THE PIRATES OF PCs
BY MARCUS BALES

Gilbert and Sullivan must be twirling in their graves. Currently making the rounds on the I-way in cyberspace is an adaptation of their comic song "The Very Model of a Modern Major-General."

I am the very model of a modern cyber-netizen:
All logic I dispense with, and all taste and manners jettison.
I'm found on TV, radio, and many other "mediam".
But cyberspace is where I'm most particularly tedious.
I come in every stripe, from the conservative to radical,
And know it all except for how to spell or be grammatical.
I haven't got a clue about the use of logically,
And drive on with made-up-factoid bargain-bin banality.
I flame opponents hairless from a dozen different pseudonyms,
Each one a ruder, lower pun on Anglo-Saxon crudonym,
And where I find civility and hot debate have been at ease,
I break it up with spamming, flaming, scrolling, and obscurities.
I'm ignorant in every field, poetic to statistical,
Which only makes my points of view more thoroughly sophistical;
My attitude's aggressive and my tone is sanctimonious,
My facts are bad, conclusions wrong, and arguments erroneous;
My posts are pure unparagraphed expressions of my vanity,
Impossible to parse except perhaps for the profitability.
I'm known for disputatiousness and other sorts of knavery.
From purposeful mendacity to things yet more unsavoury.
The places civil reason is accounted most ignituous
Are places where you'll find me inapacitiously oblivious.
In short, all logic I reject, all taste and manners jettison
Because I am the model of a modern cyber-netizen!

To communicate with the author send e-mail to mbales@cybergate.net or visit http://www.bongbull.com.

LETTERS TO THE EDITOR

I seldom raise here but occasionally it occurs: In July I received two letters to the editor!

Joe Chapline, a founder of PCS in 1957 and president in 1958-59, reflects on the changing contents of our profession; and Jean-loc Dumond, our Good Intent, Poor Outcome columnist, takes issue with Luc Bouquet's view of technical communication in Belgium (Newsletter, July/August issue). Ed.

Joe Chapline:
I hear your pleas for articles for the Newsletter. I would love to write one, but I gave a talk at the SIGDOC meeting down in Massachusetts about four years ago and while I was there I listened to some of the other talks being given at that conference. I felt so out of it that I went home realizing that the world has passed me by.

I loved the old PCEWS [Professional Group on Engineering Writing and Speech, the original name of PCS in the late '50s and early '60s]. I worked at presenting conferences at Michigan State University and other places. Back then we talked about grammar and knowing what you were talking about. Now it seems that computer technology and the many wonderful ways to escape from the obligation to know what you are talking about have advanced so far that I feel helpless to help.

I taught more than 200 courses in writing to various technical organizations in the Philadelphia area (Philadelphia Electric Co., Philco, RCA, Navy, Aberdeen Proving Ground, and so on). I used to tell the classes along about the eighth edition of ten: "You thought I was going to teach you how to write."

Well, no one can do that. But I can teach you how to think clearly, and if I succeed, the world will understand you. I have heard people who did not know my language natively who explained the most complicated things in the most broken English, yet I understood what they said."

As an organizer since I was 15, I have heard many sermons, many with the most beautiful rhetoric, that didn't say a thing! And I read computer manuals hoping to understand the programs on my computer. I have my own computer that my son has compounded for me out of trade parts. I love it. But when I buy manuals to understand the newest program he has given me, I find the manuals do more to confuse me than help.

I have coined an expression: George Washington Bridge Problem. Anyone who has gone over the Hudson River on the George Washington Bridge knows that if he misses the correct turn at any point on the bridge, his life will be forever changed; his old karma will never be retrievable. He is in a new life pattern. He will never be able to get back to the point where he made his first error.

That's the feeling I get when I try to figure out how to use a new program. I suspect that the sales departments have had such a large influence on the manual writers—to tell me all about the wonderful program and all the things it can do—that they swamp me with information long before I have even plumbed the first things it can do. Whatever, they're terrible and I see little improvement.

I feel real tongue-tied when it comes to writing a paper for you. I normally write a page-long article each month for the
FROM THE EDITOR

LETTERS TO THE EDITOR

newsletter issued by the church where I play the organ and train the choirs. There I enjoy the fact that the subject of music and its demise under church auspices, but that is a subject about which I feel a little more conflicted than I do about technical writing. Best wishes to you.

—Joe Chapline
Newbury, New Hampshire

Jean-luc Doumont:

I am very surprised at the strong regional stance of Luc Bouquet’s article “Technical Communication in Belgium” in the July/August issue of the Newsletter. As evidenced by the sidebar, the article’s main point is that “the technical communication business is mainly located in the Flemish part of the country and in Brussels,” apparently because “technological valleys are growing in Flanders” and “the Flemish people are doing quite well in English.”

I fail to find in the article convincing evidence of such Flemish dominance, on the contrary, I see three weakenses in the argument.

First, I am surprised at the lack of definition for the “technical communication” business. I fear that it is taken to mean “writing manuals” (Luc Bouquet’s main line of business, if I judge by the opening words of his Web site), an equivalence I would find too restrictive.

Second, I doubt that the (low) membership of the Belgian Chapter of the Society for Technical Communication is a faithful image of the profession in Belgium. An STC member myself, I heard but recently about the existence of a Belgian Chapter and, for lack of clarity about the boundaries of membership, have not enrolled yet. I place within that the Chapter, created by Luc Bouquet, recruited its 80 members primarily among Bouquet’s (Flemish) professional network.

The argument about membership may moreover confuse geographical location and language use. I am a native French speaker now living in Flanders. Am I a Flemish person by Bouquet’s standards? I do not think of myself as one.

Third, and maybe most important, I fail to see the relevance of geographical bias (if any) within a country as small as Belgium in an age in which workers move freely across Europe, more and more people work in: home or from remote locations, and the Internet makes geography largely irrelevant for business. (The topic sentence “Belgium is a split country” reflects the author’s bias from the start. As far as I know, Belgium is a federal country; so is the United States.)

If the article merely reflects the author’s opinion or experience, I understand better but would have appreciated it if stated as such. My own experience, indeed, is different. As an example, my company has been teaching technical communication all over the country to Dutch-speaking and French-speaking people (often mixed) and to foreigners, in industries, federal and regional research centers, and universities (continued on page 6)

IEEE PROFESSIONAL COMMUNICATION SOCIETY

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BAD NEWS FOR TREES

Part 3: Digital Paper, Digital Presses [Part 1 is in the May/June 1999 Newsletter; part 2 is in the July/August issue.]

Several companies and research laboratories are already developing what they regard as the second generation of electronic books. These aim to mimic conventional reading materials even more closely than e-books while still reaping the benefits of digital publishing, namely quick updating, cheap manufacturing, and virtually cost-free distribution. They are building electronic paper.

Joseph Jacobson and his colleagues at MIT’s Media Lab have developed inks comprised of tiny capsules that change color when electrically charged and which can be printed on flexible paper-like materials that can carry charge to the inks. Even the prototypes are strikingly easy to read, though the ultimate aim of the project—an electronic book with hundreds of pages that can display any text—is three to five years away (just as all the best gadgets always are).

The first applications of the technology, from E-Ink in Cambridge, Massachusetts, are due next year [meaning 1999]. They will probably be signs in retail stores which change their messages by radio command. Xerox’s Palo Alto Research Center is also working on a form of digital paper known as Xerox MicroGraphics.

Yet there are two reasons why even the most ambitious champions of digital technology still do not think they can kill ordinary paper. One is the problem of durability. Atoms tend to persist, but electronic signals disappear unless they are records. Unfortunately, both the recording media and the software used to retrieve digital data quickly become obsolete. This problem cannot be solved by technological progress because it is caused by technological progress. Texts that people want to keep for a long time, or to give as durable gifts, are likely to remain in physical rather than digital form.

The other disadvantage of digital media is that people are not digital. They are physical objects who live and work in three spatial dimensions. This situation is not expected to change. People prefer to work and play with objects arranged around them and their memories depend on cues provided by the environment and location. Trend homes can have dozens of digital displays and e-books, paper is therefore likely to keep a place on the desk and in the library, even if they are used only by children. This may not stop them from selling the job perfectly and to stick around. The spoon is one example, the lawn roller another. Paper may well be a third.

According to Xerox International, a broad association of companies in the information business, the number of documents produced by organizations in any format is growing so fast that paper will continue to boom even as electronic documents grow. Xerox expects the proportion of documents that are printed to decline from 90 percent to 30 percent between 1995 and 2005, but the total number of documents printed to double over the same period. One reason for thinking that printed paper will continue to thrive is that the printing industry is itself going digital.

American print firms already account for 60 percent of their jobs in electronic format. Some are starting to use digital presses, which print directly to a plate without the need to make a film for each page. Fully digital presses can economically produce short runs of a handful of copies or even customize each copy. They can already match the quality of conventional lithographic output. Books (though book or glossy-magazine covers remain a problem). Roughly speaking, most print runs under 1000 copies can currently be more cost-effective on a digital press.

