary areas of search, retrieval and relevance mentioned in Given’s keynote speech. Jacek Gwizdka of Rutgers University discussed neuro-information science in seeking to determine whether there are fundamental neural processes associated with relevance decisions by using techniques such as electroencephalography (EEG) and functional magnetic resonance imaging (fMRI) (*Peeking Inside a Searcher’s Brain: Prospects for Neuro-Information Science*). Xiaojun (Jenny) Yuan, assistant professor at University at Albany, SUNY, explored the possibility of retrieval systems accepting input from speech and gestures via a “wizard of Oz” research method with a hidden observer person interpreting and typing information into an interface (*Wizard of Oz Techniques*).

Chirag Shah extended the exploration of information search and retrieval into collaborative searching and seeking, discussing research in information seeking within both search engines and question-answering online communities (*Distributed Searching, United Searchers: Investigating Social and Collaborative Aspects of Information Seeking*). Rong Tang of Simmons College examined another aspect of collaboration activity, engagement and problem-solving in the shared use of a Microsoft Surface Table at the Harvard University Library (*Towards a Multi-Phased and Multi-Methods Usability Assessment of Microsoft Surface Table (SUR40) in Libraries*).

University of North Texas professor Linda Schamber brought mobile technologies and social media into the mix, with considerations of how these new technologies impact information evaluation behaviors and perceptions of credibility (*User Information Evaluation Behavior*). Lorri Mon, associate professor at Florida State University, discussed research into social media with doctoral student Jisue Lee on the Military Suicide Research Consortium (http://msrc.fsu.edu) with exploration of influence, reach, content, sentiment and self-presentation in information revealed and concealed, suggesting as well that “rulebreaking” in social media highlights areas where information sharing needs are not being met (*Information Behavior and Information Seeking Research in New Virtual Environments*).

Assistant professor Sanghee Oh of Florida State University described challenges of extracting knowledge from a large-scale data collection through content analysis and text mining in the online social question-and-answer community site of Yahoo! Answers (*Understanding Health*).
Information Behaviors in Social Q&A: Using the Research Methods of Content Analysis and Text Mining.

Presenters discussed a variety of methods for actively engaging participants in the research. Soo Young Rieh, associate professor at the University of Michigan, used Mihaly Csikszentmihalyi’s Experience Sampling Method [3] in prompting users to answer questions about their information behaviors and online activities at random points throughout the day, which could integrate online and mobile technologies into the prompting and reporting process (Using the Experience Sampling Method (ESM) in Human Information Behavior Research). Ji Yeon Yang, a doctoral student at the University of Michigan, described using the experience sampling and event sampling with a web-based diary survey method in workplace research tracking advice-receiving and advice-providing (Diary Method: Data Collection and Analysis Strategies). Beth St. Jean, assistant professor at the University of Maryland, integrated card sorting into research on diabetes-related information seeking for people with type-2 diabetes (Developing a Card-Sorting Technique for Use in Information Behavior Research). Shelagh Genuis, postdoctoral research fellow at University of Alberta (Capacity Building through Photovoice), and Rachel Magee, a Drexel University doctoral student (Expressive Methods), spoke about methods such as photovoice, in which the research participants take pictures in a visual record of events and other active approaches to engaging participants in visual record-keeping such as expressive artwork.

Researchers also described more unobtrusive research methods for examining the artifacts of user-generated data in written works, online comments and digital server logs. Sean Goggins, assistant professor at Drexel University, spoke about research with Christopher Mascaro using electronic trace data such as server logs as part of studying information behavior in technologically-mediated online groups and comparing online groups with each other and with face-to-face groups (Group Informatics). Jen Pecoskie, assistant professor of Wayne State University, described research by Nadine Desrochers, Diane Rasmussen Neal and Caroline Whippey on text and subtext in user comments and tags in YouTube, Blogger, Flickr and Twitter. (why am I crying?!:’)<3). Pecoskie also presented on her research with Nadine Desrochers (Reading the Writing on the Wall, Page, Book, Site: Using Paratext to Study Writers and Readers’ Informational Habits), discussing paratext (textual and visual cues), peritext (illustrations and prefaces) and epitext (related material such as metadata, author interviews and reviews of a work).

Several researchers presented on methods involving language in content or discourse analysis. Barbara Wildemuth of the University of North Carolina at Chapel Hill re-coded a dataset using gerunds in initial coding to reveal activities and processes involved in what people do (Initial Coding using Gerunds: Keeping the Focus on Processes). Leanne Bowler, assistant professor at the University of Pittsburgh, used visual metaphors to reveal metacognition around information behavior in the knowledge and beliefs of participants about their own memories, also referred to as “metamemory” (Using Visual Metaphors to Reveal Metacognition in the Context of Information-Seeking). Michael Olsson of the University of Technology in Sydney, Australia examined power, rules and norms expressed in language (Foucault Power/Knowledge and Critical Discourse Analysis).

Due to hurricane Sandy, which was bearing down on the Eastern seaboard at the time of the ASIS&T SIG/USE Symposium and hit the area the following day, some of the researchers whose lightning talks had been accepted were unable to travel and speak at the session. The additional accepted talks had included a variety of approaches in exploring information behavior and information seeking. From Emporia State University, Ann L. O’Neill, Sarah W. Sutton, doctoral student Samia Azzouz and masters student Sara de Caro had planned to discuss online research in a social networking site (Use of a Social Networking Site for Health Information about Fibromyalgia). Sanda Erdelez of the University of Missouri had planned to discuss an instrument developed to measure tendencies to engage in opportunistic information encountering, with activities such as noticing, stopping, examining, capturing and returning to the original search task (Development of a Scale to Measure Individual Differences in Opportunistic Discovery of Information). Kendra Albright of the University of South Carolina would have described her work with psychodynamic theory and projective tests in revealing underlying thoughts and inner feelings relevant
to information behavior (Investigating the Role of Unconscious Influences in Information Behavior Using Projective Techniques). A cancelled talk by Tiffany Veinot of University of Michigan would have focused on a “whole family methodology” of family group interviews and home tours in exploring family group networks and information activities (Making the ‘Meso’ Visible: Methods for Investigating Information Behavior in Families and Communities).

