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## PCS Awards for 2004

By Robert Krull

The Society will present its annual awards at IPCC 2004 in Minneapolis, Minnesota, on Thursday, 30 September. See the banquet notice on the back cover of this *Newsletter*.

### Goldsmith Award

**John M. Carroll** will receive the *Alfred N. Goldsmith Award* for distinguished contributions to engineering communication. He is Edward Frymoyer chair professor of information sciences and technology at the Pennsylvania State University, University Park. His research interests include methods and theory in human-computer interaction, particularly as applied to networking tools for collaborative learning and problem solving.

He has written or edited 14 books, including *Making Use* (MIT Press, 2000), *HCI in the New Millennium* (Addison-Wesley, 2001), *Usability Engineering* (with M. B. Rosson; Morgan-Kaufmann, 2002), and *HCI Models, Theories, and Frameworks* (Morgan-Kaufmann, 2003). He serves on nine editorial boards for journals, handbooks, and series; he is a member of the U.S. National Research Council's Committee on Human Factors and is editor-in-chief of the Association for Computing Machinery (ACM) *Transactions on Computer-Human Interaction*.

He received the Rigo Award from the ACM Special Interest Group on Design of Communication, the Silver Core Award from the International Federation for Information Processing, the Lifetime Achievement Award from the ACM Special Interest Group on Computer-Human Interaction, and he is an ACM fellow.

**William Horton**, winner of last year's *Goldsmith Award*, will give the keynote address, "O Brave New Media," and a workshop at this year's IPCC.

### Schlesinger Award

The *Emily K. Schlesinger Award* for outstanding service to the society goes to **Beth Weise Moeller**. She is the immediate past president of the society and has been instrumental in enhancing its online presence through the redesign of its Web site and the development of the PECom online community.



John Carroll



Beth Weise Moeller

(continued on page 4)



Rudy Joenk

### This Issue

IPCC 2004 takes place at the end of September. Our annual practice of presenting PCS awards in several communication categories is described on p. 1 and the awards banquet is described on p. 24.

The call for papers for IPCC 2005 in Limerick, Ireland, is on p. 23; the IEEE Engineering Management Society is coordinating a track for this conference; and the deadline for proposals is 15 October.

### Auld Lang Syne

You must have heard by now that November/December 2004 will be the last print issue of this *Newsletter*. "Auld lang syne" items will appear in that issue, some contributed by readers and others culled from the files.

### AdCom

The AdCom will meet again this year after IPCC 2004 at the Radisson Hotel Metrodome in Minneapolis, Minnesota, 2-3 October. PCS mem-

bers are always welcome at AdCom meetings. Both the conference and the meeting are scheduled too late this year to be reported on in the next *Newsletter* so they will become inaugural topics in the new electronic newsletter.

If you want to be notified when each edition of the electronic newsletter becomes available on the Web, go to <http://tinyurl.com/yqfsd> and include your e-mail address in your IEEE Web profile.

### Archive

Sponsored by Professor Michael Goodman, PCS in 1989 established an archive for its publications at the library of Fairleigh Dickinson University. Initially it was stocked with collections contributed by Ron Blicq, David Dobson, and others. Through the years it has been continually supplied by subscription with current *Newsletters* and *Transactions*, but we were remiss in providing copies of our IPCC proceedings.

To make amends, vice president Luke Maki is collecting proceedings from volunteers. Still needed are the ones from 1989–1993, 1996, and 1997. If you have one or more volumes to contribute, please notify him at [luke.maki@ieee.org](mailto:luke.maki@ieee.org) and mail the proceedings to Library–Special Collections, Fairleigh Dickinson University, Madison, New Jersey 07940.

### Potpourri

What engineering schools don't teach: "Dilbert is a documentary." IEEE Consumer Electronics Society Newsletter, August 2004.

Heard on the BBC Radio 4 six o'clock news on Friday evening [probably 30 July], in a report on a gas explosion in Belgium: "Ath is a small town that found itself in the wrong place at the wrong time." *World Wide Words*, 31 July 2004.

Posted on the top floor of a hotel in Albuquerque, New Mexico: "3rd Floor Fire Exit Located on 1st Floor." *World Wide Words*, 17 July 2004.

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## IEEE Professional Communication Society

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Eduardo H. Clark

## To Document Our Optimism

I believe it was Carlos Monsivais, a Mexican intellectual and writer, who coined the phrase that I used (translated from Spanish) as the title for this column. I borrowed it because I feel the need to document our optimism or at least provide you a few encouraging words regarding the state of our society.

### Participation

As of the end of the third week of July, our electronic information committee chair, Beth Moeller, reported that we have 201 members in our virtual community (VC) at <https://www.ieeecommunities.org/ieee.pcs>. To put this number in perspective, the Communication Society (CS) has over 1000 and the Engineering Management Society (EMS) has 363 members in their respective VCs. I think that 201 members is great news for PCS, especially if you factor in the membership proportion. EMS is about five times as large as PCS with about 6k members and, in spite of EMS's earlier start in the virtual community, they have not reached even twice our participation rate. PCS's virtual community has, according to my calculation, about 16 percent participation versus six percent for EMS. Of course, many of the members of the community are not IEEE or PCS members; however, I think that the comparison is still valid. Also, I am comparing similar societies if you consider that both PCS and EMS are division VI societies and have hundreds of members in common.

Three PCS members are in the IEEE digital intellectual property group.

### Divisions

The IEEE societies and councils (S/Cs) are organized in sort of a bicameral system under the Technical Activities Board (TAB) umbrella. It is the S/Cs that provide IEEE the largest share of its income. The society and council presidents are members of TAB and act as representatives in the lower chamber. The divisions group the societies by their field of interest and the division directors constitute, in a way, the upper chamber or senate in my bicameral analogy. For those of you who may not know the IEEE division system I am glad to explain it to you.

For this, I borrow from Cantinflas, the late popular actor who has been frequently compared to Charlie Chaplin, but is much more verbose.

In the movie *His Excellency* Cantinflas plays the ambassador from the Los Cocos Republic (a "sweet" nation) to Pepeslavia (a "red" nation). In an emotional speech before the world's national representatives, he explains the cold-war three-world order using a "tamales" analogy: The world is divided into red (chile), green (chile), and sweet, just like the tamales. By the way, I must tell you that the singular of the word is not *tamale*. Just as you correctly say one kibbutz, two kibbutzim, in proper Spanish you say *un tamal*, *dos tamales* (curiously, my Word spell-checker flagged *tamal* as a misspelling and suggested *tamale* instead, but I digress).

Division VI comprises the sweet societies. (Note that I used *comprises* correctly: The whole always comprises the parts, not the other way around). These are also euphemistically called "soft skill" societies. They include the Society on Social Implications of Technology (SSIT; the only society with the word *society* in front of its name), Reliability, Education, PC, EM, and the newest: Product Safety Engineering. As you can see by their names, these societies do not deal with hard quantitative science but with the engineering and human environments.

The Computer Society, the largest in the IEEE with about 87k members, encompasses two divisions: V and VII. The Communications Society is by itself division III and Power Engineering, division VII, also by itself. Check this Web address <http://www.ieee.org/organizations/tab/divisions.html> for additional information about IEEE divisions.

### Visibility

As you may know, I am cochair of the digital intellectual property (DIP) group, along with Gene Hoffnagle (division V director and PCS member) and Brian O'Connell (SSIT president). This group is part of the new technology directions (NTD) committee of TAB. I want to inform you of the activities that, on behalf of PCS, I have been involved with (in addition to the AdCom election, meetings schedule for 2005, editor search, June forecasting exercise with the IEEE, sales and marketing committee assistance, and a plethora of other PCS

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## PCS Awards for 2004

(continued from page 1)

She ran the very successful IPCC 2000, has begun organizing IPCC 2006, was PCS president (2002-2003) and vice president (2000-2001), has written Net Notes for the *Newsletter* since 1998, saw to the *Newsletter* redesign for 2002, and is now leading the introduction of a society Webzine.

Currently, she is a member of the PCS administrative committee and serves on the board of trustees for both the Children's Museum at Saratoga and the Saratoga Independent School. Beth also serves on the IEEE periodicals pricing committee (a TAB entity) and the information technology strategy committee (a board of directors entity).