The implications of digital printing are twofold. First, digital presses promise to reduce the cost of publishing by distributing publications before rather than after they are printed. Text and illustrations can be broadcast cheaply in the form of electronic files and then printed at thousands of print shops close to where the book will be sold. One company is already exploiting this idea as a way of selling newspapers.

In 1998 PressPoint began publishing editions of Spanish and Austrian newspapers in Washington and New York. The papers are in color on A3 brochures, printed in

(continued on page 22)

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that you are documenting. If it’s not really a part of the task, consider omitting the step. If it’s not really optional, don’t call it optional.

Final Exam

Use the following steps to test your editing skills and your grasp of this month’s lesson. Why are these steps incorrect?

5. Optional: Click Change to change the description that you specified in step 4.
6. Optional: Use your mouse instead of your mouse for these tasks.
7. Optional: Repeat steps 2a through 2e for each additional item that you need to add.
8. Optional: Click OK to submit the SQL.
9. Optional: Click Cancel to close the window without doing anything.

Take a minute to come up with your own answers before you read on. Then compare your solutions to these:

Step 5 is optional, but is it part of the task? Doubleful. It documents a button on a window but is not really related to the task. If it’s a user specifies a description in step 4, it’s not likely that the user will be itching to change that description by step 5. Omit step 5.

Step 6 is not a step of any task. It’s trying to fit some extraneous tidbit of information into a step. Omit step 6.

Step 7 is not optional. Users who need to add an additional item need to perform steps 2a through 2e. Remove the word “Optional.”

Steps 8 and 9 go together. The writer is trying to document every possibility, so is making both optional. In reality, the user must do one or the other. However, the user doesn’t really have the choice of step 9 because, to complete the task, the user must perform step 8. Remove the word “Optional” from step 8 and omit step 9.

That’s more than enough for one lesson. In closing, the Professor bids you an optionally pleasant summer, if you want one, that is.

__BAD NEWS FOR TREES__

(continued from page 2)

Xerox local print centers and sold in hotels and colleges. Bloomberg, the London Times, and the Miami Herald have all announced ThesisPoint editions. The company hopes to sell 500,000 copies a month in 12-18 cities by the end of 1999.

Digital printing could also let book publishers cut their stocks while keeping their whole back list permanently available by printing books only when retailers—or even individual customers—ask for them. Lightning Print, a subsidiary of Ingram Book Group, America's largest book wholesaler, offers such a service to 180 publishers. Titles can be ordered by retailers one copy at a time. Les Editions 00000.com offers a similar service to individual shop- pers from its Web site. In addition to customized reprints—mostly French literary classics, science fiction, and humanities—the company also sells electronic books for download and preprinted books.

Online publishers and digital-printing outfits are in many ways keen followers of Gutenberg. They rail against the effects of consolidation in the publishing industry and the tyranny of bestsellers. By reducing the costs of making and distributing books, digital publishing could restore the world of reading to the state it enjoyed in the 15th century when print runs were small.

By lumping computers and televisions together, as if they exerted a single malign influence, pessimists have tried to argue that the electronic revolution spells the end of the sort of literate culture that began with Gutenberg’s press. On several counts that now seems the reverse of the truth.

__President’s Column__

STUDENTS SEE COMMUNICATION IN THEIR FUTURE—BUT WHAT KIND?

During the summer break from classes, I’ve been talking with young students about their future and their careers—what they plan to do when they leave Rensselaer (that’s Rensselaer Polytechnic Institute in Troy, New York). These students are among the best and the brightest, so their thoughts may give us good insight to what we might expect as we move into the next millennium.

The students can be divided into two groups: those majoring in technical communication and planning to go into that field as professionals, and those majoring in other disciplines (engineering, science, and management) who see technical and professional communication as part of their chosen profession, though not their main focus.

Both groups seem to be aware of the importance of communication to their professions and to their own professional development. Both groups (or at least the students who spoke with me) are sharpening their communication skills so they can be effective on the job. The two groups, however, see different communication activities as being crucial to their success.

Those preparing to be professional technical communicators look to careers in some of the existing new venues of communication:

- As designers of Web sites and as Webmasters—responsible for creating effective communication using all the latest tools and technologies.
- As communication consultants—responsible for helping organizations develop an image and spread their message to clients.
- As multi-media designers—responsible for combining text, graphics, sound, and animation to produce communication that is both effective and technologically impressive.

Those preparing to be engineers, scientists, or managers also look to careers in which communication plays an important role:

- As innovators—responsible for developing and refining technology that will benefit society and, of course, their own organizations. Many of these students are well aware that it is not enough to be technically proficient; they must also be able to communicate the application of their creativity.

- As leaders of industrial organizations—responsible for communicating within their organizations the goals to be achieved and the measures of success, and outside their organizations the merits of the organization’s output.

- As leading members of technical professions—responsible for communicating with others in their profession so that they can advance the state of the art.

I was—and am—intrigued by these observations. On the one hand, those who will enter the market as professional technical communicators are aware of the need to become technically proficient and are prepping themselves for careers by developing this proficiency and applying their knowledge to communication tasks at hand. Those who will enter the market as technical professionals are aware of their need for what are generally considered the more traditional aspects of communication: awareness of audience, shaping a message to fit an audience, and communicating as an integral part of any development project.

We could assume as generally true that the first group already possess traditional communication skills and are working to round themselves out; we could also assume as generally true that the second group already possess technical ability and are rounding themselves out by focusing on traditional communication skills.

Could it be that we are finally seeing a blending of P.C. Snow’s “two cultures”? Will the professionals who follow in our footsteps have a solid grounding in both the science and technology camp and the
communication and humanistic arts camp? If my observations are admittently limited in scope—are true, we could be making big progress in that area.

And those of us in the IEEE Professional Communication Society may see less of a distinction between our twin goals of helping engineers communicate and advancing the field of technical and professional communication.

Now that’s what I call progress!
—Rogel Gries, r.gries@ieee.org

PCS Survey Results

By ELIZABETH WEISE MOELLER

This spring we asked you to answer Twenty Questions. First, we thank the 70+ of you who have done so. Second, the survey is still online at http://www.ieee.org/pcs/survey.html and we encourage everyone who has not yet responded to do so soon. The results of this survey help us in our strategic planning.

Results

Almost 70 percent of our members describe themselves as a technical writer (24%), an engineer (21%), an educator (14%), or a project manager (10%). This information is very useful to us as we start to define member recruiting strategies.

People are very pleased with the Transactions on Professional Communication and our bimonthly Newsletter. Almost 90 percent of the responders read the Transactions and 95 percent the Newsletter. All Transactions and Newsletter features listed on the survey received a positive reaction.

The top three Transactions features are research articles, editorials, and book reviews. The top three Newsletter features are Tools of the Trade, one-time articles, and Masters of Style.

The only question we really wish we had received more positive responses to is the willing-to-volunteer question. PCS is an all-volunteer organization. We welcome volunteers who would like to help on any of several committees or run for a position on the Administrative Committee. As always, AdCom meetings are open to members of PCS and we look forward to meeting you as we move our meetings around the country.

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<td>PCS Affiliate Member</td>
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One thing often said about PCS is that we are "the best kept secret in the IEEE." Our goal is to change that image. We want people both within and outside the IEEE to know what we are and how we can help them. Over half our members learned of PCS through the IEEE Society listing. Another 20 percent joined on the recommendation of a colleague. These results indicate that we really need to market ourselves outside the IEEE and especially encourage our members to recommend PCS to their friends and colleagues.

Beth Moeller is a member of the AdCom and chair of the Publicity & Marketing Committee. Her Net Notes column appears regularly in this Newsletter.

Professor Grammar

Optional and Conditional Steps

Lately the Professor has been annoyed by commishonals, junk mail, and peasy telemarketers. Although the Professor is in the habit of ignoring commercials and junk mail and summarily hanging up on bothersome calls, she tries to pay enough attention to notice the marked difference between this sort of communication and technical documentation.

Marketing information, whether on television, in the mail, or over the phone, is full of phrases like “Sign up now and we’ll add an additional 20 free minutes” and “To simplify your life, you need to switch to our new plan.” They all hide that what they want you to do is totally optional (of course, you know that it’s optional, but they don’t want to remind you).

In marketing information, the conditional phrasing (such as "Not valid with any other offer" and "Only on alternate Tuesdays when there is a full moon") is usually in fine print or whispered in a "fast speak" at the end of a commercial. In contrast, in technical communication we try to spell out when something is optional.

In technical communication, we begin with their conditions. It is not our purpose to mislead the user. Our purpose is to make optional choices clear and to point out conditions before a user takes a step. As we all allow ourselves to be clear, we need to remember a few simple things about optional and conditional steps.

The Difference Between Optional and Conditional Steps

Many writers and editors do not spend much time thinking about the difference. But confusing the two types by using them interchangeably or improperly can confuse your users. The Professor has seen hundreds of steps like this one:

1. Optional: If you want to specify a description for the widget, type one in the Description field.

What’s wrong with step 1? Is step optional? Yes, it is. Is it conditional? Well, that depends. It is conditional on whether the user wants to, but is that the same thing as conditional? No, that’s the same thing as optional. (The Professor knows that she just lost half of you, so do not be embarrassed to go back and read that again.) More simply put, the phrases "Optional" and "If you want to" are redundant. Users should be able to assume that a step that starts with "Optional" means that they can skip it.