**Breakout Sessions: Small Group Discussions**

Following the lightning talk rounds, SIG/USE Symposium participants joined small groups to engage in discussions on research methods such as cognitive approaches, social approaches, content analysis and textual analytics, interviewing, diaries, critical approaches, usability and human/computer interaction (HCI), grounded theory approaches and online/virtual research techniques. Members from each group reported out after the discussions on notable issues and challenges that had emerged around the research methods in the small groups. For example, Microsoft researcher Phil Fawcett discussed the diary group’s challenge to interpret visual as well as textual data and to deal with stories, music, video, drawings and SMS text messages. Sanghee Oh, assistant professor at Florida State University, noted that the textual analytics group identified a need “not just to stick with the text but to expand the scope to other objects created by users.”

Rong Tang of Simmons College reported from the cognitive approaches group on issues of mental models and both group and individual cognition in the investigation of information processing in the mind. Shuyuan Ho, assistant professor at Florida State University, shared two key observations from the usability and HCI discussion group: 1) paired users might be preferable to a solitary individual in implementing think-aloud techniques, since this gives the research participant a more natural sense of talking to another person and 2) eye tracking can be deceptive in that looking at something is not necessarily equivalent to thinking about it.

From the critical approaches group, Maria Souden, postdoctoral research fellow at University College Dublin, spoke of the need to be more critical about our discipline, our assumptions as researchers and our own content analysis group noting the need for careful definitions, as there can be slippage from intention in the encoding of language within documents and texts.

Lynn Westbrook of University of Texas at Austin of the online and virtual methods group noted the issue in research approaches of respect for the authenticity of online worlds. After being challenged to sum up the online and virtual methods group’s discussion in just one sentence, Westbrook replied with a haiku:

shadow truth cuts hearts
shoving in old methods
re-create our space.

Westbrook recited a limerick to complete her summary:

We step into giant’s land
where truth is really just sand
getting online hugs
and working out bugs
holding a virtual hand

**2012 SIG/USE Travel and Research Awards**

At the conclusion of the SIG/USE Symposium, awards chair Gary Burnett presented the results of the 2012 ASIS&T SIG/USE awards for travel and research (for more information, see [http://siguse.wordpress.com/awards/](http://siguse.wordpress.com/awards/)). The 2012 SIG/USE Student Travel Award of $500 to help support student travel to the ASIS&T Annual Meeting went to Laura Christopherson, doctoral student at the University of North Carolina at Chapel Hill, whose research is in the area of social media and games. Roberto González-Ibáñez, doctoral student at Rutgers University, received $200 for the 2012 Interdisciplinary Travel Award to support travel to alternative conference venues for presenting research. González-Ibáñez studies collaborative searching and computer-mediated communication.

The 2012 SIG/USE Best Behavior Conference Paper of $200 was given to University of Maryland researchers June Ahn, Mega Subramaniam, Kenneth R. Fleischmann, Amanda Waugh, Greg Walsh and Allison Druin, who studied youth as online storyteller and information creators in “Youth Identities as Remixer..."
Strategies, and Values” [4]. The paper examined the remix as an emerging information practice among youth. This award honors the best paper presented on information behavior at the ASIS&T Annual Meeting.

University of Michigan researchers Ji Yeon Yang and Soo Young Rieh received the 2012 SIG/USE Best Conference Poster Award of $200 for their research using diaries and interviews to examine information seeking and advice provision in the workplace (Dual Roles in Information Mediation at Work: Analysis of Advice-Receiving and Advice-Providing Diary Surveys). The award honors the best poster presented at the ASIS&T Annual Meeting for the area of information behavior, broadly defined as focusing on how people construct, need, seek, manage, give and use information in different contexts.

The 2012 ASIS&T SIG/USE Elfreda A. Chatman Research Award of $1,000 went to Jong Hwa “Joy” Koo, Yong Wan Cho and Melissa Gross of Florida State University to support their research on information seeking practices of North Korean refugees (Is Ignorance Really Bliss? Understanding the Role of Information-Seeking in Coping with Severe Traumatic Stress Among Refugees). The award supports and provides funding for proposed research in information behavior, and the winning researchers return to the ASIS&T SIG/USE Symposium the following year to give a presentation on the results of their research.

Pertti Vakkari of the University of Tampere in Finland was named the 2012 ASIS&T SIG/USE Award Winner for Outstanding Contributions to Information Behavior Research, receiving a $500 award and induction into the ASIS&T SIG/USE Academy of Fellows. This award honors scholars who have, over a period of time, contributed in an outstanding way to the development of the information behavior research field. Vakkari’s research on task-based information searching and information-seeking strategies has made significant contributions to the field of information behavior research, bridging the interactive information retrieval and information behavior fields, and in recent research he has explored the impact of technology use in public libraries in Europe. Vakkari’s international impact on the field of information behavior, seeking and use is also seen in his efforts toward launching and supporting two important conferences in the field, CoLIS and ISIC: Information Behavior in Context.

SIG/USE Elfreda A. Chatman Research Award Presentations

The SIG/USE Symposium concluded with two research presentations delivered by the 2011 and 2012 Elfreda A. Chatman Research Award winners. This year’s winner Jong Hwa “Joy” Koo delivered a five-minute presentation on her proposed research, followed by 2011 Chatman Award winner Julie Hersberger with a 20-minute presentation on research completed over the past year.

Joy Koo, a doctoral student at Florida State University, spoke first about her proposed research with Yong Wan Cho and Melissa Gross (Is Ignorance Really Bliss? Understanding the Role of Information-Seeking in Coping with Severe Traumatic Stress Among Refugees). In the tradition of Elfreda Chatman’s work on the information worlds of underrepresented groups, the proposed research follows the information seeking practices of North Korean refugees living in South Korea. The work will focus on the relationship between symptoms of post-traumatic stress disorder (PTSD) and the refugees’ information needs and seeking behaviors.