Moeller holds a B.S. degree in physics and technical communication from Clarkson University, Potsdam, New York, an M.S. degree in technical communication from Rensselaer Polytechnic Institute, Troy, NY, and a Ph.D. degree in communication and rhetoric from Rensselaer. Her Ph.D. degree research concentrated on the design of hypermedia (integration of hypertext, graphics, video, and sound) interfaces for optimum user performance. Her research has been published in journals such as *Technical Communication Quarterly*, *Journal of Business and Technical Communication*, and *IEEE Transactions on Professional Communication*. In addition she has presented her work at international conferences such as *Society for Technical Communication* and the *International*

*Professional Communication Conference*. She owns Interactive Media Consulting, LLC, a Web design and development firm in Saratoga Springs, New York.

### Blicq Award

**Thomas E. Pearsall**, who will receive the *Ronald S. Blicq Award* for distinguished contributions in technical



Thomas Pearsall

communication education, is one of the founders of technical communication education. He taught at the Air Force Academy and is professor and head emeritus of the department of rhetoric at the University of Minnesota, which developed undergraduate and master's degree programs in technical communication during his tenure there.

He is also a founder, fellow, and former president of the Association of Teachers of Technical Writing and cofounder of the Council of Programs in Technical and Scientific Communication. He is a fellow of the Society for Technical Communication.

Pearsall is a coauthor of one of the landmark introductory textbooks in the field, *Reporting Technical Information* (with Houpp, Tebeaux, and Dragga; Oxford Univ. Press, 2001), now in its 10th edition.

### Joenk Award

The *Rudolph J. Joenk, Jr. Award* for best paper in the *IEEE Transactions on Professional Communication* during the preceding year will be presented to Jake Burkey and William L. Kuechler for their article "Web-based Surveys for Corporate Information Gathering: A Bias-Reducing Design Framework," vol. 46, no. 2, June 2003, pp. 81-91.

**Jake Burkey** is a graduate research assistant in the Ph.D. degree program in agricultural and resource economics at Washington State University, Pullman, where his focus is applied Web-survey research.

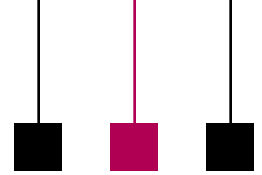
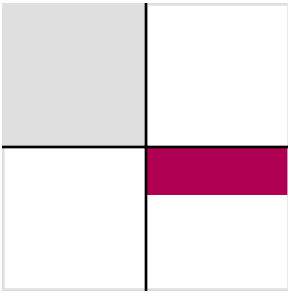
He earned an M.S. degree in resource and applied economics from the Uni-



Jake Burkey

versity of Nevada, Reno. Subsequent work as a research analyst at the university's Center for Economic Development (UCED) included the development and administration of the UCED Web site as a database-driven application allowing dynamic access to Nevada state data and UCED publications; the design and application of econometric models; and the development, implementation, and interpretation of multi-modal and phone surveys. His research on multi-





modal surveys while at UCED was incorporated into the paper that won the *Joenk Award*.

His current doctoral study includes work on application of new Web technologies to improvement of the user interface; development of a cardinal and universal response scale designed to address the shortcomings of the ordinal and context-sensitive Likert-type scales; bias effects from the perception of security and the design of the user interface; and the economics of survey mode.

**William L. Kuechler** is associate professor of information systems at the University of Nevada at Reno. He holds a B.S. degree in electrical engineering from Drexel University, Philadelphia, Pennsylvania, and a Ph.D. degree in computer information systems from Georgia State University, Atlanta. He has had a 20-year career in business software systems development and has conducted studies of inter-organizational workflow and coordination, Web-based supply chain integration, and the organizational effects of inter-organizational systems.

He has published in the *IEEE Transactions on Knowledge and Data Engineering*, *Decision Support Systems*, *Journal of Electronic Commerce Research*, *IEEE Transactions on Professional Communication*, *Information Systems Management*, *Information Technology and Management*, and other international conferences and journals. Dr. Kuechler is a

member of the Association for Information Systems and the Association for Computing Machinery.

### How the Awardees Are Chosen

Nominations for the Blicq, Goldsmith, and Schlesinger awards may be submitted by the PCS membership in the spring. The final selection is made by the administrative committee (AdCom). The best paper award is determined by the editorial advisory committee.

Previous award winners from 1997 forward are identified in the July/August and September/October 2002 and September/October 2003 issues of this *Newsletter*. Pre-1997 awardees are listed in the May/June and July/August 1997 issues.

*The author is awards chair for PCS and a member of the AdCom, and professor of communication at Rensselaer Polytechnic Institute, Troy, New York.*

## President's Column

*(continued from page 3)*

business). We had a teleconference meeting in late July. That was the fifth meeting, if I remember correctly, that we have had since November 2003, when the group was formed at the Seattle TAB meeting.

Months ago I asked the PCS AdCom for help in recruiting members with expertise on intellectual property. Luke Maki suggested Glenn Tenney, a PCS member and chair of the IEEE-USA intellectual property committee (IPC). I invited Glenn to join the group and he graciously accepted. Visit this Web address to learn more about the IPC and its testimony to the Senate Judiciary Committee on the Inducing Infringement of Copyrights Act of 2004 (S. 2560): <http://www.ieeeusa.org/forum/policy/2004/072204.html>.

More recently, Jean-luc Doumont suggested that I contact Benoit Macq,

a professor at the Catholic University of Louvain in Belgium, who also graciously accepted my invitation to join the group and share his expertise.

The group still needs more experts on digital IP technologies such as digital rights management, digital watermarking, digital signatures, etc. If you know anybody (preferably an IEEE member) with expertise in those technologies, please let me know. The group also needs to find a nice acronym or initialism to call itself: DIP just doesn't sound right. Although PCS may not be represented again in Senate hearings, we can, at least, achieve more visibility within IEEE with our participation on the NTD committee.

I hope that after reading this document you feel a bit more optimistic about PCS—or at least more knowledgeable about tamales.

## From the Editor

(continued from page 2)

**Supersize That Semicolon** “Digital reproduction is souping up super-graphics, allowing designers to transfer highly detailed photographs and graphics to paper, vinyl, and fabric and to blow up images to the point of abstraction. Computers and the Internet have created new awareness of letters, numbers, and even punctuation, spurring designers to use them as graphic elements.” Marianne Rohrllich in *The New York Times*, 15 July 2004.

“Robert Spence, 3, has lived in a Habitat house in Bakersfield, California, since 1998.” *Habitat World*, June/July 2004, via *World Wide Words*, 3 July 2004.

A quote from a large research organization in Tasmania, Australia: “The existing Environmental Management Policy is considered an appropriate umbrella vehicle to encapsulate the gambit of environmental matters including energy rather than formalise a separate energy policy.” *World Wide Words*, 26 June 2004.

Sign on the Oklahoma (U.S.) Turnpike: FAILURE TO PAY TOLL STRICTLY ENFORCED. *World Wide Words*, 19 June 2004.

Once we adopt a (foreign) word, it plays by our rules. For example: *Table Mesa* = table table; the *hoi polloi* = the the many; the *La Brea Tar Pits* = the the tar tar pits; the *La Fonda Hotel* = the the boarding-house hotel. *AWADmail Issue* 125, 15 June 2004.

On the radio station KUSC of the University of Southern California, 1 June 2004: “Some of the most fortuitous meetings occur by accident.” *World Wide Words*, 5 June 2004.

Turn the pages of some of the world’s oldest and most beautiful books at the British Library: <http://www.bl.uk/collections/treasures/digitisation1.html>. *The New York Times*, 3 June 2004.

### Computer Haiku

First snow, then silence.  
This thousand dollar screen dies  
So beautifully.

The Tao that is seen  
Is not the true Tao, until  
You bring fresh toner.

There’s more at <http://www.funny2.com/haiku.htm>; Sony has replaced some of the Microsoft error messages on its Vaio computers with Japanese haiku.

### Information for Authors

One thousand words makes a nice page-and-a-half article, though longer and shorter articles may be appropriate. Write about what you know, things that you’re familiar with. If you live outside North America, consider writing about technical communication in your country. ***You needn’t be a PCS member to contribute.***

If you use a wp program, **keep your formatting simple**; multiple fonts and sizes, customized paragraphing

and line spacing, personalized styles, etc. have to be filtered out before being recoded in *Newsletter* style. Headers, footers, and tables lead the casualty list. Embed only enough formatting and highlighting (bold-face, italics, bullets) to show me your preferences.