Further, they should assume that a step that starts with "If such and such" means that the step applies to them in the case where "such and such" is true for them. Users cannot skip an step unless they determine that it does not apply to them.

Unfortunately, if your writing is careless, the difference between an optional step and a conditional one becomes muddied. Consider these steps:

2. Optional: Specify a description for the widget in the Description field.
3. If your widget contains whatnots, select the ABC check box.

Step 2 is clearly optional, whereas step 3 applies only to users whose widgets contain whatnots.

Steps That Are Both Optional and Conditional

How do we combine optional and conditional steps? Consider:

4. Optional: If your widget contains whatnots, specify details on the Whatnots Properties page.

In the case of step 4, we have a step that is both optional and conditional. All users can skip the step, but only those with whatnots can choose to follow the step. Compare step 4 to step 3. Both apply to only a subset of users, yet one is optional for those users and one is required.

Override of Optional Steps

Not only must you be careful not to confuse the two types of steps, but you must also avoid overusing the word "optional." Use optional steps only when taking a step is clearly an optional part of the task.
4. Determine the Level of Interactivity

Your site can be an online brochure or one that allows visitors to customize it for their specific needs. At the very least you must include contact information. Visitors should be able to e-mail, fax, or phone you without needing to search further.

A feedback form provides the next level of interactivity. You can ask survey-type questions of your visitors or simply provide room for their comments in either a public or a private forum.

The level of interactivity is almost limitless. Some Web sites allow you to customize information so you can see what you want quickly. An example is The Weather Channel (http://www.weather.com), which allows you to create a "My Weather" page so that when you access TWC's home page the first thing you see is the information you requested.

Other sites provide recommended paths based on previous visits. Amazon.com (http://www.amazon.com) provides book recommendations based on books previously purchased from that site. The key is finding the right level of interactivity for your purpose and audience.

5. Decide on Bells and Whistles

Once you know how the interface will be designed, including the size of the graphical images and any other cutting-edge technologies, it is possible to decide whether you can include any extra "bells and whistles" without hindering the overall usability of your site.

These extras could include two- and three-dimensional animation, enhanced three-dimensional images, scrolling text, sound effects, video, or any other extras that could add to your Web site. However, it is very important to determine how these extras would enhance your image. It is best to include them only if they serve a specific purpose. Gratuitous use of animation that serves only to increase download time will just annoy visitors to your site.

6. Create Content

Although this step is the last one in the design process, it is the most important and most basic one. While the World Wide Web continues to grow at an astounding rate, the amount of usable content on it seems to be dwindling. Web sites that provide useful information for their visitors stand out among their competitors. Do not be afraid to start small by providing smaller sections of quality information. The wonderful thing about a Web site is that it is a document in progress. As your business grows and changes, so can your site.

Finally, your site has been developed and is online. Your work is not yet done. Your site needs to be maintained and updated regularly to keep the content current and remind visitors why they want to return to your site time and again.

Elizabeth Weis Moeller is a PCS AdCom member and chair of the Publicity & Marketing Committee. She owns Interactive Media Consulting (518-566-8765, beto@interactiveconsult.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.

"Good communication is as stimulating as black coffee, and just as hard to sleep after."
—Anne Morrow Lindbergh

"A few words, well chosen and distinguished, will do the work that a thousand cannot."
—John Ruskin

HIGHLIGHTS OF THE JUNE ADCOM MEETING

BY MURIEL ZIMMERMAN

The Professional Communication Society's Administrative Committee (AdCom) held a two-day meeting in Waltham, Massachusetts, on June 26-28, 1999. Major discussion issues were conferences, publications, publicity and marketing, education, and awards.

We held productive breakout sessions on education, finance, and membership, and created an agenda of action items for accomplishing goals. The next AdCom meeting—the annual election meeting—is in New Orleans at the Omni Hotel on September 7, 1999, at 2:00 p.m. All PCS members are welcome to attend.

Conferences

The AdCom approved the final report from IPCC 98 and once again applauded chair Ron Blicx for the successful Quebec conference. Michael Goodman, chair of IPCC 99, reported that plans for the New Orleans conference are proceeding on schedule. Thanks to Dave Milley and Beth Moeller, the IPCC 99 Web site is available through the PCS site and is updated regularly. Tony Temple of IBM has accepted the invitation to be keynote speaker.

Beth Moeller, chair of IPCC 2000, reported substantial progress. The conference is scheduled for September 25-27, 2000, in Cambridge, Massachusetts, and it will be a joint venture with SIGDOC.

Nicholas Negroponte of the MIT Media Lab will be the keynote speaker. Bernadette Longo is program chair for PCS and Michael Prioleau is program chair for SIGDOC. Terrance Malkinson will edit the proceedings and Steve Chu will create and maintain the Web site.

IPCC 2001 will again be co-located with SIGDOC, this time in Santa Fe, New Mexico; Joe Chew will be chair. For IPCC 2002, Laurel Grove and Paul Seering will host a conference in Oregon.

Three more IPCCs are assigned and several topical Transactions issues are planned.

Publications

Transactions editor Kim Campbell has scheduled several special topics for future issues. The December 1999 issue will focus on Communication in Virtual Organizations. March 2000 is a joint issue with STC's Technical Communication on the topic of Communication in Cross-Functional Teams (guest editors are Karl Smart and Carol Ranman). Another topical issue, tentatively scheduled for September 2000, will focus on Document Evaluation Methods (guest editors are Menno de Jong and Judy Ramzy).

The IEEE Educational Activities Department has opened an Online Education Reading room at http://www.ieee.org/oba. Viewers can click on any book in the IEEE Selected Readings series or the Engineers' Guides to Business Series and read the full text. Titles available include two PCS-sponsored publications: Working in a Global Environment by Mike Goodman and Writing for Career Growth by David McKee.

Publicity and Marketing

Publicity and Marketing chair Beth Moeller reported that the PCS Booth at the annual conference (ITCC) of the Society for Technical Communication attracted much interest and 200 applications for affiliate PCS membership were handed out. Beth has reserved space at ITCC 2000 in Orlando, Florida, and she is looking for volunteers to staff the booth there.

Education

The one-day PCS workshop planned in conjunction with the AdCom meeting was canceled due to lack of registration. Education committee chair Lisa Moreno is planning PCS-run workshops and tutorials in professional communication for alternative sites, including the annual meetings of other IEEE societies.
Ron Blicq and Lisa Moretto are presenting a preconference tutorial at the IEEE-USA 1999 Professional Development Conference (Labor Day weekend in Dallas, Texas) called "Shortening Your Professional Communication Skills: Writing Action-Giving E-mail, Letters, Reports, and Proposals."

Awards
PCS gives three annual awards to technical communicators. The Outstanding Paper Award recognizes a paper of unusual quality, originality, and significance published in the IEEE Transactions on Professional Communication in the preceding year. The Alfred N. Goldsmith Award recognizes outstanding contributions to the field of technical communication and thus the goals of PCS. The Emily K. Schlesinger Award recognizes an individual who has actively furthered technical and professional communication through outstanding service to PCS.

The PCS Editorial Advisory Committee selected the Outstanding Paper Award winner and the AdCom selected the winners of the Goldsmith and Schlesinger Awards. Winners will be announced at the IPCC '99 awards luncheon, September 9 in New Orleans.

FROM THE EDITOR
(continued from page 2)

located in Flanders, Wallony, and Brussels, with no apparent bias other than the spreading of word-of-mouth reputation.

—Jean-luc Doumont
Kortenberg, Belgium

Luc Bouquet’s Response:
I read Mr. Doumont’s letter very attentively. I don’t want to polemize on this issue. Mr. Doumont is right in that the article reflects my own experience; that’s why I had it peer reviewed by a colleague in Brussels. As the technical writing business in Belgium is relatively new, any article on it will just reflect the author’s personal experience. I’m looking forward to reading an article with Mr. Doumont’s opinion. I am also prepared to collaborate with him on an update sometime next year.

—Luc Bouquet
Gent, Belgium

Info for Authors
One thousand words makes a nice page-and-a-half article, although longer and shorter articles may be appropriate. Proposals for periodic columns are also welcome.

If you use a WP program, keep your formatting simple; multiple fonts and sizes, customized paragraphing and line spacing, personalized styles, etc. all have to be filtered out before being recoded in Newsletter style. Headers, footers, and tables lead the casual list. Embed only enough specialized formatting and highlighting—boldface, 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.

I prefer to receive articles by e-mail; most WordPerfect, Word, and ASCII files are acceptable. My addresses are in the backplate at the bottom of page 2.

Deadlines
The 15th day of each odd-numbered month is the deadline for publication in the succeeding odd-numbered month. For example, the deadline is November 15 for the January/February issue, January 15 for the March/April issue, etc. You won’t be far off—and never late—if you observe the odd numbers, January, etc.