Julie Hersberger, associate professor of University of North Carolina at Greensboro, the 2011 SIG/USE Elfreda A. Chatman Research Award winner, closed the symposium with a presentation of her award-winning research on information needs and information-seeking strategies of the homeless (A Resilience and Information Behavior Model: Understanding Information Roles and Use Outcomes in Homeless Populations). Hersberger found that catalysts for the need to be resilient could include disasters as well as life events such as illness or job loss. Those among the homeless that she described as functioning with high affect and low cognition tended to demonstrate denial, a low sense of self-efficacy and an “external locus of control” in perceiving themselves as not in control of their own destiny [5]. Among the homeless that Hersberger spoke with, she observed that “nobody thought that they were not resilient,” and those who were chronically homeless believed themselves to be “resilient because they were not dead.” Hersberger also commented on an observed phenomenon of “resilience by proxy” in which homeless individuals felt that they needed to be resilient for someone else. Hersberger’s work may lead to ways for performing assessments that may be useful in tailoring information services to individual needs.
The 2012 SIG/USE Symposium in Baltimore was the culmination of the efforts of symposium organizer Jeanine Williamson, University of Tennessee, along with planning committee members Karen Fisher, University of Washington; Lisa Given, Charles Sturt University, Australia; Lorri Mon, Florida State University; Soo Young Rieh, University of Michigan; Chirag Shah, Rutgers University; Maria Souden, University College Dublin, Ireland; Rong Tang, Simmons College; Barbara Wildemuth, University of North Carolina at Chapel Hill; Bo Xie, University of Texas; and Guo Zhang, Indiana University. We look forward to the 2013 ASIS&T SIG/USE Symposium in Montreal, Canada.

Resources Mentioned in the Article


What will it mean to be an information professional in coming decades? How can we shape the public perception of our slice of the economy? How will job opportunities change? These are some of the questions that a panel at the 2012 ASIS&T Annual Meeting in Baltimore aimed to answer. This session was organized by the Information Professionals Task Force and moderated by the task force’s chair, Sandra Hirsh, professor and director at San Jose State University. Hirsh introduced the session by discussing the charge to the Information Professionals Task Force by ASIS&T president Diane Sonnenwald to tackle advocacy for information professionals (www.asis.org/Bulletin/Jun12/JunJul12_PresidentsPage.html).

The Information Professionals Task Force approached this challenge in several ways – by creating an advocacy plan, by creating sessions like this one to talk about advocacy (including Hirsh’s keynote at the Library 2.012 conference: "How to be a Catalyst for Change: Redefining the Library 2.0 Information Professional" – http://slisweb.sjsu.edu/about-slis/news/detail/sjsu-slis-director-delivers-opening-keynote-library-2012-worldwide-virtual) and by creating a new website prototype that, when more fully developed, can broaden awareness about information professionals. All of this work was done in close collaboration with Prudence Dalrymple, research and teaching professor, Drexel, and Marcia J. Bates, professor emerita, University of California, Los Angeles, over the past year. Our goal with the panel session “From Vision to Reality” is to further understand and advocate for the role of the information professional.

The session started with insights gathered from two symposia held in 2012 about the future of information professionals. Gary Marchionini, dean and Cary C. Boshamer Professor at University of North Carolina, Chapel Hill, shared key takeaways from the Information Professionals 2050 (IP2050)
Symposium and Conference (http://sils.unc.edu/news/2012/ip2050-symposium-conference). IP2050, which drew together more than a dozen thought leaders, identified several themes of importance to future information professionals. The first theme Marchionini discussed was the common values that hold our information profession together: universal access to knowledge, organization of information, collaboration, intellectual freedom and diversity of thought, self-directed learning, creation, and curation and preservation of knowledge responsiveness to user needs. Other themes include the emergence of new economic models across many types of information organizations, the importance of the social mission of the profession and the need to address sustainability challenges and the focus on problem-based rather than discipline-based education. He spoke optimistically about the future for information professionals. According to Marchionini, “There is no better time to work in libraries and the information field.”

Michele Cloonan, dean and professor at Simmons College, shared insights from a blue-ribbon futures panel that brought together 17 faculty and professionals representing libraries, archives, museums, the corporate world and other fields to explore changes that will likely impact the environment in which future library and information science graduates will find themselves. She discussed key observations from this blue-ribbon futures panel, which included the importance of looking for synergies among library and information science, the publishing industry, museum studies and other information-related professions; creating wider global consortia of programs and networks; infusing leadership into library and information science education and focusing on data curation (including the planning and management of data libraries). Additionally, she discussed how library and information science programs should engage more effectively and pro-actively with the research community by identifying their needs and expectations, understanding current and changing research interests and developing and maintaining relationships with them. She wrapped up by talking about the journey that our information profession is currently on with a quote by Bob Proctor: “It doesn’t matter where you are, you are nowhere compared to where you can go.”

We invited three panelists who are on the front lines of recruitment and who hire information professionals in different environments – biomedical (Allen Tien, MDLogix), industry (Nathan Andrews, Deloitte) and government (Helen C. Keil-Losch, board of governors of the Federal Reserve Board) – to share their perspectives about information professionals. Specifically, they were asked to address these questions:

- What is the nature of the work that information professionals do in your workplace environment?
- What can information professionals do to better represent their knowledge and skills to others?
- What are the expected needs for information professionals in your sector?
- What is missing from information professional skill sets/knowledge base?
- What aspects of information professionals do you most value?

However, due to the disruption caused by hurricane Sandy, only one of our panelists, Allen Tien of Medical Decision Logic, Inc. (MDLogix), was able to speak at the session. After giving some background about his company, including the work that it does, he addressed the questions above. When hiring, he feels that it is important for information professionals to represent their ability to listen and understand clients, demonstrate their problem-solving abilities and showcase their ability to develop more knowledge and skills. He emphasized the importance of some of the soft skills of being a good employee such as being reliable, responsible and a quick learner. He believes that some of the things that are currently missing from information professional skill sets/knowledge base included experience and understanding (he gave the example of how some don’t have a clear understanding of what data means), technical knowledge and code maintainability. He says that the aspects of information professionals he most values are their accurate communication about what will happen (in terms of how to solve problems, estimating how long projects will take, anticipating consequences), their productivity throughout a project (such as through team participation) and continuous improvement of code quality.