If you borrow text—more than a fair-use sentence or two—from previously published material, you are responsible for obtaining written permission for its use. Ditto for graphics. Always give credit to the author or artist.

The *Newsletter* issues on our Web site ([http://www.ieeepcs.org/activities\\_publications\\_newsletter.php](http://www.ieeepcs.org/activities_publications_newsletter.php)) can be used as examples. Issues are posted about one month after distribution of the print version and now have active e-mail, Web, and table-of-contents links.

I prefer to receive articles by e-mail; most WordPerfect, Word, RTF (rich text format), and ASCII files are acceptable. My addresses are in the boilerplate at the bottom of p. 2 along with our copyright notice.

### Deadline

Depending on where you live, the deadline for the final print issue of this *Newsletter*, November/December 2004, is or was **15 September**. Please e-mail me immediately if you have something to include.

Auld lang syne  
coming in  
the next issue

## Plan Now for IPCC 2005 in Limerick

By Marj Davis

In June I had the delightful duty of visiting the University of Limerick, site of our International Professional Communication Conference to be held 10-13 July 2005. What a great venue for our conference, whose theme is *ceangail*—making connections!

Only a short drive from Shannon airport, the university campus is set within a beautiful 650-acre National Technology Park that serves as a primary center for e-learning-related applied research. Several research units focus on many aspects of e-learning:

- College of Informatics and Electronics
- Educational Media Research Centre
- Interaction Design Centre
- Localisation Research Centre
- Software Quality Research Laboratory

It's easy to see how technical communication fits into each of these areas of applied research. The campus representatives we met are looking forward to the opportunity to host IEEE engineers and technical communicators whose work connects on many levels.

The conference meeting rooms are typical of university settings, with perhaps more integrated technology in classrooms and auditoriums. Conference presenters will find it easy to navigate the rooms and technology. See the university's Web site for

more information about the facility: <http://www.ul.ie>.

I stayed on campus at Dromroe Village and found it to be neat, clean, and very convenient to all the conference activities. It is the typical Spartan dormitory space, of course; you won't find the amenities of a big hotel, but you will find pleasure in sharing a common living-dining-kitchen area with five others in your hall. Each room is designed en suite for a single student, with a double bed and a shower in the bathroom.

A wonderful continental breakfast was brought to the kitchen the evening before. Free parking is a valuable perk, too, and there's a laundry facility right across the walkway from the rooms. The river runs near the residential village, and there are great spaces for walking or running. (And Phil Rubens says the fishing is good in Limerick waters.) If your housing expectations are adjusted to dorm-like settings, you will enjoy the experience—and the price is right!

By far the best part of our preview visit was the banquet at Bunratty Castle. The Bunratty Web site ([http://www.historic.irishcastles.com/bun](http://www.historic.irishcastles.com/bunratty.htm)

[ratty.htm](http://www.historic.irishcastles.com/bunratty.htm)) does not do it justice! From the time we entered the castle and were greeted as lords and ladies, we enjoyed a royal meal and entertainment in the style of the 15th century Earl. First we were handed pottery cups with honey mead and treated to an introduction and royal welcome. Then we negotiated narrow winding steps into the dining area. The wait staff treated us to unparalleled service and also to wonderful Irish music. Accomplished musicians, a harpist and a violinist, accompanied the singers. We had not expected

the food to be very good, thinking that eating only with knives must surely restrict the menu options. We found, however, that the hot meats, vegetables, soup, wines, and desserts were outstanding.

Having experienced it ourselves, we can say with certainty that you will not want to miss this 15th century banquet!

Plan now to submit a proposal for IPCC 2005. The call for papers, sponsorship information, and other pertinent conference information are available at <http://www.ieeepcs.org/limerick>. Contact program chair Helen Grady for information:

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Attended by a "lady of the castle" (standing), from left: Jim Hamlin, Marj Davis, Helen Stumbo, and John Stumbo preview the hospitality of Bunratty Castle



Jean-luc Doumont

## An Abuse of Engineeringese Was Observed

Most of us working in the technical or scientific fields, whether as professional communicators or as communicating professionals, come across *engineeringese* (or perhaps *scientese*): ineffective wording so widespread in the profession that it looks like a foreign language of its own. Engineeringese may be no more than jargon, but it may also consist of ineffective constructions.

At first sight, such endemic idiosyncrasies may seem to stem from no more than a copycat attitude. After all, most engineers and scientists have learned their genres by example; new hires typically read many more documents than they write, anyway. Is it any wonder, then, that specific writing habits self-replicate through novice writers like viruses through their host cell (or their host CPU)?

Still, to survive the many mutations brought about by generations of writers, a particular phrasing style must be fit enough for the perceived purpose. Engineeringese is no mere accident; it must be the result of some evolutionary process. Explanations, if not excuses, have thus been proposed for the omnipresent passive voice, so typical of scientific writing. Science, some will argue, must be objective. It is only logical, then, that scientists use the object of their investigation as the subject of their clauses, preferring thus a passive voice—a good intent, if any, but sometimes a poor outcome, as discussed before (“Scientists and Engineers Never Do Anything” in the January/February 2003 *Newsletter*).

Readers are more likely to care about what happened.

Another form of scientese, equally frequent but perhaps less frequently reported, is a shift in emphasis from a given phenomenon to its observation. As such, it is thus in line with most authors’ focus on reporting their work instead of addressing the needs of their audience. This focus leads to two ineffective habits: expressing the true action with nouns instead of verbs and locating the main information in a subordinate clause.

So-called *nominalizations* have many causes. Writing “exhibit a tendency to” to mean “tend to” may simply reflect an unconscious desire to impress. Writing “As a result, an increase in temperature was observed,” however, denotes a focus on the scientist’s essential act—observation—instead of on the phenomenon observed. Readers are more likely to care about what happened than about the fact it has been observed, and would thus be better served by the shorter, more direct statement “As a result, the temperature increased,” expressing the phenomenon (*increase*) as a verb.

A similar recommendation applies to complex sentences. “Figure 4 shows that the temperature increases” emphasizes not the fact that the temperature increases, but the fact that this is shown in Figure 4. Turning the subordinate clause into a main clause and vice versa brings the focus back on the phenomenon: “As shown in Figure 4, the temperature increases” or perhaps simply “the temperature increases (Fig. 4).”

The participants of my training programs usually have no difficulty identifying instances of main information in a subordinate clause (once they have been reminded what a subordinate clause is, that is), but they are often at a loss to find alternatives. The tactic, however, is simple: Suppress the main clause so the subordinate clause becomes an independent one; then put back somehow what you have lost, if anything. Impersonal main clauses of the form “it is obvious that” or “it is a surprise to us that” can mostly be replaced by a single adverb, such as “obviously” or “surprisingly.” Main clauses such as “it is important to note that” can usually be suppressed altogether. Perhaps paradoxically, the resulting conciseness emphasizes the statement better than the extra words did.

To focus on phenomena, not on observation, one must of course assume that what is observed is also what happens. This assumption is usually valid for positive observations, except perhaps for hard-to-measure variables, but never applies to negative observations. Stating that “no adverse effect has been reported” is not equivalent to stating that there is none; the absence of proof is no proof of the absence.

*Dr. Jean-luc Doumont teaches and provides advice on professional speaking, writing, and graphing. For over 15 years he has helped audiences of all ages, backgrounds, and nationalities structure their thoughts and construct their communication (<http://www.JLConsulting.be>).*





Peter Reimold and Cheryl Reimold

## How to Give Technical Presentations to Non-Technical Audiences

### Part 4: Telling the Story in Their Language

Last time, we suggested a way to avoid irrelevant technical detail by starting with five magic questions posed by your audience. Guided by those questions, you will tell them not what seems most interesting to you but what matters to them. Now let's see how to do that in practice.

#### Applying the Magic Questions

Let's say you are a safety expert at a large mill and you've just installed a major system for monitoring explosive or hazardous dusts, gases, and liquids. It's a safety expert's dream: fully computerized, incredibly complex and based on the latest information, and ahead of anything else in the industry. Now you've been asked to present it to a mixed audience of upper management, production and research people, and first-line supervisors.

You may be tempted to tell them, blow by blow, just how fantastic and intricate this system is (magic audience question 1: What do you—the presenter—want to tell me?). But then you remember the other magic questions: 2) Why does it matter to me? 3) How does it affect what I do? 4) How can it help me do my job better? 5) What do you want me to do with this information? When you consider those questions for each of your audience groups, your presentation will take a very different direction.