The people you want to reach must have the capability to view your site with minimal download time and no horizontal scrolling.

1. Determine Audience Technical Abilities
For the majority of Web sites you should design for the lowest common denominator—a screen resolution of 640 pixels by 480 pixels, 256 colors, and a modern speed of 38.6 kbps. While many people have migrated to computer systems with at least a screen resolution of 800 pixels by 600 pixels, there are many organizations and government agencies for which this is not the case.

There are special cases, however, in which designers can justify designing for monitors with higher resolutions, more colors, and computers with faster Internet connections. For example, if you can guarantee your primary audience is connected to the Internet over a T1 line, you can design a Web site with larger graphics or animations—something that would take too long to load over a dial-up connection.

If you know that your primary audience members all have large monitors, you can design for a higher screen resolution and more colors. The key word, however, is “guarantee.” You must be able to guarantee that the people you need to reach have the capability to view your site with minimal download time and no horizontal scrolling.

2. Decide on a Navigation System
A good Web site allows visitors to find the information they need quickly and easily. This is the navigation system. How do visitors move around the site and how do they find the information they need? Some sites provide site maps, some provide search capability, but all useful sites provide good navigation links on each page.

The next question is how to design these links. Designers have a number of tools available. There are straight text links, which every visitor can follow no matter which browser is being used; image maps, in which visitors click on a portion of a graphic; and expandable menus created on the fly using Java or JavaScript. One caution to using cutting-edge technologies, such as Java, is that not everyone can access the latest technology. For example, some people have turned off browser images to speed downloads. Others have disabled Java access due to potential security issues. It is critical that all site visitors be able to access navigation points. Keep them simple enough for everyone.

3. Determine the Graphical Interface
Ideally, your graphical interface should complement your existing printed materials. Unless its time for a complete overhaul of your paper image, do not create something completely new and different for your online image.

Jakob Nielsen’s Alertbox column (found at http://www.useit.com) reminds designers what works on the World Wide Web and what does not. For example, splash screens, an initial screen that sometimes announces the company name with an “Enter Here” link, are often viewed as annoying and a waste of visitors’ time. Frames can also hinder visitors because they make bookmarking difficult.

At this point in the process your designer should provide you with two or three design options from which to choose. This does not mean you have to choose one of them. You can take elements from each to create your final Web site.
G O O D  I N T E N T ,  P O O R  O U T C O M E

STRIPEASE!

Visual aids, a topic often discussed in my training programs, predictably raise a rather emotional, if sometimes enlightening, debate. After the group concludes, on the basis of examples, that overload is the most common and most obvious problem, I state that each should probably expect no more than one idea, if only to control what the audience pays attention to at any time. “Well,” someone skeptical then remarks, “you can achieve exactly that by progressively uncovering the visual with a sheet of paper.” I look at the room. “I hate that,” someone else snaps.

To get it off people’s chests, I put the idea to a mock referendum. Some participants “see nothing wrong with it,” the others “can’t stand it.” Why this apparent conflict? The first group see nothing wrong in doing so unless others: They think it better than having the audience read the fifth bullet point while they are still busy explaining the first. The others, by contrast, cannot stand having it done unto them: They feel they are being treated like kids.

The discussion around whether to hide part of the visual often turns to a dialog of the deaf, largely because some fail to distinguish intent from outcome. Controlling the attention of the audience surely contributes to a successful presentation. So what’s wrong with “progressive disclosure”?

Hiding a part of something irritates the audience because of its very nature: hiding. Being naturally curious, we do not like it when others, including speakers, hide information from us. Unless we seek pure entertainment, we have little patience for suspense. To some extent, we also want to do the same with what we pay attention to at any given moment.

Hiding part of an overhead transparency with a sheet of paper placed on the projector usually results in the opposite of what is intended. Instead of focusing on what is visible, audience members cannot but wonder about what is hidden. (As an obvious analogy, I usually refer to this as the “strip tease” effect.)

Clearly, the unwanted outcome stems from the fact that some information is visibly hidden. In a sense, the next visual is hidden, too, but invisibly so; it still does not bother the audience. There lies the key to a better outcome, along three routes:

1. Present only one idea per visual, so it can be shown at once in its entirety.
   No matter what part of the visual the audience looks at, what it sees is relevant to what it hears. Presenting the idea with graphical elements rather than text further helps: The audience grasps the idea globally, almost instantly, and can devote its mental text processor to the spoken words.

2. Use overlays. Overlays—when expected—do not suggest that information is withheld, so they work well. With modern presentation software, they are easily created and can be displayed at a click of the mouse. When overused, however, they become another source of distraction.

3. Show the whole, then hide part. Say you want to detail two items, then compare them. Should you use one or two (or maybe three) visuals? One possibility is to use one visual, show it as a whole first (to kill the suspense and provide a global view), discuss each item while covering the other, and show the whole again to compare the items.

Granted, keeping something covered at first may heighten the audience’s eagerness to see it at last, but at a double cost. First, raised curiosity about one item lowers the capacity to pay attention to other items—the audience focuses on what is hidden. Second, raised expectations increase the risk of disappointment—whatever is finally uncovered had better be worth it!

At JL Consulting (www.JLConsulting.be), Dr. Jean-luc Doumont teaches and provides advice on professional speaking, writing, and graphical. Over the last 15 years, he has helped audiences of all ages, backgrounds, and nationalities structure their thoughts and construct their communication.

T O O L S  O F  T H E  T R A D E

THE ART OF CONVERSATION

Part 2: Keeping It Flowing

We began with a summary of Jonathan Swift’s observations of conventional sins and his ideas on what a good conversation is: an exchange that leaves both parties enriched by new knowledge and feeling good about themselves and each other. This definition holds the secret to both starting well and keeping a conversation going. Here are three simple principles you can easily remember and apply.

Principle 1: Use the power of questions.

Questions are the way to get a conversation started and keep it moving. At the beginning of the conversation, be content with the obvious questions suggested by the context and don’t be discouraged if you don’t get much response. Just keep fishing and wait for a bite.

However, being persistent with questions doesn’t stop there unless you should “grill” people. Once you start getting responses, it’s time to move to a true exchange of ideas.

For instance, consider the following exchange: “Have you noticed that the cafeteria chef has ventured into all kinds of ethnic experiences lately?” (“Hmm.”) “It’s rather a nice change, isn’t it?” (“Yeah.”) “Do you ever try your hand at any kind of adventurous cooking?” (“No... making bread is as far as I go... just in a bread machine.”)

This is the first “bite” after low-key, obvious starters. It’s easy to fall into the trap of grilling at this point by asking endless questions about details of bread making: the machine used, the ingredients, how long it takes, how much everything costs, the kinds of bread made. In the end, you have a bunch of facts—but what does the other person have? Just the satisfaction of having talked a lot.

How can you move into sharing even if you can’t contribute any direct experience? By focusing on the larger issues—for instance, why people do whatever they do: “Really? That’s great! I love homemade bread. How did you get into that?”

Now you may be able to share ideas on freedom, nutrition, nostalgia for simpler times—all things in which both of you are similarly expert.

A special tool to cultivate is the focused question. Say you meet somebody who works in a high government office. A simple open-ended question might be: “What’s it like to work in such an environment?”

A more effective focused question might be: “I read somewhere last week about political organizations of all places, there seems to be less internal politics. What’s been your experience with that?” Think of it as a formula: food for thought + invitation to respond. It’s a way to jump-start a conversation. If you want to become skilled in this, watch master moderators such as Larry King.

Principle 2: Contribute, but don’t overwhelm or show off.

Obviously, if you want to be a positive conversational force, you have to contribute something. As Swift puts it: “...if the majority of those who are got together be naturally silent or cautious, the conversation will flag...”

On the other hand, you don’t want to say so much that nobody else gets a chance to talk. This is the danger of taking too much into details of a situation, problem, theory, or hobby. How long will your partner want to listen silently?

Showing off intelligent or successful work is another sure way to kill a conversation. Even innocent “topping” can backfire. Say a woman is starting to tell you about an extravagant trip she made to celebrate her 10th anniversary. How will she continue if you throw in: “Oh, really? We celebrated our 25th anniversary!”

You just stole her thunder!

But perhaps you have the opposite problem: You rarely talk, let alone show off.
because you see yourself as uninteresting and not good with words. Then consider Swift's interesting observation on this point: "Great speakers in publick are sel-doms agreeable in private conversation.... Natural elocution, although it may seem a paradox, usually springs from a barrenness of invention, and of words." In other words, the best conversations come from honesty, not self-centered brilliance!

**Principle 3: Praise and appreciate, don't criticize or offend.**

Nobody will ever regret your being enthusiastic and appreciative, but few will enjoy being criticized or ridiculed.

What about "well meaning ridicule"? Consider what Swift has to say on this subject: "The French... have a quite different idea of the thing... Ralliere, was to say something that at first appeared a reproach or reflection, but, by some turn of wit... ended always in a compliment." Can you do it in that gracious manner? Then go ahead. Otherwise, poke fun only at yourself, not at others!