After the speakers finished, there was an interactive discussion. Some of the questions centered around the challenges the recent graduates from library and information science programs have experienced in finding employment. Panelists acknowledged these challenges, but pointed out the evolving set of opportunities that are available to people with library and information science degrees in other information environments.
Many innovations are on the way for users of portable devices, especially smartphones. Edward Chang, vice president for research at hTC Corporation, outlined some of the frontiers of research in a plenary session at the 75th Anniversary ASIS&T Annual Meeting in Baltimore.

Chang, who used to direct research for Google in China, began with an overview of the past few years. Web 1.0 appeared 15 years ago, he said. Google developed page ranking. Then Web 2.0 arrived. In addition to document content, it involved people with the web, permitting them to develop their own content and enhancing connections between people. New search engines, still under development, can do people searching.

Providers want to sense the user, to make the smartphones smarter. They want to change the information model from pulling to pushing, matching the users to things that are relevant to him or her.

New developments include human-computer interaction improvements as well as many more sensors on cellphones, sensors that report on users and their environments and enable providers such as Google to do context-centered computation. For example, on a mobile device, input methods such as voice or touch are preferred to keystrokes. And because there are output space limitations, a terse summary using natural language is preferred to a list of results.

Chang’s team built Confucius, a Google Q&A system, to provide high quality, timely answers. They showcased it at the International Conference on Very Large Data Bases in 2010. When it came to market, it faced six...
competitors already. With future enhancements to Confucius, your smartphone receives a spoken query and delivers an answer using a voice interface. Then the software provides labels for the query semi-automatically. It generates answers on search results using natural language processing (NLP) techniques. Depending on the question asked, it can parse the web pages to zero in on your information request. A simple ranking can provide you with top-ranked answers. And if that can’t be done, you can resort to users on the Internet. But there, you need to evaluate user credentials and route questions to experts. Once the question has been answered, the phone can speak the answers back.

Current research topics include things like speech recognition. Questions can be answered using a model-based or a data-driven approach. Certain questions are about opinions. As Chang spoke, hurricane Sandy was approaching Baltimore; he noted that persons asking about the storm could be frustrated because the information they wanted was not yet available.

The reason that voice recognition works better than it used to, Chang said, is because the model-based approach is giving way to a data-driven approach. That’s what Google Translate uses. Google can look for translated documents in the United Nations document collection, and if they exist, the software can return the translated phrase. That’s the data-driven approach. If they can collect data about different data in different accents, they don’t need the model-based approach.

Google can achieve this level of quality in translation, he said, because of its massive computation power – Google has about 20-million CPUs worldwide. Translation may not be accurate in offline or airplane mode, because it must use the model-driven approach. But a translation request may be sent to the cloud, and the translation then becomes much more accurate. He quoted a 2001 article by Michele Banko and Eric Brill (available at http://acl.ldc.upenn.edu/P/P01/P01-1005.pdf) that discussed the advantages of large scale. Test accuracy increases with the size of the training corpus.

A second challenge for voice input, Chang said, is natural language understanding (NLU). Issues such as context awareness (for example, function, location) and dialog design (for failure recovery) come into play. Speech recognition is not just converting speech into text, but understanding the semantics. For example, if you ask about Japanese restaurants in a particular area, the software concludes you’re interested in booking something; the accuracy of results increases if that’s true.

With wi-fi and GPS sensors, Chang said, location-based services can be provided. Google is developing indoor and 3D positioning and navigation, because most commerce activities occur indoors. Your cellphone may know you’re interested in cat food and near a cat food store, and then offers you a coupon to redeem. But coupon providers generally aren’t on the highway – they’re in the mall. If sensors can achieve resolution to about five meters, coupon effectiveness will be greatly increased.

Existing technologies such as GPS, wi-fi and cell towers fall a bit short for indoor positioning. Also, the time to make the first fix can be more than 30 seconds – too long for many people. Wi-fi models use wave propagation based on computing the distance from a mobile device to a known access point (AP). But obstructions, wave deflection and noise can affect accuracy. Another wi-fi approach is the signal strength map (SSM) or RF fingerprint. It generates a heat map showing how close a device is to an access point. Chang said it’s promising but still suffers from noise problems. Its implementation can be laborious, too; it requires site surveys and re-surveys when the AP is broken. There are also privacy concerns.

Google’s solution is a patented technology called XINS (pronounced “SINS”) and what Chang called “killer apps.” Google started the XINS project a year ago. It involves inertial navigation systems (INS) such as accelerometers, gyroscopes and compasses. It computes a cellphone’s direction and speed of movement. Once a cellphone’s position has been
accurately plotted, a gyroscope can detect its roll, pitch and yaw. If the angular speed is known, the attitude of the cellphone can be determined too. If the acceleration is known, the velocity, and hence the position, of the phone can be inferred.

Of course, there are technical challenges, too. The INS devices must be inexpensive, and they can be prone to errors. The devices may suffer from precision bias, in which one full rotation does not equal 360 degrees. They can also be sensitive to temperature and noise. Errors are progressively multiplied, Chang pointed out, so even small deviations can result in huge errors. Still, with INS and a good indoor map, with 20 access points, it’s possible to achieve accuracy within five meters. Integration drift can be a problem, he said, because its effect is cumulative. The vibration energy model (VEM) is predicated upon noting the position of arms and legs as people walk. If Google can model that, Chang said, it can, with proper processing, obtain an accurate direction for a person’s movement.