Instead of beginning with technical detail, you probably first summarize

why the system was needed: say, to address problems discovered in safety audits. Similar problems have led to disasters in other companies. This system prevents disasters by automatically monitoring dangerous substances throughout the mill.

Next, as you consider the magic questions, you realize that your talk is a great opportunity to prevent implementation problems. For instance, supervisors may be happy about the increased safety, but they should be aware of the need for training. Specifically, operators may be tempted to disable sensors that set off alarms during routine cleaning, which tends to stir up flammable dust (key-point backup: example of a devastating dust explosion caused by unsafe cleaning practices). Supervisors will also want to know that you have a plan for anticipating and minimizing production interruptions caused by the system.

You may even decide to lay the groundwork for the next phase of the project: extending the system so any substances introduced into the mill in the future will be added to the database automatically, with no chance of a slip-up and possible disaster. Here management might be concerned that the project is a bottomless barrel requiring yearly infusions of big money. You might reassure them by showing how Material Safety Data Sheets (which are in any case required by law) can be used to automate the link to future substances. All that is required is that the sheets be

filled out promptly, with an automatic copy and alert sent to the safety database.

Audience members from research may be worried about the additional bureaucratic burden of having to clear every substance used in research, even if its amount is ridiculously small. Here you could reassure them that no clearance beyond that already legally required is involved—only a link programmed into the system. The main work will lie with the safety group, which must devise a speedy way to evaluate safety hazards introduced by new substances.

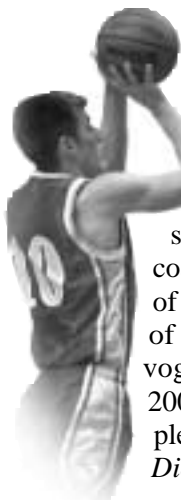
Guided by such audience-focused questions, you can turn a potentially boring talk into something that achieves real progress for you and makes the audience feel considered and respected. All that remains is to organize the material sensibly and support it in ways that are meaningful to the audience.

*Cheryl and Peter Reimold have been teaching communication skills to engineers, scientists, and business people for over 20 years. Their latest book, **The Short Road to Great Presentations** (Wiley, 2003), is available in bookstores and from Amazon.com. Their consulting firm, PERC Communications (+1 914 725 1024, [perccom@aol.com](mailto:perccom@aol.com)), offers businesses consulting and writing services, as well as customized in-house courses on writing, presentation skills, and on-the-job communication skills. Visit their Web site at <http://www.allaboutcommunication.com>.*

## Coaching Communication

By Michael Brady

Coaching arguably is the leading buzzword of the day. Keying it in as a search word in Google brings up more than seven million hits. There now are national and international coaching associations. Workshops



are held and courses are given to further coaching as a key to success in professional life and in business. The bedizenment is so new that save for coaching in sports, none of the myriad meanings of coaching now in vogue are listed in the 2002 edition of the complete *Oxford English Dictionary*.

As late as the 1970s, coaching was in professional limbo. In baseball, a coach was a member of the team at bat who signaled from a box by first or third base; in schools and colleges, a coach was someone who taught the skills of a sport to team members. There was little or no coaching education, and the belief that “if you played the sport, you’re qualified to coach the sport” prevailed. Moreover, physical education then was in decline, which pushed coaching farther away from the academic mainstream.

Though he could not have known it at the time, in 1973, Rainer Martens, a young professor at the University of Illinois, defied received wisdom and took a small step that was to affect

professional communication in sports and allied fields. He had just finished hosting a successful conference on sports psychology and sought to publish the conference proceedings to make them available to colleagues. He put out many queries to publishers, but was rejected by all. So, aided by his wife and working at home, he had the papers turned into a book by a local printer, sent out flyers to promote it, and named the venture Human Kinetics.

He initially envisioned Human Kinetics as a low-key sideline. He soon proved himself wrong. Over the first five years, more and more colleagues asked him to publish books that had been rejected by established publishers, who apparently had failed to spot the rise of the sport and exercise sciences. By 1979 Human Kinetics had outgrown the basement ping-pong table that had served as its office and had become a publishing company. By 1983 it had turned over its first million USD. Thereafter, turnover skyrocketed, to USD 6 million in 1990, USD 20 million in 2000, and nearly USD 30 million in 2003. Human Kinetics now has a staff of 300, subsidiaries abroad in Canada, England, Australia, and New Zealand, and each year publishes some 150 books, 100 issues of 22 journals, 35 videos, 24 online courses, and 20 software products, some now Web-based. It publishes eight catalogs and has a comprehensive Web site at <http://www.human-kinetics.com> with links to four ancillary Web sites.

Martens believes that the success of the company rests on user-driven practices in professional communication. He claims no visionary abilities other than a willingness to develop to meet user needs for knowledge. On the bulletin board behind his desk he has a list of eight simple tenets:

- Know your customer
- Provide superior content
- Provide answers, not just information
- Utilize technology
- Provide superior customer service
- Provide flexible distribution systems
- Provide creative pricing options
- Care

Of the tenets, he sees the third as increasingly challenging. Information technology has brought improved means of conveying knowledge (it’s easier to learn how to hit a golf ball from a multimedia presentation than by reading a book) but also the threat of burying it. Information overload is commonplace; yet there is a dearth of knowledge. So, he believes that professional communication can respond by developing “knowledge management” systems that provide architecture to access the knowledge needed to solve a problem at hand. Backdated to 1973, that’s equivalent to saying that the best way to provide your colleagues with the knowledge made available at a conference is to start a publishing venture on your basement ping-pong table. And Human Kinetics is proof: The approach works.

## What Embodied Information Means for Technical Communication

By Robert Krull

A large slice of our professional practice has been based on research that treats user understanding of language mainly as an abstract process. Rules of grammar are valued because they structure logical relationships among words in a sentence. For example, nouns and verbs should agree in number so that users can easily pick them from among other words in sentences.

When we treat grammar rules as universals, we are saying that they hold despite differences in the physical world among the people, objects, events, and actions that are referred to in sentences. A familiar grammar universal is that sentences should be written in active voice because active voice makes clear who causes events that are described. At least a couple of studies have shown that recommendations about writing in technical communication textbooks and journals are predominantly concrete suggestions about grammar. There are comparatively few guidelines about the *content of information*. Is this a good thing? Let's look at the recommendations for sentences written in active voice, the most frequently offered guideline.

One study performed a frequency count of verb forms in sentences in user manuals, reference manuals, and other material collected from six multinational corporations. Verb forms varied considerably and in

unexpected ways. For example, user manuals, which would be expected to contain a lot of procedural information, actually contained fewer active-voice sentences than did reference manuals.

But is that all there is to it? Suppose that a user manual contains lots of sentences in active voice, but the subject of the sentences is the equipment rather than the user. For example, one study found a user manual in which the user was the subject of sentences less than five percent of the time. Users might not like such a manual even if it did include lots of active-voice sentences. The manual wouldn't seem to have much to do with them.

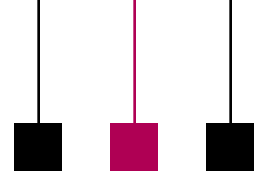
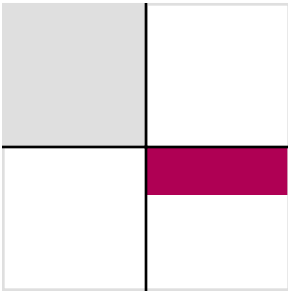
A new approach, sometimes called "embodied language," argues that users ground their understanding only partly in abstract aspects of language. Instead, the new approach suggests users understand language in a way that is grounded in concrete *experience*. According to this view, users link the meaning of individual words to their physical environment and the meaning of connections among words to actions and events in that environment.

The implications of the new approach for technical communication are considerable. One implication is that adherence to grammatical rules produces only partly successful user information. It is necessary, in addition,

to consider how language connects to people's physical experiences. Researchers who work within this approach vary with respect to how concrete they expect user processing of language to be, with a few arguing that every aspect of language processing is somehow grounded in physical experience. It seems more plausible that users process some kinds of language more concretely than others. For example, users' processing of instructions for changing an oil filter on a motorcycle engine is likely to be more concrete than their trying to understand the principles of the LINUX computer operating system. Let me give a couple of examples of research in the area to illustrate its potential for technical communication.