These principles are easier, of course, when you're talking to a brilliant conversationalist. But you've probably taken part in many conversations that shriveled up in a hurry because your conversation partners were snobbish, awkward, grumpy, or just not very interested in talking to you. That's the challenge I focus on here: how to make a conversation bloom when the nurturing is mostly up to you.

**A Case Study**

I had occasion recently to talk to a grump. It was late in the evening, and he was driving me home from the airport. I knew him from a previous drive, when he'd exhibited a slighly verbal repertoire: silence, grunts, and complaints. I started talking with him and he responded with various depressing items from that repertoire. Yet, by the end of the drive, he acted like a new person: chatting nonstop, in the most amusing, enthusiastic way — laughing, waving his hands, and paying dangerously little attention to the road.

What magic happened? Here's what I did:

First, I was persistent, pushing on with questions until I spotted an opening. How had the weather been here this week? ("O.K.") What a nice, comfortable car. ("Yeah.") Did it get good mileage? ("It's O.K.") Roy, some of these drivers... he must see some wild ones. How did he cope with them? (A shrug.) Did he often have to drive until late at night? ("Some.") Did it bother his wife? (A shrug.) What was it she did? ("Travel agent.") Really? Did she sometimes get good deals for them for trips? ("Yeah.") Here was the opening! Any exciting places they'd visited? Information began to emerge in small drips.

Second, I responded enthusiastically to any promising answer, no matter how reluctantly it had been offered. Steadfast enthusiasm begets enthusiasm, even with grumps!

Third, I wasn't just chatting but going somewhere: toward genuine sharing. For instance, it turned out that the grump had gone on a lengthy trip to Australia. No doubt he could have been prodded into spilling out random information about the interesting sights he'd seen. However, since I'd never been in Australia, this would have turned into a one-sided conversation.

Remember, our definition of a good conversation calls for both parties to learn something new. So, I steered the conversation into shared territory: thoughts about cultural differences he'd noticed. Not only was there room for lively give and take, but it soon became clear that my conversational partner had some most interesting thoughts and feelings.

Fourth, I didn't care at all whether my questions and comments sounded intelligent or knowledgeable; I just let them tumble out as quickly and naturally as they would come. Besides avoiding unproductive silence, I think this conveyed a genuine interest in the other person. Clearly, I was there not to make an impression but to learn about his ideas.

Fifth, I kept my own contributions brief unless he showed a clear interest in details. My goal was not to talk about myself, but to get in touch with another person — to

We tend to use these wordy expressions for a variety of reasons. (Ooops! "for several reasons.")

We use them because we see other people using them, because we think they sound businesslike, or because when we were asked to write a 1000-word essay in a class they helped us use more words!

In his book *The Presentation of Trivial Information* (Macmillan, 1948) Raymond Kapp talks strongly about removing those words from our writing.

In the table we list some L1C words that may be creeping into your writing. Search for them and weed them out!

The authors are principals of RGI International, Inc. (http://www.rgi-intl.com). This article is from RGI News, No. 5, Spring 1999; copyright 1999 by RGI International.

**TOOLS OF THE TRADE**

They're useful for discovering those aspects that are not immediately and publicly visible. I shared my own experiences only when they helped to widen the common ground.

**The Real Lesson**

So, there you have some ways to move a conversation forward, even with unwilling or inespct partners. They are not techniques that you can apply mechanically. Rather, they must grow out of a desire to connect with people honestly and to make the conversation enriching for both. If you really want to make progress, this is the attitude you need to work on most of all.

The rule is simple. If you enjoy talking to people, are genuinely interested in them, and have no hidden agenda, they will like to talk to you. Put another way, it's hard not to like someone who likes you.

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**FLOCCI... PILIFICATION**

ers, brevity was lauded. It served well, as one might reflect this year, the centennial of the birth of Ernest Hemingway, the writer whose succinct style set the standard for 20th century literature.

Arguably, the true threat to our art is not ultralong Hemingway style, Houston space-talk, Hal remarks, or highway-sign brevity. It's the converse in which we wallow daily, from the software user manual that's larger than a desk dictionary to the airport bookrack novel that takes a thousand pages to say that the author regrets having grown up in New York City. Works such as these worsen the communication capacity of English from the star status of being only 50 percent redundant, as observed by Shannon in 1948. Perhaps, then, we who pound keyboards can do our part, by thinking more often of Shannon—and of Hal.
TAKING CARE OF THE FLUFF WORDS
BY RON BLIOQ AND LISA MORETTO

Recently, a business manager complained: "Some of my staff don't know how to convey a message in only a few words. I'm not asking them to write e-mail and letters that read like short, disconnected snippets of information—I'm looking for properly constructed sentences written in clear, tact language.

She was referring to "low information content" (LIC) words and expressions—words that don't add anything to the sentence in which they are lodged. In fact, when you remove them a sentence is often easier to read and understand. For example:

- There is no evidence of negligence at this point in time. ("There is..."

implies "now.")

- In an effort to increase productivity, we purchased a new software program. (Say: "To increase productivity..."

- For your information, we investigated the vandalism reported last week. (As a normally write to inform a reader about something, you don't need to say "For your information.")

In many cases a long expression can be reduced to a shorter one:

- There were two power failures during the course of the night shift. (Delete "the course of.")

- Attached hereto is an invoice covering last month's work. (Delete "hereto" or replace the expression with "I attach..." or "Here is..."

- Due to the fact that there have been many breakdowns, it will be necessary to buy a new delivery van. (Change to: "Because there have been many breakdowns, we must buy a new delivery van.")

LIC WORDS AND EXPRESSIONS
If an expression has an X beside it, delete it from your writing, if it is followed by a word or expression in parenthesis, not the word or shorter expression.

actually (X) a majority of (most) a number of (many, several) as a matter of fact (X) as a means of (for to) as a result (so) as necessary (X) at the rate of (at) at the same time as (while) at this time (X) being in conclusion (conclude) by means of (by) by the use of (by) connected together (connected) due to the fact that (because) during the course of (during) during the time that (while) end result (result) in the light of (X) in the neighborhood of (about near) in the neighborhood of (about near) in the vicinity of (near) involves the use of (employs uses) is a person who (who) is designed to be (is) it can be seen that (so) it is considered desirable to (we want to) it will be necessary to (if we must) of considerable magnitude (large) on account of (because)

Public speaking is the one skill you must have if you expect to be a leader in your organization.

TIME TO CONQUER THAT NAKED FEAR
BY DAN DANBOM

Occasionally, because of someone's desperation or simple lack of them. Your imagination, you may be invited to speak to their group. If this happens, the first thing you will do is become terrified.

This is a common reaction, because public speaking is one of Americans' greatest fears. Surveys consistently show that people fear public speaking more than death, snakes, spiders, heights, widths, postal workers, medical exams, ghosts, aliens, the IRS, Pat Robertson and being trapped in an elevator with Mary Kay.

Speakers know this fear as "stage fright." If you have stage fright, your palms begin to sweat, your breath shortens and you feel that your spleen has somehow loosened itself and is shooting toward your throat. Your mouth feels as if you've taken a real big bite of steel wool. Your stomach rolls over, dumping a couple of gallons of nervousness down through your legs, and they begin to quake. In severe instances, you pass out, leaving your audience nothing to do except go through your pockets.

Public speaking is the one skill you must have if you expect to be a leader in your organization. The higher you rise on the corporate ladder, the more you will be expected to be a speaker—for business plan presentations, for retirement parties, and for appearances before investigating committees. If you ever reach the pinnacle of your company, you'll get to speak at the annual meeting of shareholders. It can diminish investor confidence if you pass out and have accomplished public speakers replace this terror with trepidation. They have a whole collection of tricks that give them the appearance of competence and confidence. One of these that you've probably heard about is to imagine your audience naked. It is very important to note that I mean that it is the audience you should think of as naked, not yourself, as you imagine that make you feel confident that none of your naked listeners will be interviewed on television, telling everyone what a lazy speaker you were.

Another technique worth adopting is to work from an outline instead of reading your speech word-by-word. I used to help an executive prepare speeches. He was more nervous than a rat so put him at a tattoo college when he read a speech he would hyperventilate, so he insisted that at key points in his speech I insert the instruction "breathe." Of course, most of us don't have to be told to breathe but, as I said, he was an executive. I regarded it as a mark of my professionalism that I never, ever inserted instructions such as "pant tongue out with piers or "skip lines around and around.

Lots of speakers realize that they can discharge their nervous energy through physical activity. Before they get up on the podium they'll do a couple of deep-knee bends or vigorously shake their arms, and the really good speakers take care to do this where the audience can't see them.

Gestures are important in releasing nervous energy, so you should be sure to flail around when you're speaking. Many speakers make the mistake of gripping the lectern. This has the effect of routing the positive ions of their nervous energy into the microphone, which then makes a noise like BREEEEEERRRREEEEEER.

You've probably also seen speakers who jam their hands in their pockets and have to take out their nervous energy by jangling their keys and change, which is why it's always a good idea to rehearse your speech with your pants off.