A second problem involves error drift. Proper INS calibration helps with that. But, Chang said, they can’t ask users to do the calibration. The service providers must do that. Chang said they’ve developed a six-point calibration. If they can calibrate six parameters in three dimensions, they can do the calibration. It’s non-intrusive to the user. Once they’ve collected more than eight points, they can use a straightforward optimization method, which can form something like a sphere or elongated sphere around the user. Once we can convert it into a true sphere, they can get the needed calibration parameters.

Chang noted that biological and environmental sensors can be added as well. The proper sensors can allow services to predict someone’s transportation mode – walking, running, using an elevator, train, bike, car. A pressure sensor can detect vertical movement with great accuracy. Once service providers do ground truth, he said, they can determine someone’s elevation as well. In addition, there are health sensors that can be connected to a cellphone. For example, a message can be sent directly to a doctor when a sensor detects precursors to a heart attack. Sensors can monitor stress and serve as a fitness coach. Sensors can also do security alerts. Once a lock has been touched, a photo can be transmitted to your cellphone. Increasingly, sensors are everywhere.

In closing, Chang said mobile opportunities are tremendous. With increasing context-aware computing, recommendations on the information a person needs at a particular time and in a particular place can be made. We can make sure, he said, that people get the transportation information they need, or the music they like. To make it all happen, we’ll need cloud computing, infrastructure, big data, social networks and sensors for cellphones. The coming changes will be both evolutionary and revolutionary.

The question and answer session dealt with a number of topics, but four persons raised issues involving privacy. Big data can have a negative social side. Totalitarian regimes can use it for surveillance. Will applications be developed that will permit users to opt out of providing selected data or choose not to see certain ads? Even the emergency management applications require surrendering information about health. Chang acknowledged that everyone is concerned about privacy. It certainly needs to be preserved, he said. But he added he doesn’t have the answer to everyone’s questions. The issue is being addressed, he said.
Award of Merit Acceptance Speech by Michael K. Buckland

Editor's Summary

Accepting the 2012 ASIS&T Award of Merit, Michael K. Buckland mused on the inherent interest and social benefits of library and information science. As a child, Buckland saw being a librarian as a worthwhile endeavor, transitioning from child stage star until he found something more interesting. Through various positions as a professional librarian and researcher, he came to appreciate the value of effective library management, design, planning and the power of technology, as well as libraries’ role in informing and building communities. Libraries provide access to essential tools and methods for solving societal problems. The field should pursue dedicated research and directly address and promote its supportive and enabling position in society. Despite bemoaning ambiguous terminology in the field and occasional inadequate thinking, Buckland expressed envy for young professionals for their years of interesting and socially beneficial work ahead.

Keywords

honors
scholars
career development
information science
socioeconomic aspects
librarianship

It is a special kind of honor to be honored by one’s peers. I felt that when I was elected president of ASIS&T, and I feel it again with this award, but more strongly. An elected president has work to do, chores to perform. But in this case there are no chores or work. Instead, two gifts: a silver bowl and a briefly captive audience.

The timing is nice since this conference marks 40 years since my first ASIS conference and, to within a few months, 50 years – half a century – since I started in this field. How could that be? The explanation is that I started young.

In fact, this field was my second career. My first career was in the theater where I started really young and at the top. At the age of two weeks I starred as Jesus Christ in a Nativity play, and I stole the show. The difficulty was then to find comparable roles. My whole life has had to be an anticlimax after that elevated start. By the time I was a teenager acting in an English pantomime loosely based on the nursery rhyme about Little Miss Muffet and her spider, I was cast as half of the spider. Spiders have eight legs so the arms and legs of two people are needed to make a serious spider. Going from Jesus Christ Superstar to half of a spider was a poor career trajectory even if it was an anatomically correct spider. I left the stage.

My parents kept asking what I was going to do when I grew up. The English have a sense that it is a mistake to grow up, but one has to earn a living. I didn’t know. I didn’t want to discuss it. I thought, “If I give them an answer – any answer – they’ll stop asking.” But what answer? We lived next to a public library, and I thought that libraries were socially beneficial and probably a pleasant place to work. So I told them that I was going to be a librarian until I found something more interesting to do. Fifty years later, that is still my position. I am only temporarily in this field.
I went to work in the ancient library of Oxford University and observed the high price of poor management. Then off to library school where I learned an attitude: However things are being done, there’s probably a better way. Then as a professional librarian at Lancaster, I helped create a whole new library for a new university and discovered the satisfaction of good design and effective planning. After that, five years of full-time research.

In 1972 I became a librarian again, in the United States at Purdue University, where I learned a lot about people problems. I left to help the Berkeley School of Librarianship move towards becoming a school of information whatever. Then back a fourth time to library work in what is now the California Digital Library where I learned a lot about the power of technology. Finally I began an entirely new career as a mere professor and retired.

Looking back, I had clearly underestimated how interesting this field is and how socially beneficial. Who could not be interested in the many neglected questions and paradoxes inviting our attention, in the challenges of design as new techniques and new technologies become available and in the human interest of forgotten pioneers?

As for “socially beneficial,” libraries are concerned with community building and, within that, with making accessible the documents that people want or need. Archives, publishing and social media do much the same, widening our scope. Professional schools and professional associations need to remember that fact.

Library schools have a well-understood mission and role to prepare professionals to work in libraries. Library schools have an identified market, profession and professional associations to deal with.

I worry that “iSchools” seem to lack that clarity of purpose, mission and identity. There is a compelling mission at hand, and it is the following: With a few exceptions, notably privacy and security, ignorance is a bad idea. Who wants an incompetent dentist? A lawyer ignorant of current law? An auto mechanic without manuals? A physician unfamiliar with the best new treatments? A military using out-of-date maps? The list goes on and on. I like the slogan, “If you think education is expensive, try ignorance!”

The situation is getting worse because we are all increasingly dependent on second-hand knowledge. It matters for society who knows what. That consequence is the rationale for our field. It is my rationale for our field.

Now, anything that is a really important societal problem will be complex, requiring a versatile tool kit. Who can predict what kind of tool will be needed next? People of my generation with my background liked to think of themselves as generalists. It may be a vain delusion, but it is liberating because it encourages one to work on any problem and to pick up any useful tool. The problem should determine the methodology. Whatever works is a good choice. If some statistics would help, do some statistics. If you can, engage a statistician. Being interdisciplinary is not in itself a virtue because drawing on other fields can be wasteful and detrimental unless it really suits our purpose. Our field has suffered from that.