- One potential area of application for the embodied approach is to tasks that involve people and objects' positions in a physical space. Arthur Glenberg and his colleagues have researched how users process sentences that describe relative locations of objects. They have found that users' sentence comprehension is affected by object location and that comprehension errors occur when relative locations are left implicit. For technical communication such findings suggest that users work through the meaning of sentences by using their understanding of the relationship of words to a physical environment, rather than just working with meaning at a grammatical level.

Users may understand language in a way that is grounded in experience.



• In a separate though similar set of studies Barbara Tversky and her colleagues have found that users remember information about three-dimensional physical spaces based on the positions of their own bodies and objects within the spaces. For example, when users read a description from the point of view of a person within a scene, they recall information differently than when they read a description from the point of view of a person outside the scene. For the former description, users more quickly recall items that are described as being in front of them than items described as being behind them. This corresponds to users' typical perceptions of space (they have eyes at the front of their heads not the back). For descriptions framed outside the scene, users do not show a recall advantage for items in front, indicating that they conceptualize the scene based on the different point of view.

Tversky's group has also found that *speakers* smoothly blend different points of view when constructing sentences because doing so is parsimonious compared to making each point of view explicit. Listeners can follow those shifts when they have enough context to detect what words refer to.

Taken together, such findings could explain how computer users would understand the following instruction, intended to tell them how to turn off the power on a CRT monitor:

Flip the switch on the right to the back.

Several points of view are implied rather than explicit in that instruction. Is the switch on the right side of the person or the right side of the monitor? Is the monitor placed so that the glass side faces the user or is turned away from the user? Does the word *back* refer to the user's back, the back of the room, or the back of the monitor? Users may be able to follow the switches in point of view if they can see the situation visually. They may not be able to follow if they do not have a visual referent.

A purely grammatical analysis of the instruction does not answer those questions or suggest a cure for potential problems in the instruction. An embodied-information approach could suggest directions for improvement by demanding that the instruction make clear how user and object

are placed relative to each other and the room.

The research on embodied information will enable technical communicators to move beyond guidelines based only on grammar. Instead of just telling communicators to cast a sentence in active voice, an embodied information approach could suggest who or what to place in the subject and object positions of the sentence, how to choose a verb that relates the two effectively, and how to select words that support users in taking action.

*The author is professor of communication at Rensselaer Polytechnic Institute in Troy, New York. He conducts research on graphics and text for procedural information and teaches courses in documentation, user interface design, and instructional design.*

## IPCC 2005 in Limerick

*(continued from page 7)*

*grady\_h@mercer.edu*. The deadline for proposals is **15 October 2004**.

Be sure to check the Limerick booth at IPCC 2004 in Minneapolis this month. We will give away a free IPCC 2005 conference registration to some lucky person who registers and is present at the Minneapolis conference.

If you have questions, please contact me. I look forward to seeing you first in Minneapolis and then in Limerick. Marj Davis, general chair: *davis\_mt@mercer.edu*.

**N**ever joke with the press. Irony does not translate into newsprint."  
—Erica Jong



GORDON H. BYFORD

Gordon H. (Mick) Byford, who died in December 2003, made an outstanding contribution to the IEEE. Mick's professional interests were in vestibular physiology and physiological signal analysis. He held the position of head of aviation medicine at the Royal Aircraft Establishment, Farnborough, U.K., and continued to lecture in Europe on his subjects of interest after retirement.

For the United Kingdom and Republic of Ireland Section of IEEE he had acted as both section chairman and section secretary.

Mick was editor of professional medical journals and took on the additional task of producing the *U.K.R.I. News*. This newsletter was the model for the IEEE *Region 8 News*, which he edited and produced between 1983 and 1998. He was always conscious that, as a service to every member, newsletters must be of the highest quality.



He experienced and struggled hard to overcome an editor's usual problems in getting people to send in the latest news and contributions. He wrote editorials using his own, often ironic, humor which was not always appreciated by some of his senior and more seriously minded readers. Mick put much time and effort into the newsletter development and in finding ways in which to minimize the cost of production and distribution.

All IEEE Region 8 members should appreciate that Mick Byford made an outstanding contribution towards making the U.K.R.I. and Region 8 newsletters the valuable,

respected, and well-presented publications they are today. In 1990 Mick acted as host organizer for the first International Professional Communication Society conference to be held outside the U.S. That conference in Guildford, Surrey, U.K., was significant since it also acted as a springboard for an IEEE society's working visit to Estonia. Professional Communication Society members from the United States organized workshops in Tallinn that helped form personal relationships that assisted in the development of the Russia Section.

In 1989 Mick Byford received the IEEE RAB Larry K. Wilson Transnational Award "For creative innovation in the editing, production, and management of the *Region 8 News*, thus improving communication and member service in Region 8."

*Prepared by R. C. Winton; reprinted from the U.K.R.I. News, March 2004.*



Elizabeth Weise Moeller

## Internet Applications: Making Your Web Site Work for You

In the previous issue I covered how to create a Web site on a shoestring budget. If your budget permits a little more creativity, your site can be much more than just a marketing tool for your business. As you become more familiar with your site and navigating the Internet, it is time to start asking what your site can do to help your business work more efficiently. Internet applications can be as grand as customizing a customer's shopping and check-out experience (such as at Amazon.com) or as simple as providing a form to register for a meeting or event. One thing is certain, however: You do not need a king-sized budget to create Internet applications that set your organization apart.

### Why Internet Applications?

There are three main reasons for using Internet applications: supporting customers, streamlining processes, and helping staff. *Supporting customers* essentially means that you provide an application that makes it easier for them to interact with your Web site or find what they are looking for. It can also mean providing services online that make better use of their time when they reach your place of business.

In upstate New York, Oligny's Country Gardens, a family-owned plant nursery and landscape center, uses their Web site (<http://www.olignys.com/perennialsearch.html>) in a unique way to help their customers find perennials. Customers can search for plants by flower color, month of bloom, sun exposure, butterfly or hummingbird attraction, and so on.

They make it easy to find a yellow flower that blooms in August and needs partial sun. Examples of customer support on other Web sites include order tracking, product configuration, and technical support assistance.

You can also use your Web site to *streamline processes*. This is especially useful if you can capture data on forms and import it directly into your database, minimizing duplication of effort. Professional organizations, for example, often allow one to complete a membership application online. That data is saved in a database format and automatically imported into the master membership database. This is much faster than asking an administrator to enter the data from a handwritten paper form, especially if she or he needs to decipher bad handwriting.

Web sites and Internet applications can be used to *help staff* of a small business. A very simple implementation is the Web site for First Night Saratoga, a local community-wide New Year's Eve celebration. In the first year of First Night, the phone rang off the hook with people asking where they could buy admission buttons. In the second year, the Web site had this information and the outgoing voice mail message on the First Night phones reminded people to check the Web site. Calls diminished dramatically, leaving the staff to do the other work that needed to be done.

The possibilities are endless. Other examples of Internet applications are:

- Event registration
- Meeting scheduling and other calendar functions
- New patient forms completed online before first visit to a medical office
- Online giving for non-profit agencies
- Restaurant reservations or ordering for pickup

The end results of any Internet application implementation should include reduced phone calls, less time spent on tasks that can be automated, and more time to work with customers who have more complicated issues.

### What Is Required?

Four main elements are needed to create Internet applications:

- **Web site** This may seem obvious, but it is helpful to have at least a basic Web site with a solid foundation in place before trying to add too many new features.
- **Database connectivity** These systems work because data is transferred from one location to another without human intervention. Adding a lot of extra work to transfer data diminishes the time saving realized by the applications.
- **Well-defined workflow process** You need to know what happens in-house when someone uses one of these applications. A poorly designed workflow process only confuses matters and makes it more difficult to process the automated data.

(continued on page 22)



Ronald J. Nelson

## Ants!

In this column I encourage professional communicators to be receptive to the countless influences that pervade life and so broaden and deepen our way of seeing the world, including (but not limited to) art, music, literature, sports, technology, medicine, history, psychology, and nature. My reason for doing so is my belief that masters of style are almost invariably Renaissance persons who are adept at interweaving various aspects of a subject into cogent documents that achieve their effects with seeming effortlessness.