Should you use visual aids? I don't recommend it. If an audience has a choice of either looking at you or looking at a bar
graph projected on screen in such a way as to be too small for them to read, you're sunk. If you do use visual aids, you will feel compelled to use one of those laser pointers. Laser pointers are the marriage of technology and annoyance, and I believe they should be banned.

Thank you for your attention, and now I'd be glad to take your questions. Feel free to get dressed anytime.

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MIN-LAN

BY MICHAEL BRADY

In the Mathematical Theory of Communication, published in 1948, Claude Shannon put forth the principles that underpin current telecommunications. One of them involves the efficiency of spoken languages in conveying information. In theory, the perfect language would comprise only essentials, with no redundant information, as determined by grammar and syntax.

Yet Shannon was not the first to ponder less is better. In art, there could hardly be less than, say, a white square on a white background, as painted by Kazimir Malevich. In 1913 he had defined the genre of the approach as suprematism, the supremacy of feeling attained by reducing art to the extreme.

In the 1950s, it surfaced in the U.S. as minimal art in a trend led by American painter Ad Reinhardt, who, in 1962, described it as “non-objective, non-representational, non-figurative, non-imagist, non-expressionist, non-subjective.” In the 1960s, American composer Steve Reich experimented with it by using repeated musical patterns that incorporate gradual changes over longer periods, in a style that came to be known as minimalism.

The trend surfaced earlier and more latingly in architecture. In the 1930s, architects who fled Europe for Tel Aviv employed a minimalist language in creating the White City, a group of buildings now listed by the World Monuments Watch. Starting in the mid 1950s and working through the early 1980s, Spanish master architect Alejandro de la Sota created outstanding minimalist language works, from the simple village of Esquivel to the elegant P&T offices in León.

In the 1970s, American composer John Adams, then still in his 20s, came upon minimalism in music. He innovated and changed it by employing connections to the older maximal techniques of composition. The results were memorable. His operas Nixon in China and The Death of Klinghoffer, with librettos by Alice Goodman and staged by Peter Sellars, were sellouts, and he has been featured in a composer week at the New York Philharmonic. He now is one of the world's most frequently performed living composers.

In the arts, baroque seems bygone, replaced by minimal language as the mechanism of expression. Quite independent of communications theory, the arts of written and spoken communication have not escaped. The dialogue of Stanley Kubrick's best known film 2001: A Space Odyssey stands as a min-lan milestone. Hal, the talking robot, communicates superbly in the Shannon sense, but not in a way that would have earned him an A in high school English. And that was more than 30 years ago, in 1968. Since then, min-lan has spread to become the vehicle of breathless

Min-lan has spread to become the vehicle of breathless

communication.

Prepared by Rudy Jurek

(continued on page 17)
**Black Tools**

**Making Conclusions**

**Hanspeter Schmid**

**Your values determine which facts you will see and how you will see them.**

Facts are discovered and conclusions are drawn. A fact is a fact is a fact. That is what most people believe, having been taught so at school.

Ludwik Fleck made it very clear that the view was different in his 1935 book *The Genesis and Development of a Scientific Fact: Reality is so complex that it is impossible to grasp it completely, and to describe reality, you must always choose what is important to you.*

This choice is never rational, but it is not arbitrary either: It depends on your values, which you acquire from your scientific community and from the societies you live in during your school time and professional training. The choice determines which facts you will see, and also how you will see them. This is why a fact is always a made thing rather than a discovered one, as the word itself expresses: "fact" is derived from the Latin "facio," which means "a making."

Fleck's views were dire news for the scientific community, who had by then almost successfully managed to oust the church as the sole purveyor of absolute truth. Other philosophers, most notably Thomas Kuhn, Wolfgang Pauli, Imre Lakatos, Paul Feyerabend, and Yehuda Elkan, strengthened the case against absolute scientific truth and pointed out that even scientific progress is possible only if the scientific world view coexists with other, conflicting world views with which it exchanges ideas, concepts, and, most important, values.

Like Fleck, all of these philosophers started their careers as scientists. After all, you must get behind someone before you can stab him in the back.

The insight that even scientific truth is in the eye of the beholder is almost directly applicable to the task of winning a dispute irrespective of who is in the right, which is the topic of my columns. As facts are created rather than discovered, conclusions can be made rather than drawn. By shifting the point of view slightly, by interpreting the opponent's concepts a bit differently, or by including something the opponent has almost but not quite said, one can make almost any conclusion.

Two tricks use this technique: Trick 20, called "The Do-it-Yourself Conclusion," is to use the technique for underpinning your own position, while Trick 24, "Make Undesired Conclusions," is to use it for trash ing the opponent's view by deriving something from it that is untrue or unacceptable in the audience's view.

You can do three things against these tricks: First, you can try to say, show where your opponent's argument has gone awry, or perform a similar trick in return.

Trick 24 is rather effective because it lets the opponent's view appear in a bad light. It is even more effective to let the opponent queer the pitch for himself. Just as any statement may be true within sufficiently narrow limits, any statement is also false if exaggerated.

Since most people tend to exaggerate if provoked, it is easy to make them undermine their own position by repeatedly contradicting them and arguing with them.

"Provoking Exaggerations" is the name of this 23rd trick, and the best countermeasure against is to not let anyone provoke you into exaggerating.

A related trick is number 27, "Pressing on Weak Spots." If your opponent unexpectedly gets angry during a dispute, you should pursue the present line of thought, not only because it weakens your opponent if he gets angry, but also because you have apparently found a weak spot. Unkindly enough, many teachers and professors use Trick 27 in oral exams. If you know a person who is likely to use this trick, you must either keep a straight face all the time, or you must show him more emotions than he can possibly assimilate.

The remaining tricks 21, 22, 25, and 26 are less personal because they deal mainly
with the proposition and not with the pro-
poser. The most brilliant trick is to "Turn
the Tables," number 26: You use your
opponent's argument against her:
"He's a child, so we should handle the
case with leniency."

"Precisely because he is a child, we must be
unyielding, or his bad habits will harden."
You can normally avert this attack by give-
ing a better argument for your position—
if you have one, that is.

To refute general statements, it is normally
easy enough to give "One Concrete Counter-
example" (Trick 25). Like the philosophers
I mentioned, I don't believe in generally,
absolutely valid statements. There are,
however, statements that can reasonably
be thought of as true with respect to the
discussion at hand or the decision that
must be made.

To give a strange but brief example, the
citizens of a village might ask government
to employ a full-time exorcist. The answer
will, of course, be: "Forget it. There are
no ghosts." This statement can be proved
false by the one concrete example, such as by
evidence from an eyewitness.

As with all concrete examples, the govern-
ment should then answer three questions:
1. Is the example true? (The wit-
ness might lie because the exorcist has
promised him a commission.) 2. If it is
true, is it relevant to the discussion? (The
witnesses might tell the truth, but a psycho-
litist might be better suited to solve the
problem.) 3. If it is true and relevant, does
it really contradict the general statement?
The culprit might be a troll or a tooth
fairy, neither of which is a ghost.

A very good argument can sometimes be
refuted by shouting, "Now you just stated
what you should actually prove!" The bet-
ter the argument, the easier it is to make
the audience believe that the statement is
not a real one, but only your opponent's
claim in disguise. The best response to this
22nd trick is probably to go one step back
and give a second argument leading to the
first one.

Finally, Trick 21 is to "Answer Bad
Arguments With Bad Arguments." For
example, a manager in your company
wants to split the sales department and
the repair department into two independent
companies. You oppose the split, and he
gets personal: "As usual, you oppose all
proposals just because you don't have
the idea yourself!"

Now you could explain that you're really
against the split because an independent
repair department has less time for the
customers if it has to work cost-effectively,
which makes for less satisfied customers,
who will then buy somewhere else, and so
on. It is, however, much faster and perhaps
even more effective to answer with the
same kind of argument: "You always make
proposals that are profitable in the short
term but disastrous in the long term
because you know that you will have been
promoted by then and someone else will
be held responsible."

This trick is related to the one I call "To
Convince the Jury," about which you will
read in the next issue of this Newsletter.

Hans Peter Schmid (h.p.schmid@ieee.org)
is an analog-IC designer and Ph.D. degree
student at the Swiss Federal Institute of
Technology (Zurich) who has an un-
reasonably great interest in modern philosophy of science
and society. He's an epistemological anarchist,
believing that it is bad for humanity if one
world view claims to possess absolute truth
and uses its imperiousness to out other world
views. He still became a scientist; after all,
you must get behind somebody."

"When you take stuff from one writer it's plagiarism; but when you take it from
many writers, it's research."
—Wilson Mizner

"If it takes a lot of words to say what you have in mind, give it more thought."
—Dennis Reck
with the proposition and not with the proponent. The most brilliant trick is to "Turn the Tables," number 26: You use your opponent's argument against her: "He's a child, so we should handle the case with leniency."

"Precisely because he is a child, we must be unyielding, or his bad habits will harden." You can normally avert this attack by giving a better argument for your position—if you have one, that is.

To refute general statements, it is normally enough to give "One Concrete Counterexample" (Trick 25). Like the philosophers I mentioned, I don't believe in generally, absolutely valid statements. There are, however, statements that can reasonably be thought of as true with respect to the discussion at hand or the decision that must be made.