Many of us are expected to do research in some form. We tend to do what is feasible, so most published research is routine if not rather trivial. If our field is to thrive we need to address the difficult and embarrassing questions: Why use public funds to finance libraries? How come our most scientific work is built on questionable assumptions? The danger is in not thinking through the hard and unpleasant issues because sooner or later someone hostile will go there, and it is unwise to be unprepared.

Talking of dangers reminds me of my grandmother who was rather fierce. She had a murder list of people she was going to do away with when she became prime minister. As a mild-mannered, impressionable little boy I would be put on and taken off her murder list unpredictably and inexplicably.
These events were long before Margaret Thatcher and, eventually, I came to realize that maybe my grandmother might not become prime minister. That was a relief. She is dead now, so I am safe – at least from her.

I myself never compiled a murder list, even though sometimes tempted. Not yet. But I have often thought that a semantic murder list would be useful: Words that should be taken out of service. Our field has been plagued by terminological problems and a failure to remember the fundamental distinction between a thing and its name. (The next time someone says, “Information is…,” beware!)

In my high school we had an assignment called Paraphrase. We were given a passage of text and required to rewrite it with the same meaning but without using the same words. It is a good exercise. When people have difficulty rewriting, the reason is usually inadequate thinking, not lack of vocabulary. We could try it: “information”-free Fridays, when the word is avoided. Christians could give it up for Lent.

Three recent recipients of this noble award mentioned my name when they spoke of the ancients of their youth. That makes one feel old. So as I stand here in the twilight zone between senior and senile and survey this room of (mostly) younger people, you might wonder whether I wish I were young again. I think not. I have been there and done that, and I could not hope to be so fortunate a second time around. But I will admit to a little envy of the younger among you for this simple reason: You have so many more years ahead to explore the interesting and to engage in the socially beneficial and useful. Thank you.
O
riginally aiming to become a librarian, I was first introduced to information science and information retrieval (IR) by my first professor, Sinikka Koskiela, at the University of Tampere in 1972. She guided me to read F.W. Lancaster’s Information Retrieval Systems: Characteristics, Testing and Evaluation (1968), Manfred Kochen’s The Growth of Knowledge (1967), Gerard Salton’s Automatic Information Organization and Retrieval (1968) and several other excellent texts. The ideas gained from them remained in my mind while I studied computer science, database management in particular, and nearly stayed in that area as a researcher. Accidentally, I returned to information science in the early 1980s and assumed the responsibility of developing the curriculum for classification, indexing and information retrieval at one of the predecessors of my current school, the School of Information Sciences, University of Tampere, Finland.

My initial research efforts were split between information seeking and knowledge-work augmentation on the one hand, and relational database management on the other. Both interests have continued to date, but IR has formed my main research area since the early 1990s. For the curious reader, my publications are listed at http://people.uta.fi/~kalervo.jarvelin/KalPubl.html, but most of them may be found through Google Scholar.

The initial driving aim in my research in IR was that all information should be available to anyone desiring it and in an accessible form, no matter in which form or language it is stored or where it is located. Today, much of this availability has been realized in the form of the web, its search engines and the resources accessible through them. With my colleagues in the research group FIRE, I have been happy to contribute to IR in the areas of natural language processing (NLP) method evaluation for IR, ontology-based query expansion and relevance feedback, cross-language IR (CLIR) methods/evaluation and IR evaluation metrics. This work has been great fun.
Originally, IR methods were developed for English, which is a morphologically simple language. This characteristic means that very simple methods of stemming are sufficient to make documents accessible as far as language is concerned. My native language is Finnish, which is highly inflectional. Every noun may have some 2000 inflectional forms, for example, in contrast to four forms in English. This complexity means that high recall is difficult to achieve with simple methods in Finnish – which has given Finnish benchmark-language status in NLP and CLIR experiments. Lemmatizers (see http://en.wikipedia.org/wiki/Lemmatisation) were seen as necessary instead of stemmers for document representation. We also noted that many other languages are, while morphologically simpler than Finnish, clearly more complicated than English. We have not created stemmers or lemmatizers for any language ourselves but have evaluated their effectiveness for document representation. However, such tools cannot always be applied – if one has no control over database production – or be available at all for many languages. We have created lightweight statistical lemmatizers for indexing, and morphologically smart query-time tools for expanding the original query words to their most frequent inflectional forms of each language. We have shown such methods to be effective. These findings are good news in the global information access scene, where many languages are not nearly as well equipped as English.

One of the basic tough problems in IR is vocabulary mismatch: the searcher’s query words do not match with the words in relevant documents. Ontology-based query expansion and relevance feedback are two approaches to solve the problem through query reformulation. Both expand the query with new words that are semantically, syntagmatically or (at least) statistically associated with the original ones and hopefully better match the relevant document texts. We were among the first to analyze the effectiveness of various query structures in semantic query expansion in best-match IR in late 1990s and identified the effective synonym structure for expansion. Interactive relevance feedback, while not really popular in practice among searchers, has been an appealing idea for query modification for a long time. Here the searcher examines the result of an initial query and identifies the relevant results for the search engine. We have shown through a number of simulation studies that an effective approach is to provide feedback only on a few first results. This finding holds even if the first results are of marginal relevance and one aims to retrieve only highly relevant documents.

Cross-language IR methods gained in importance along with the global development of web IR. We developed in the late 1990s the dictionary-translation method for CLIR based on synonym structure. In a bilingual translation setting, the target language translation equivalents (for example, in English) of a single source language word (for example, Spanish) are all put into a synonym set in the target query without attempting to disambiguate various word senses. This simple method proved very effective and served as a challenging baseline in CLIR for a number of years. However, dictionary translation in CLIR may be bogged down by OOV (out-of-vocabulary) words. These words may be proper names spelled differently in different languages or technical terminology not covered by a machine-readable dictionary. We developed novel and effective approximate string-matching methods and statistical transliteration-based methods to overcome the OOV problems during 2000-2010.