Just as the spokes of a bicycle wheel support the hub, rim, and tire, keeping the apparatus in place even as they come into the hub at regular intervals and contribute stability and strength to the moving wheel, so too masters of style, like true students of writing, approach their central topic from a multitude of angles. By doing so they produce worthy pieces of writing that integrate relevant information from various perspectives into a meaningful whole, thereby enabling the reader to advance in knowledge and appreciation of the subject, the core.

Take ants. If a person wanted to create a document on that subject (or any other subject, for that matter)—say an article for *Smithsonian* geared to a lay audience—the writer would need to delve into the topic by researching its various aspects to become a subject matter expert on it. Something of the detective kicks into

gear to try to ascertain the inner workings, the secrets of the subject. In this case it would be a quest to learn about ants, in the spirit of enlightening the self in preparation for enlightening the reader. In other words, the superb writer explores the subject with a determination to satisfy his or her curiosity by becoming knowledgeable on it and then sharing that knowledge with the reader for the good of the individual or the organization or both.

Clearly, people have much to learn about human behavior from ants, a fact that has been celebrated in works of fiction and nonfiction over the centuries. We can also, of course, learn stylistic lessons from those who have written about ants. Indeed, it is refreshing to read documents that illuminate us on both counts, allowing us to see things with fresh, renewed eyes. Let us briefly look, then, at four resources: a sentence from a story, a section of a longer nonfictional piece, an article in a technical journal, and an entire book on the subject.

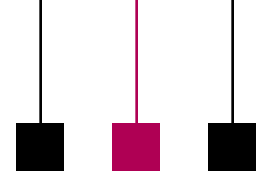
In Virginia Woolf’s short story, “The Mark on the Wall” (*The Complete Shorter Fiction of Virginia Woolf*, 1989), for example, we find the following sentence: “How readily our thoughts swarm upon a new object, lifting it a little way, as ants carry a blade of straw so feverishly, and then

leave it” (p. 83). That sentence accurately reflects a common proclivity to think about something as being vitally important for a while, thence simply to drop off the burden—all conveyed on the vehicle of a delicate, unexpected analogy. Such an imaginative way to provide insight into human nature—employing as it does related words like “readily,” “swarm,” and “feverishly”—contributes to and ensures coherence as it reminds us of how our behavior is sometimes strikingly similar to that of these tiny creatures that inhabit the world with us (or we with them). The sentence is stylistically impressive,

moreover, as it alternately intensifies and releases pressure on the reader’s mind. In the process it helps us put into perspective what seems (and perhaps is) weighty, thereby lightening the burden somewhat.

That keen observer of nature and man, Henry David Thoreau, also wrote about ants in “Brute Neighbors” (*Walden*, 1854). How casually he introduces his subject, corrects himself for accuracy, and describes the situation dynamically: “One day when I went out to my wood pile, or rather my pile of stumps, I observed two large ants, the one red, the other much larger, nearly half an inch long, and black, fiercely contending with one another. Having once got hold they never let go, but struggled and wrestled and rolled [polysyndeton,

Involvement in subject matter can contribute to making a document powerful and memorable.



note] on the chips incessantly.” He then realizes that it is actually “a war between two races of ants, the red always pitted against the black, and frequently two red ones to one black.” As he becomes increasingly engrossed in the struggle, he reports it faithfully, reflectively: “On every side they were engaged in deadly combat, yet without any noise that I could hear, and human soldiers never fought so resolutely.” Here he points out his own limitations while clearly admiring the ants’ determination, making the seemingly silent battle all the more poignant. Indeed, “they fought with more pertinacity than bulldogs. Neither manifested the least disposition to retreat.” Thoreau seems almost surprised to be caught up in the action: “I was myself excited somewhat even as if they had been men. The more you think of it, the less the difference.” He sees the struggle as no less significant to them than historical battles among humans: “I have no doubt that it was a principle they fought for, as much as our ancestors, and not to avoid a three-penny tax on their tea; and the results of this battle will be as important and memorable to those whom it concerns as those of the battle of Bunker Hill, at least.”

Then, the true scientist, he “took up the chip on which the three I have particularly described were struggling, carried it into my house, and placed it under a tumbler on my window sill, in order to see the issue.”

With a microscope he observes the horrors that ensue for the following hour, finally raising the glass and letting the apparent black victor go off in a crippled state. As he says, “I never learned which party was victorious, nor the cause of the war; but I felt for the rest of that day as if I had had my feelings excited and harrowed by witnessing the struggle, the ferocity and carnage, of a human battle before my door.” Thoreau’s words suggest how involvement in subject matter can contribute to making a document powerful and memorable.

Be receptive to the countless influences that pervade life.

Deborah M. Gordon’s article, “The Development of Organization in an Ant Colony” (*American Scientist*, vol. 83, Jan.-Feb. 1995, pp. 50-57), is a model of organization itself, as well as a fascinating

account of the lives of the harvester ant in southeastern Arizona. As she says, “On its own small scale, an ant colony accomplishes many tasks comparable to those in larger human societies: Nests are protected, chambers and tunnels are excavated, and territories are defended.” Over a nine-year period she observed “how an individual ant behaves and how an entire colony coordinates a response to a series of experimental challenges” (p. 50). Gordon orients the reader by reviewing the four distinct tasks that adult workers can perform outside the nest: foraging (retrieving food), patrolling (choosing directions the foragers will go during the day and responding to disturbances to the

nest and invasions of alien ants), maintaining the nest, and doing mid-den work (building and sorting the colony’s refuse pile).

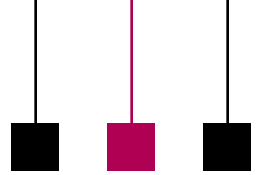
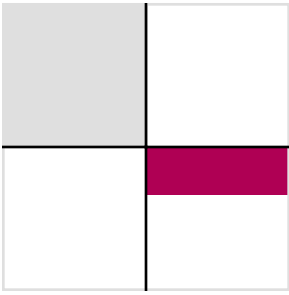
Without going into detail about her experiments, I find innovative her imaginative use of toothpicks near the entrance to the nest (which engage only nest maintenance workers), of small plastic barriers to block foraging ants, and of cardboard cylinders to engage patrolling ants—all of which she tracks by color-coding (painting) the ants according to function. Moreover, she provides graphics depicting the characteristic patterns of paths for each of the four types of tasks.

The definitive book on the subject is Bert Holldobler and Edward O. Wilson’s *Journey to the Ants* (Cambridge: Harvard University Press, 1994, USD 16.95 paperback), which is based on their 1990 highly acclaimed monograph entitled *The Ants*. The earlier work was a technical book “aimed primarily at other biologists, as well as an encyclopedia and vade mecum of myrmecology, the scientific study of ants.” Its sheer size (732 pages) deterred the casual reader from buying it, and it did not attempt to “convey in any direct manner the adventure of research on these astonishing insects.”

Holldobler and Wilson wanted the 1994 book to have a more manageable length and less technical language so as to reach the lay audience.

(continued on page 18)

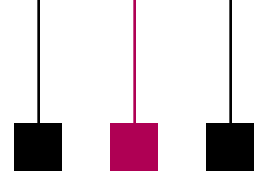
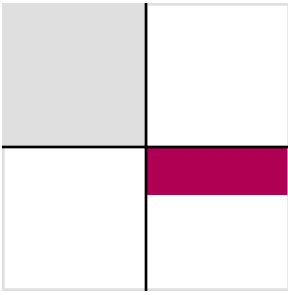




## Hitting the Paper Trail All Over Again

By Duncan Graham-Rowe

Due to copyright restrictions, "Hitting the Paper Trail All Over Again" by Duncan Graham-Rowe could not be posted here; see *New Scientist*, 22 November 2003, page 28.



## Masters of Style

(continued from page 16)

The authors (both Pulitzer Prize winners) cover a great variety of topics related to the ants, including the likely reasons for their success based on “the swiftly applied and overwhelming power arising from the cooperation of colony members,” which in turn seems to be based on chemical communication. The process appears to involve “the release of a medley of substances from different parts of the body that are tested and smelled by nest mates and evoke in them, according to the substances released and the circumstance of the moment, respectively alarm, attraction, nursing, food offering, and a diversity of other activities. Ants, like humans, to put it in a nutshell, succeed because they talk so well.”

The book is a treasure trove of pleasure in which the reader encounters fascinating anecdotes and facts (their history goes back a hundred million years, there are 9500 species, their jaws are the equivalent of human hands, etc.), as well as information about challenges (like the search for the rare *Thaumatomyrmex*, which has a unique mandible).