To give a strange but brief example, the citizens of a village might ask government to employ a full-time exorcist. The answer will, of course, be: "Forget it. There are no ghosts." This statement can be proved false by the presence of a counterexample, such as by evidence from an eyewitness.

As with all concrete examples, the government should then answer three questions: 1. Are you sure it is an example true? (The witness might lie because the exorcist has promised him a commission.) 2. If it is true, is it relevant to the discussion? (The witness might tell the truth, but a psycho-artist might be better suited to solve the problem.) 3. If it is true and relevant, does it really contradict the general statement? (The culprit might be a troll or a tooth fairy, neither of which is a ghost.)

A very good argument can sometimes be refuted by shouting, "Now you just stated what you should actually prove!" The better the argument, the easier it is to make the audience believe that the argument is not a real one, but only your opponent's claim in disguise. The best response to this 22nd trick is probably to go one step back and give a second argument leading to the first one.

Finally, Trick 21 is to "Answer Bad Arguments With Bad Arguments." For example, a manager in your company wants to split the sales department and the repair department into two independent companies. You oppose the split, and he gets personal: "As usual, you oppose all proposals just because you didn't have the idea yourself!"

Now you could explain that you're really against the split because an independent repair department has less time for the customers if it has to work cost-effectively, which makes for less satisfied customers, who will then buy somewhere else, and so on. It is, however, much faster and perhaps even more effective to answer with the same kind of argument: "You always make proposals that are profitable in the short term but disastrous in the long term because you know that you will have been promoted by then and someone else will be held responsible."

This trick is related to the one I call "To Convince the Jury," about which you will read in the next issue of this Newsletter.

The headings in documents should direct the reader to the content of the subsequent prose efficiently and naturally.

"When you take stuff from one writer it's plagiarism; but when you take it from many writers, it's research."

—Wilson Mizner

"If it takes a lot of words to say what you have in mind, give it more thought."

—Dennis Reck

MASTERS OF STYLE

RICHARD BROOKHISER'S GEORGE WASHINGTON

One of the surest tests of the work of a master of style is that the reader is somehow powerless to put it down. Richard Brookhiser's Founding Father: Rediscovering George Washington (New York: Simon & Schuster [Free Press Paperbacks], 1996) is just such a book. What gives a work that capacity, one wonders?

Perhaps the main ingredient is the author's ability to spin a sequence of events, endowing them with vitality. Brookhiser makes the events of Washington's life come alive by describing the fullness of the situations in which Washington found himself and explaining thoroughly what he did, wrote, and said. Thereby, this man of heroic stature is taken off his pedestal and made human.

Brookhiser's book is a moral biography that gets at the essence of Washington's character. Since character is intimately related to style, as we professional communicators can learn about style from Washington's way of handling himself and from Brookhiser's way of handling Washington. Not only Washington's words and actions, but also his silences and demeanor contributed to his presence in any given situation. So impressive was he that, even in defeat, he was more admirable than most people are in victory. Brookhiser's style is equally impressive.

Professional communicators can benefit from many aspects of the book, including its structure, which is reflected in Brookhiser's concise section and chapter headings: Introduction, Career (War, Constitution, President), Character (Nature, Morals, Ideas), Founding Father (Fathers, Patriarchs and Masters, Father of His Country), and Death.

There is an orderly, natural sequence to these topics—phrased with admirably direct simplicity. The headings and subheadings professional communicators use in documents should direct the reader to the content of the subsequent prose efficiently and naturally, and as Brookhiser's do. Such pointiness indeed ring true to the substance of a piece, thereby achieving their purpose.

Brookhiser's content everywhere reflects his keen grasp not only of Washington's life, but also of human nature. His words and tone attest to that apprehension. In speaking of people's decreasing interest in Washington, for example, Brookhiser says, "He is in our textbooks and our wallets, but not in our hearts." And "Looking at the lips clamped firmly over the false teeth (we do know he had false teeth) we imbue coldness to him, and we respond to him coldly."

In an age of People magazine and Oprah, "Washington's reserve frustrates our craving for emotional intimacy and personal detail... Brookhiser's biography goes far to thaw the coldness that surrounds Washington's life, making him accessible. So too should the writing of professional communicators reflect an understanding of human nature, since the audience is always human beings.

The first chapter, War, documents Washington's activities from 1758 through the Revolutionary War to his resignation in 1783. As an aide to British General Edward Braddock in 1755 (French and Indian War) and as Commander in Chief during the American Revolution, Washington experienced many defeats. But in the process he was developing a strategy for victory: By avoiding direct conflict, he could prolong the war, thus making it too costly for the British to wage a war so far from home.

Washington understood the big picture—the establishment of a country—which was far more important than winning or losing individual skirmishes or battles. Professional communicators can also benefit from focusing on the big picture of any situation rather than launching into divisive conflicts, if they can be avoided. It is possible to transform defeat into victory.
by being proactive rather than reactive (see Steven R. Covey's Seven Habits of Highly Effective People).

Among the matters covered in Constitution are Washington's putting up with all sorts of interruptions to his peace in private life at Mount Vernon (those who wanted to paint his portrait and unannounced visitors, for example), his accepting shares of stock in two canal companies on the condition that any dividends be given to charity, and his handling of the 1786 Shays rebellion (a genuine threat to the Constitution he had worked hard to establish). His way of handling the latter was: "Know precisely what the insurgents aim at. If they have real grievances, redress them if possible. ... If they have not, employ the force of government against them at once."

Washington's tolerance (we must all put up with minor annoyances), generosity, and wisdom in dealing with trouble caused others to respect him. He was thus able to work well with Alexander Hamilton, James Madison, and almost everyone else he met, freely asking for and receiving their analysis and advice in various situations.

Moreover, his knowing when to keep silent, his politeness, and his backing off points in the interest of higher goals all spoke of his diplomacy, especially at the Constitutional Convention of 1787. His major contribution to that gathering was not speeches but his endorsement of the Virginia plan that gave the national government authority over the states.

As President, Washington had to decide in his new office "how to behave toward others and how others should behave toward him." What he settled on was to blend "amability and reserve," thereby giving dignity to the office. In his second term he had to deal with the Whiskey Rebellion (1794) and Jay's Treaty (1794), both of which tested his mettle severely.

The writing of professional communicators should reflect an understanding of human nature and the many influences that shape character.

Address that Washington found "more dignified...with less egotism." As Brookhiser eloquently puts it, Washington's last service to his country was to stop serving. Knowing when to stop aside from any given situation is, of course, a sign of profound wisdom.

The second half of the book deals with Washington's character—the special quality of which was recorded by an English visitor in 1796: "Washington has something uncommonly majestic and commanding in his walk, his address, his figure, and his countenance."

In addition to his demeanor and physical stature, he appreciated all sorts of activities, including circuses, plays, puppet shows, and exhibitions of wild animals, giving him a breadth of character. So should professional communicators, I think, be receptive to the many influences that can shape character, expanding one's realm of experience.

Washington was influenced significantly by Seneca's Moralis and by Joseph Addison's 1713 drama Cato. But the lifelong guide that so strongly moulded his character was Rules of Civility, compiled in 1595 by French Jesuits and reprinted 11 times by 1672. These Rules—taught him to be courteous, to behave well, and to be concerned about his reputation. The Rules were "guidelines for dealing with others, based on attending to their situations and their sensibilities."

The Rules of Civility could provide a valuable corrective to the in-your-face coarseness that so often seems to characterize the present age. It is an important enough book to devote the next column to, and I shall do so. For those of you who cannot wait, Brookhiser has republished the book: Rules of Civility (New York: The Free Press, 1997). And if you like to see Brookhiser in action, his appearance on C-SPAN (18 April 1996) is available on videotape (#73006) by calling (877) 290-1241.

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**Black Tools**

**Making Conclusions**

Facts are discovered and conclusions are drawn. A fact is a fact is a fact. That is what most people believe, having been taught so at school.

Ludwig Fleck made it very clear that his view was different in his 1935 book The Genesis and Development of a Scientific Fact: Reality is so complex that it is impossible to grasp it completely, and to describe reality, you must always choose what is important to you.

This choice is never rational, but it is not arbitrary either: It depends on your values, which truth and acquire from your scientific community and from the societies you live in during your school time and professional training. The choice determines which facts you will see, and also how you will see them. This is why a fact is always a made thing rather than a discovered one, as the word itself expresses: "fact" is derived from the Latin "factus," which means "making."

Fleck's views were dire news for the scientific community, who had by then almost successfully managed to outst the church as the sole purveyor of absolute truth. Other philosophers, most notably Thomas Kuhn, Wolfgang Pauli, Imre Lakatos, Paul Feyerabend, and Yehuda Elkana, strengthened the case against absolute scientific truth and pointed out that even scientific progress is possible only if the scientific world view coexists with other, conflicting worldviews with which it exchanges ideas, concepts, and, most important, values.

Like Fleck, all of these philosophers started their careers as scientists. After all, you must get behind someone before you can stab him in the back.