My search engine is better than yours. – Statements like this one are often sought after in IR research and are based on IR evaluation, which is sometimes referred to as a hallmark and distinctive feature of IR research. In the early years of the U.S. National Institute of Standards’ Text Retrieval Conference (TREC), in the 1990s, test-collection based evaluation used binary relevance assessments with a very liberal relevance criterion. In addition, the evaluation itself was dominated by a scenario where the (simulated) searcher was exhaustively searching for relevant documents. We asked the questions: What if most documents are of marginal value, others being highly relevant? What if early retrieval of a relevant document, of any degree of relevance, is far more valuable than late retrieval? These questions led to the development of evaluation methods by highly relevant documents and, in particular, to a family of evaluation metrics based on cumulated gain. Among the latter normalized discounted cumulated gain, the nDCG, became very popular in IR evaluation and also in operational development within search engine companies.

While the progress in the field of IR is astonishing and impossible for
anyone to follow-up in all detail, I currently believe that we can do a much better job in supporting information access in people’s tasks and focused everyday-life information need situations. My current work focuses on task-based IR and interactive IR, including simulation of multiple query IR sessions.

Regarding task-based IR, we have collected comprehensive qualitative data in two task settings, research tasks in molecular medicine and administrative tasks in city administration. We are planning to continue these efforts in public administration and commercial companies. The data collection methods include interviewing, task performance shadowing, client-side interaction logging, photo logging through SenseCam and questionnaires. We have found how information needs in simple tasks are satisfied through one or a few organizational information systems, while complex tasks require a range of sources and traversing through several types of systems, not just one search engine. We also classified barriers in information access by their character (conceptual, syntactic and technological) and by their context of appearance (work task, system integration, or system) and analyzed how these depend on task complexity.

Taking the human searchers as an actor (and thus, a variable) in IR research design poses many challenges. Humans learn, get tired and are expensive to hire for experiments. At any step in an interaction, they may take a range of decisions that may lead to the termination of their search session with either success or frustration. Such decisions depend on many factors such as their personal traits, work task and search task, current situation in the search, search strategy, the quality of document representation or search platform among others. Human information access behavior can be modeled, to some degree, through behavioral probabilities observed in real life. This ability provides an opportunity to simulate interactive sessions in the computer economically and without (unprogrammed) learning effects or fatigue. In fact, one may run in reasonable time (hours) experiments involving many million interactive sessions and identify which kind of decisions or behaviors are likely to lead to successful results. We have recently shown that expected human fallibility in providing relevance feedback does not deteriorate search results and how important it is to consider time factors as opposed to plain ranking quality in IR evaluation. ■

A Short Biography

Kal Järvelin (http://people.uta.fi/~kalervo.jarvelin/) is professor and vice chair at the School of Information Sciences, University of Tampere, Finland. He holds a PhD in information studies (1987) and two MSc degrees (library and information science, 1978, and computer science, 1983) from the same university where he started as a student in 1972. He was academy professor with the Academy of Finland in 2004 –2009.

Kal Järvelin’s research covers information seeking and retrieval, natural language processing and ontological methods in IR, IR evaluation and database management. He has co-authored over 250 scholarly publications and supervised 17 doctoral dissertations. Several of his former students have a recognized standing within information science. He has an H-index of 27 in Google Scholar and 13 in Web-of-Science (December 2012). He is particularly well cited for the work he has co-authored on IR evaluation methods, task-based information seeking and the integration of information seeking and retrieval research.

He has frequently served the ACM SIGIR conferences as a program committee member (1992-2009), conference chair (2002) and program co-chair (2004, 2006, 2014); and the ECIR, the ACM CIKM and many other conferences as program committee member. He was an associate editor of Information Processing and Management (2008-2012).

Kal Järvelin has received many awards beginning with the Finnish Computer Science Dissertation Award 1986 and continuing with several best paper awards with co-authors, including the ACM SIGIR 2000 Best Paper Award for the seminal paper on the discounted cumulated gain evaluation metric; the ECIR 2008 Best Paper Award for session-based IR evaluation; the IIiX 2010 Best Paper Award for a study on task-based information access. He also received the Tony Kent Strix Award 2008 in recognition of contributions to the field of information retrieval, and, most recently, the ASIS&T Research Award 2012 in recognition of contributions to the field of information science.

Publications on next page
Some Key Publications


In December, I was traveling on a one-lane road that borders a creek when I hit a patch of ice. As the rear wheels lost traction, the back of the vehicle began to skid toward the creek. I envisioned spinning out of control, gulped as I assessed the riverbank and cursed the manufacturer of my vehicle – my new (used) four-wheel drive truck.

You may wonder why a truck owner was spinning on ice. A 4x4 truck is designed to power all four wheels, which provides better control. But I couldn’t find a way to switch into a different gear. So as I fought embarrassment, I silently cursed the truck manufacturer, asking, “Why is there no perceptual affordance?”

I first learned about affordances when I read Donald Norman’s seminal text, _The Design of Everyday Things_. (I actually have an early edition entitled _The Psychology of Everyday Things_.)

In the book, Norman describes design based on the needs of the user, rather than focusing on preference and aesthetics. He describes the structure of tasks, how designers can make choices visible and how we can design for error by depending, in part, on what we can see or expect to see as we perform our tasks.

I am often thwarted by a lack of perceptual affordances. I will routinely pull on doors that must be pushed. I’ll plug in a USB device with about 50 percent accuracy. These design snafus bug me – but they are hardly as threatening as careening into a creek because you cannot find the controls.

I suspect I should have studied my vehicle guide to learn the location of the controls for my 4x4 options. But I expected the 4x4 gears to be an option close to other transmission choices.

Where were the controls? I had no idea. I turned to the manual for help, finding “Four-Wheel Drive Operation” in a section called “Starting and Operating.”