In conclusion, we live in a huge world that will go by us rapidly like a blur of MTV images, if we are not careful. We need to slow down, in my opinion, to see things—*really* see things—and appreciate them while we can. To satiate that need, we must from time to time ride a bicycle rather than a car through the neighborhood, as well as study small creatures that cohabit the world with us. The microcosm can and does illuminate the macrocosm for us. When we study very small creatures, we study ourselves—no matter how big and important we think we are. If you doubt me, look at the paintings of Thomas Cole, founder of the Hudson River School of painters, in which there is often a vast landscape and somewhere amidst it all is a tiny man. (See, for example, his *Catskill Creek*.) If you doubt me, look up into the heavens on a starry night.

*Ron Nelson is a professor of English at James Madison University, Harrisonburg, Virginia 22807; +1 540 568 3755, fax +1 540 568 2983; nelsonrj@jmu.edu.*



## End-of-Summer Mini-Lessons

### 1. Following

Avoid using the word *following* as a noun. Here are two sentences that incorrectly use the word as a noun:

- Following is a mini-lesson about proper word usage.

Instead, you could revise this sentence to something like: The following mini-lesson is about word usage.

- You can start the program with any of the following: <list>.

Instead, simply add a noun after the word *following*, such as *commands* or *statements*.

### 2. A lot

Do you know that *a lot* is not a word? *A lot* is actually two words. Would you write any of the following words?

*abunch, acouple, adozen, afew*

The Professor doesn't think so! Use *a lot* instead of *alot*.

### 3. Fewer or less

Use *fewer* when referring to nouns that you can count, and use *less* when referring to nouns that you can't count. For example:

- Version 5 has *fewer* authorization restrictions than version 4.
- Using the XYZ option requires *less* administrative resource.
- You can maintain *fewer* servers with less code.

The Professor hypothesizes that writers sometimes misuse *fewer* and *less* because the antonym to each of those words, *more*, works for both nouns

that you can count and those that you can't.

### 4. Haves and have-nots

The word *have* is often misused in technical information. When you state a requirement, use *must* or *need to* instead. For example:

You *have* to specify this parameter before starting the program.

Better: You *need to* specify this parameter before starting the program.

Best: You *must* specify this parameter before starting the program.

Also, avoid using *have* to form verb phrases that are not simple present tense if simple present tense would suffice. For example:

After the table *has been* updated, ...

Better: After the table *is* updated, ...

For better clarity, use simple present tense whenever you can.

### 5. Time for a run

When you refer to the period during which a command or program is executing, use *run time*. When you use the associated compound adjective, hyphenate the two words. For example:

The *run time* might last three hours.

You can issue the command in the *run-time* environment.

Do not use the single word *runtime* except when referring to Java Runtime Environment; in this case, do not hyphenate *Runtime* because this is Sun's official name for this environment.

### 6. Slash the slashes

Avoid using a slash (/) to represent the word *and* or *or*. Slashes cause problems for inexperienced users and for those who are translating the information into a different language because they don't know what the slash really means. For example:

#### *Instead of...*

To start/stop the program, ...

...you can create tables/indexes.

The programmer can enter his/her password...

Windows NT/2000

#### *Use ...*

To start or stop the program, ...;  
To start and stop the program, ...

you can create tables, indexes, or both.

Programmers can enter their passwords...  
Enter your password...

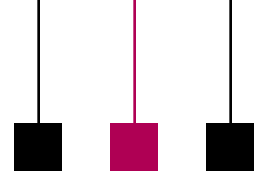
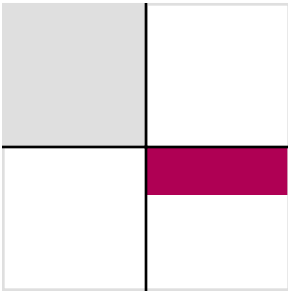
Windows NT  
or Windows 2000

(The ambiguity of the slash isn't the only problem here; its use also violates the Microsoft Windows NT™ trademark.)

The Professor acknowledges that some product names and commonly used terms (such as I/O for input/output) contain slashes, which you can't really modify on your own.

### 7. UPPERCASE

Avoid using uppercase letters to emphasize a word or phrase. Instead, choose clear words and, if necessary, use highlighting to call attention to a specific word or phrase that needs special emphasis. For example:



## Division VI Director Candidate Statement of Mark Haselkorn (Nominated by Division VI)

### Instead of...

Do NOT issue the STOP command BEFORE you issue the START command.

The program returns ALL values that satisfy the search criteria.

### Use...

Do not issue the STOP command before you issue the START command.

The program returns all values that satisfy the search criteria.

Most translation tools and translators assume that words that are in uppercase letters are acronyms or abbreviations and therefore they do not translate them into other languages. IBM style guidelines recommend use of italic highlighting for emphasis but discourage its overuse. If you emphasize too much, the effect is diluted.

### 8. Since you asked

Most English speakers often use the word *once* to mean *after* and the word *since* to mean *because*. In technical writing that is translated or read by an audience that includes people whose first language isn't English, you need to be more precise in the words that you use. For example:

#### Instead of...

Once you have installed the agent, ...  
Since you created the table, you can change...

#### Use...

After you install the agent, ...  
Because you created the table, you can change...

### 9. Do you verb your nouns?

Avoid using words in more than one grammatical sense. For example,

Some within IEEE view Division VI as housing "soft societies," by which they mean somehow less complex or central to the Institute's mission. Those people couldn't be more wrong. We all understand the complexity and criticality of the technical advances and practical applications that are the focus of the nine other divisions. However, Division VI addresses the development and management of these activities within the context of organizations; their functioning within the environments that we use them; their implications on the quality of our lives; the information and communication and educa-

tion that makes all this possible. The interdependencies between IEEE's technological innovations and the world's social, political, economic, and educational institutions are incredibly complex and critical to the Institute. Throughout my career I have been a successful leader of major interdisciplinary, technically based initiatives for large, complex organizations. As Division VI Director, I will energetically apply that experience to assure that all of IEEE recognizes, supports, and takes advantage of Division VI's leadership of our impact on and outreach to the rest of the world.

avoid using the same word as both a noun and a verb. For example:

#### Instead of...

The mining run might fail if you do not run the application.

FTP the file to the server.

The install program creates new files.

The files are created during install.

#### Use...

The mining utility (or query) might fail if you do not run (or start) the application.

Use FTP to add the file to the server.

The installation program creates new files.

The files are created during the installation.

Do an import of the metadata.

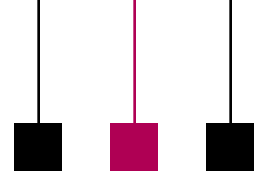
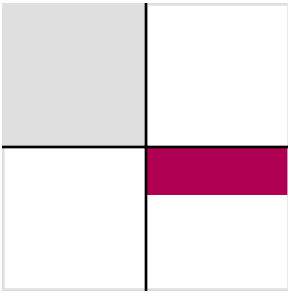
When the import completes...

Import the metadata.

When the import process completes...

*Copyright 2002 by IBM Corporation. Used with permission. Professor Grammar is an advisor to the IBM Santa Teresa Laboratory Editing Council. Each month she sends a lesson to the technical writers at the Laboratory. Many of the Professor's lessons are based on tenets described in the Prentice-Hall book **Developing Quality Technical Information: A Handbook for Writers and Editors**, recently authored by the Council.*





## Can't Remember Your Password? See Your Dentist!

By Dan Danbom

I've been getting frequent headaches and flaky skin lately, and my doctor says it's because I have to remember at least 20 different passwords including my home voice mail password, my work voice mail password, my cell phone voice mail password, my home Internet access password, my work Internet access password *and* e-mail password, my benefits voice-response system password, my long-distance access password, my alarm system password, my garage-door opener password, and a whole bunch of online subscription passwords, including one to a professional tome I enjoy called *The Journal of Nubile Cavorting*.

It turns out that, in this narrow area of human existence at least, I'm normal. Many office workers are forced to remember more than 20 distinct passwords. Of course, scientists (and most of us) know that the average person has difficulty remembering more than four or five passwords or, if you have the mental firepower of a columnist, almost two.

In a sane world you would have a single password that would work on everything. It would be the information age equivalent of your Social Security number, yet something that was personal and descriptive and unlikely to be taken by someone else, something like "stranglebunny." But because that would be efficient, easy, and make sense, software designers have worked extremely hard to come up with different ideas. Not only must you use different passwords, but also

your e-mail system and all the other systems on your PC are constantly demanding *new* passwords.

The result is that about half of the calls to information technology help desks are from memory-strained wretches who have forgotten their passwords. Computer system administrators have special ways to retrieve forgotten passwords, including hypnosis and sending high-voltage electric current through your keyboard. The cost to an average large corporation of having people find forgotten passwords is easily USD 1 million a year.

Because calling the help desk is a pleasure on a par with chicken pox, many workers simply write their passwords on a piece of paper and tape it to their computer. Whereas this ensures that no one will forget a password (because they don't have to memorize it in the first place), it also can lead to mischief if unauthorized persons access your computer and download secret nuclear-launch codes. Or, worse, negative outcomes can come out if unauthorized persons access your computer and send e-mail that contains inappropriate sexual suggestions to can't-take-a-joke senior executives.

Companies can be paralyzed if disgruntled employees jump ship and tell no one their passwords. One company was particularly devastated when a high-speed bus hit a high-

level systems-administering employee. Concerned executives hovered by his bed in the pre-terminal unit of a hospital, holding his hand and whispering to him, "Bob, is there anything we can do for Sue and the kids after you give us the password?"

Remembering passwords has become a sticky problem for which the computer industry is endlessly searching for complicated and expensive solutions. One is "biometric identification," a method that will allow you into password-protected areas after you have pressed your face, fingers, or retina against the computer screen and it has confirmed that you indeed look silly.

Another solution, based on the specious belief that you never forget a face, asks users to identify previously designated human faces from among a gallery of portraits, and the portraits of course would not be of people everyone could identify such as Elvis and Madonna, but rather more obscure persons such as your Uncle Gus and his wife, Leonardo DiCaprio, etc.

Until these products are more universally available, you're stuck with your memory and any memory aids you can come up with. For example, it's usually easy for me to remember that my name is "Dan," so all my passwords similarly begin with "D." As a backup precaution, I always write them down and give them to

Until biometrics takes over, you're stuck with your memory.

(continued on page 22)

## Special Issue of *Technical Communication Quarterly* on Communication in Technology Transfer and Diffusion

This special issue of *TCQ* will explore technical communication research, pedagogy, theory, and practice in commercializing high-tech innovations—perspectives that are often omitted or incorrect in R&D literature. We invite articles on the processes and consequences of moving technological ideas, skills, process, hardware, and systems across national, geographic, social and cultural, and organizational and institutional barriers. Articles might address the following topics:

- Archetypal case studies that cross context and time
- Courses and content necessary for successful technology transfer
- Metrics of successful technology transfer
- Moments in history that define communication in technology transfer and diffusion
- Requirements for practitioners to be linkage champions between scientific research and product development
- Rhetoric capable of embracing the nuances of technology transfer
- Social perspectives that could provide a conceptual framework for technology transfer events

Send proposals in a .DOC or .RTF file via e-mail to editor **Nancy W. Coppola**, [coppola@njit.edu](mailto:coppola@njit.edu). Contact the editor if you have any questions or would like to be considered as a reviewer for this special issue.

### Deadlines

1-2 page proposal for paper	15 December 2004
Full paper (if proposal is accepted)	15 July 2005
Scheduled publication of issue	Summer 2006

## Net Notes

(continued from page 14)

- **Secure Web server** If you are dealing with sensitive personal or financial information, it is a requirement; in other cases it may be optional.

### What Are the Costs?

The costs vary depending on the type of application. They start around USD 200 to implement a simple form. They increase as the level of complexity and customization increases. It is important to remember that, in many cases, you want a custom application. You want an application that works with your specific business situation and for your customers. Therefore the up-front costs may be more, but the savings realized for the automated

Support customers, streamline processes, help staff

task will far outweigh the initial expenditure.

Internet applications are here to stay. They can save your organization time and money. There is often a proven return on investment when time savings are measured. One of the best things you can do for your customers is to make yourself available to meet their needs. By creating Internet applications geared to their needs, you can make yourself available 24 hours a day.

*Elizabeth Weise Moeller was president of PCS 2002-2003. She owns Interactive Media Consulting, LLC (+1 518 587 5107, [beth@imediacon.com](mailto:beth@imediacon.com))*

*sult.com), a World Wide Web and Internet training firm in Saratoga Springs, New York, which provides Web site design and Internet training for businesses in the Northeast.*

## Password

(continued from page 21)

someone skilled in holding information in confidence, and whose name also begins with “D,” my doctor.

Or was it my dentist?

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# Call for Papers IPCC 2005 Making Connections

10-13 July 2005 Limerick, Ireland



**Ceangail (KANG-guhl)—Gaelic, tying or connecting together.** Communication is the tie that binds people around the world, crossing boundaries of knowledge, cultures, languages, and values. Technical communication connects engineers, educators, managers, and communicators in a global community. Come to IPCC 2005 in Limerick, Ireland, to explore these connections and share knowledge. <http://ieeeps.org/Limerick>

## Proposed Program Threads and Topics

- **Localisation**
  - Technical writing
  - Technical translation
  - Vendor management
  - Writing for International English
  - Project management
  - Localisation teams
  - Software issues
- **Engineering Management**
  - Managing virtual teams
  - Cross-cultural communication
  - Knowledge management
  - Compatibility issues
  - Managing technology
- **Teaching and Training**
  - Teaching engineers
  - Preparing practitioners
  - Distance learning
  - Writing in new fields
  - International English training
- **Tools and Technology**
  - Translation tools
  - E-learning tools
  - New technologies
  - Authoring tools for the Web
  - International documentation
- **Cross-Cultural Communication**
  - Design and graphics
  - Web design
  - Training
  - Outsourcing issues
  - Documentation challenges
  - International English; ESL
  - Usability

**Session Type**  
**Paper** (2-3 presentations in a 90-minute session)  
**Panel discussion** (1-4 speakers, brief presentations with discussion in a 90-minute session)  
**Conference workshop** (90 minutes)

### Proposal Instructions

Please submit these items:

1. Description of topic (250 words)
2. Description of intended audience
3. Brief (100-word) biosketch of each author, including contact information (e-mail address and telephone number)
4. The suggested thread
5. The suggested session type
6. Statement of agreement to present: "If this proposal is accepted, I agree to register for IPCC 2005 and make the presentation described in this proposal."

Send your proposal to **Helen Grady, program chair**, at [grady\\_h@mercer.edu](mailto:grady_h@mercer.edu) no later than 15 October 2004. Electronic submissions are preferred. If you have questions, contact her at +1 478 301 2211.

For other conference questions, contact **general chair, Marj Davis**, at [davis\\_mt@mercer.edu](mailto:davis_mt@mercer.edu) or call +1 478 301 2356.

### Program Calendar

- |               |                               |
|---------------|-------------------------------|
| 15 Oct. 2004  | Proposals due                 |
| 15 Nov. 2004  | Acceptance notifications sent |
| 15 Jan. 2005  | Draft of paper due            |
| 15 Feb. 2005  | Feedback to authors           |
| 15 March 2005 | Final papers due              |



## Awards Banquet

A highlight of the IPCCs is the awarding of PCS honors to several outstanding communicators (see the article on p. 1). This year awards chair Robert Krull will present the awards at the unique Frederick R. Weisman Art Museum on the University of Minnesota campus, a short walk from the conference hotel. Designed by Frank Gehry, the museum has a stainless steel exterior.

Join us on 30 September for the candlelight awards banquet overlooking the Mississippi River and its autumn colors just off the upper gallery

*Photo by Don Wong.  
Used with permission.*



suite of the Weisman Museum. The gallery, featuring contemporary art, will be open for viewing and free to IPCC registrants. The menu for the evening is being prepared by Minneapolis–St. Paul's

premier caterer, A Taste of Scandinavia, well-known for their ethnic-accented entrees. Selections will include Norwegian salmon and beef tenderloin along with a full complement of hearty autumn dishes. Warm appetizers will

be served during the cocktail hour as you listen to the acclaimed Twin Cities pianist and arranger Sanford Moore.

For a complete program and news and updates, visit us online at <http://www.ieeepcs.org> (click on IPCC 2004), where you can register through 17 September.

NAVIGATING  
THE EVOLVING  
FRONTIERS OF  
COMMUNICATION

29 SEPTEMBER –  
2 OCTOBER, 2004