FOUR-WHEEL DRIVE OPERATION
The NV233/243 is an electric shift transfer case and is operated by the 4WD Control Switch (Transfer Case Switch), which is located on the instrument panel.

“How” I wondered, “does this content help me understand how to operate my truck?” I felt thwarted. Would most readers be familiar with an electric shift transfer case? I wasn’t – I don’t know what it is, what it does, what it looks like or where to find it. I needed a picture of the instrument panel. The manual provided no cross-reference, so I turned to the table of contents, found

---

Thom Haller – teacher, speaker, writer and user advocate – teaches principles of performance-based information architecture and usability. Thom volunteers time supporting advocates of plain language. Thom can be reached via email at thom<at>thomhaller.com.
a section called “instrument panel and controls” and looked for an image (Figure 1) on which I might find the control I had not found while driving.

Can you find the “hidden” control knob? If you look closely, you’ll see it underneath the climate controls. The illustration identifies the part as a transfer case switch.

Notice the communication challenges I faced. If I had read the manual before operating the vehicle, I would have found an illustration that pointed out “transfer control switch” but provided no other information. The manual did not link the content on “what something is” to content on “how to use it.” And to use my four-wheel drive, I first had to find a switch that, because of its location on the dashboard, did not fit my expectations nor was it easy to see from the driver’s seat.

As humans, we encounter information and try to gain knowledge across channels. To drive my vehicle, I relied on my own expectations of where I might find certain controls. When that failed me, I turned to printed content. I shifted from relying on the architecture in the physical world to the architecture in the printed world. My task remained the same: Use 4x4 feature on truck.

My experience affects my perception of the truck manufacturer as well. Although I stayed on the road, the incident made me feel embarrassed and grumpy. Pouring through a manual that barely answered my questions further hampered my customer experience.

How can we keep customer experiences from slipping away?

As information architects, we work in a profession where we strive to improve the customer experience by making the complex clear. Through our work we can influence product development and ask questions such as, “Does the placement of this control make sense?” We can influence content, asking questions such as, “Am I using terminology my readers understand?”

Our work as information architects and user experience professionals puts us at the forefront for helping people understand and act. If we hope to make the complex clear, we’ve got a lot of work to do.
Looking Out for the Little Guy: Small Data Curation
by Katherine Goold Akers

It is perhaps no coincidence that academic librarians are accelerating their efforts to curate research data at the same time that attention is increasingly being focused on big data. But in a college or university setting, a preoccupation with big data may be unrealistic and unproductive. Instead, our concerns should be with small data and the challenges of managing a myriad of diverse and undocumented, yet small, datasets.

With big data at the forefront of discussion, it is easy to imagine that all scientists are routinely generating massive quantities of research data. And some are. But many of these big data producers work in federal or private labs that are out of the reach of academic librarians. Or they work in universities but are supported by grants enabling them to hire staff and build infrastructure necessary to manage their own data without assistance from librarians. What remains is the majority of researchers based in colleges and universities, who conduct several small, interrelated projects simultaneously, many of which are either not federally funded or not funded at all. Some of these projects culminate in journal articles and conference presentations, and others quietly phase out, but in either case, the data are rarely preserved or disseminated. Although science is rapidly evolving with advances in thinking and technology, it has not undergone a paradigm shift, at least not yet. Despite having more sophisticated tools, most scientists continue to make progress via incremental steps – series of observational, experimental or computational studies that each generate a relatively small amount of data. The same is true for researchers in the social sciences and humanities, who also typically produce modestly sized datasets or collections of digital objects. It is these small datasets that academic librarians are most likely to encounter.

It is also easy to get the impression that, as a general rule, big data are more important than small data. But the value of a dataset is not a function of its size. Certainly the curation of big data is vital in many cases. Consider the unique conglomeration of weather conditions leading up to the recent superstorm Sandy. Meteorological data captured from this event are not reproducible. If the data are not preserved, scientists lose opportunities to gain additional insights into how such storms arise and how to improve our weather prediction systems. However, big data often accumulate through unfocused sweeps of the environment at

---

Katherine Goold Akers has a background in psychology and neuroscience research. She is now a Council on Library and Information Resources (CLIR) postdoctoral fellow and e-Science librarian at Emory University. She can be reached at katherine.g.akers<at>emory.edu.
microscopic to astronomical scales, with potentially valuable information hidden in huge amounts of noise. Small data, in contrast, are often the result of highly focused, carefully designed studies with a limited number of observations. Not all small studies yield data that are highly valuable or worthy of long-term preservation, but they do tend to be the types of studies that explore new areas of inquiry or that narrow in on answers to long-standing questions. If preserved and meaningfully integrated, small data can be just as important as big data, if not more so.

Worry over the management of big data is justified, as it presents significant challenges in terms of storage, accessibility and analysis. But because big data are difficult to curate does not mean that the curation of small data is easy. In fact, in some situations, small data can be even more difficult to manage than big data. The instruments that churn out big data often produce files that are highly standardized and automatically accompanied by metadata. These files often fit nicely into established disciplinary repositories, allowing data to be preserved in perpetuity, linked to related data and accessed by the individuals who are best suited to re-use the data in new and meaningful ways. Small data is messier [2]. Any individual small research project can generate a surprising number of files in a variety of formats. Because the goal of academic researchers is to publish manuscripts as quickly as possible, they spend little if any time preparing their data for archival or re-use, meaning that most datasets lack adequate documentation or metadata. Some research areas have no appropriate disciplinary repositories. Whether the orphaned data make it into institutional repositories, it is unclear how these detached, diverse datasets can be synthesized into something that is greater than the sum of its parts.

Because academic librarians are more likely to encounter small data in their colleges and universities, we should focus on developing approaches to the documentation, organization, preservation and dissemination of small datasets that have no permanent home outside of the labs and offices in which they were born. The effective and efficient curation of small data may prove to be an immense feat, but one that offers profound opportunities for librarians to meet an unfulfilled need and to forge new paths in the discovery and sharing of scholarly information.

Resources Mentioned in the Article