The insight that even scientific truth is in the eye of the beholder is almost directly applicable to the task of winning a dispute irrespective of who is in the right, which is the topic of my columns. As facts are created rather than discovered, conclusions can be made rather than drawn. By shifting the point of view slightly, by interpreting the opponent's concepts, a bit differently, or by including something the opponent has almost but not quite said, one can make almost any conclusion.

Two tricks use this technique: Trick 27, called "The Do-it-Yourself Conclusion," is to use the technique for underpinning your own position, while Trick 24, "Make Undesired Conclusions," is to use it for trash ing the opponent's view by deriving something from it that is untrue or unacceptable in the audience's view.

You can do three things against these tricks: First, you can refuse to say, show where your opponent's argument has gone awry, or perform a similar trick in return.

Trick 24 is rather effective because it lets the opponent's view appear in a bad light. It is even more effective to let the opponent queer the pitch for himself. Just as any statement may be true within sufficiently narrow limits, any statement is also false if exaggerated. Since most people tend to exaggerate if provoked, it is easy to make them undermine their own position by repeatedly contradicting them and arguing with them. "Proving Exaggerations" is the name of this 23rd trick, and the best countermeasure against it is to not let anyone provoke you into exaggerating.

A related trick is number 27, "Pressing on Weak Spots." If your opponent unexpectedly gets angry during a dispute, you should pursue the present line of thought, not only because it weakens your opponent if he gets angry, but also because you have apparently found a weak spot. Unking enough, many teachers and professors use Trick 27 in oral exams! If you know a person who is likely to use this trick, you must either keep a straight face all the time, or you must show him more emotions than he can possibly assimilate.

The remaining tricks 21, 22, 25, and 26 are less personal because they deal mainly...
Thank you for your attention, and now I'd be glad to take your questions. Feel free to get dressed anytime.

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MIN-LAN
BY MICHAEL BRADY

In the Mathematical Theory of Communication, published in 1948, Claude Shannon put forth the principles that underpin current telecommunications. One of them involves the efficiency of spoken languages in conveying information. In theory, the perfect language would comprise only essentials, with no redundant information, as determined by grammar and syntax.

Yet Shannon was not the first to ponder less is better. In art, there could hardly be less than, say, a white square on a white background, as painted by Kazimir Malevich. In 1913 he had defined the genre of the approach as suprematism, the supremacy of feeling attained by reducing art to the extreme.

In the 1950s, it surfaced in the U.S. as minimal art in a trend led by American painter Ad Reinhardt, who, in 1962, described it as “non-objective, non-representational, non-figurative, non-imaginative, non-expressive, non-subjective.” In the 1960s, American composer Steve Reich experimented with it by using repeated musical patterns that incorporate gradual changes over longer periods, in a style that came to be known as minimalism.

The trend surfaced earlier and more latently in architecture. In the 1930s, architects who fled Europe for Tel Aviv employed a minimalism language in creating the White City, a group of buildings now listed by the World Monuments Watch. Starting in the mid 1950s and working through the early 1980s, Spanish master architect Alejandro de la Sota created outstanding minimalist language works, from the simple village of Esquivel to the elegant PTT offices in Leon.

In the 1970s, American composer John Adams, then still in his 20s, came upon minimalism in music. He innovated and changed it by employing connections to the older musical techniques of composition. The results were memorable. His operas Nixon in China and The Death of Klinghoffer, with librettos by Alice Goodman and staged by Peter Sellars, were sellouts, and both were featured in a composer week at the New York Philharmonic. He now is one of the world’s most frequently performed living composers.

In the arts, baroque seems bygone, replaced by minimal language as the mechanism of expression. Quite independent of communications theory, the arts of written and spoken communication have not escaped.

The dialogue of Stanley Kubrick’s best known film 2001: A Space Odyssey stands as a min-lan milestone. Hal, the talking robot, communicates superbly in the Shannon sense, but not in a way that would have earned him an A in high school English. And that was more than 30 years ago, in 1968. Since then, min-lan has spread to become the vehicle of breathless communication.

Min-lan has spread to become the vehicle of breathless communication.

Prepared by Rudy Juenk
TAKING CARE OF THE FLUFF WORDS
BY RON BLUCQ AND LISA MORETTO

Recently, a business manager complained: "Some of my staff don't know how to convey a message in only a few words. I'm not asking them to write e-mail and letters that read like short, disconnected snippets of information—I'm looking for properly constructed sentences written in clear, plain language.

She was referring to "low information content" (LIC) words and expressions—words that don't add anything to the sentences in which they are lodged. In fact, when you remove a sentence is often easier to read and understand. For example:

- There is no evidence of negligence at this point in time. ("There is..."
implicates "now.")
- In an effort to increase productivity, we purchased a new software program. (Say: "To increase productivity..."

For your information, we investigated the vandalism reported last week. (As
you normally write to inform a reader about something, you don't need to say "For your information.")

In many cases a long expression can be reduced to a shorter one:

- There were two power failures during the course of the night shift. (Delete "the course of.")
- Attached hereto is an invoice covering last month's work. (Delete "hereto" or replace the expression with "I attach..."
or "Here is..."
- Due to the fact that there have been many breakdowns, it will be necessary to buy a new delivery van. (Change to: "Because there have been many breakdowns, we must buy a new delivery van.

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<thead>
<tr>
<th>LIC WORDS AND EXPRESSIONS</th>
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<tbody>
<tr>
<td>actually (adv)</td>
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<tr>
<td>a majority of (most)</td>
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<tr>
<td>a number of (many, several)</td>
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<tr>
<td>as a matter of fact (X)</td>
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<tr>
<td>as a means of (for, to)</td>
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<tr>
<td>as a result (so)</td>
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<tr>
<td>as necessary (X)</td>
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<tr>
<td>at the rate of (at)</td>
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<td>at the same time as (while)</td>
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<td>at this time (X)</td>
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<tr>
<td>bring to conclusion (conclude)</td>
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<tr>
<td>by means of (by)</td>
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<tr>
<td>by the use of (so)</td>
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<tr>
<td>connected together (connected)</td>
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<tr>
<td>due to the fact that (because)</td>
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<tr>
<td>during the course of (during)</td>
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<tr>
<td>during the time that (while)</td>
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<tr>
<td>end result (result)</td>
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<tr>
<td>in the case of (X)</td>
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<tr>
<td>in the course of (during, while)</td>
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<tr>
<td>in the direction of (toward)</td>
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<tr>
<td>in the event that (if)</td>
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<tr>
<td>in the light of (X)</td>
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<tr>
<td>in the neighborhood of (near, about)</td>
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<tr>
<td>involved with the use of (employ, uses)</td>
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<tr>
<td>is a person who (who)</td>
</tr>
<tr>
<td>is designed to be (is)</td>
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<tr>
<td>it can be seen that (so)</td>
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<tr>
<td>it is considered desirable to (we want to)</td>
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<tr>
<td>it will be necessary to (if we must)</td>
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<tr>
<td>of considerable magnitude (large)</td>
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<tr>
<td>on account of (because)</td>
</tr>
<tr>
<td>we are pleased to advise (X)</td>
</tr>
<tr>
<td>with the aid of (with)</td>
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<tr>
<td>with the result that (so, therefore)</td>
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TIME TO CONQUER THAT NAKED FEAR
BY DAN DANBOM

Occasionally, because of someone's desperation or simple lack of them. Do you imagine, you may be invited to speak to their group. If that happens, the first thing you will do is become terrified.

This is a common reaction, because public speaking is one of America's greatest fears. Surveys consistently show that people fear public speaking more than death, snakes, spiders, heights, widths, postal workers, medical exams, ghosts, aliens, the IRS, Pat Robertson, and being trapped in an elevator with Mary Kay.

Speakers know this fear as "stage fright." If you have stage fright, your palms begin to sweat, your breath shortens and you feel that your spleen has somehow loosened itself and is shooting toward your throat. Your mouth feels as if you've taken a real big bite of steel wool. Your stomach rolls over, dumping a couple of gallons of nerves down through your legs, and they begin to quake. In severe instances, you pass out, leaving your audience nothing to do except go through your pockets.

Public speaking is the one skill you must have if you expect to be a leader in your organization. The higher you rise on the corporate ladder, the more you will be expected to be a speaker—for business plan presentations, for retirement parties, and for appearances before investigating committees. If you ever reach the pinnacle of your company, you'll get to speak at the annual meeting of shareholders. It can diminish investor confidence if you pass out and have accomplished public speakers replace this terror with trepidation. They have a whole collection of tricks that give them the appearance of competence and confidence. One of these that you've probably heard about is to imagine your audience naked. It is very important to note that I mean that it is the audience you should think of as naked, not yourself, as you imagine yourself naked and talk to them. This makes you feel confident that none of your naked listeners will be interviewed on television, telling everyone what a loud speaker you were.

Another technique worth adopting is to work from an outline instead of reading your speech word-by-word. I used to help an executive prepare speeches. He was more nervous than a test subject at a tattoo college. When he read a speech he would hyperventilate, so he insisted that at key points in his speech I insert the instruction "breathe." Of course, most of us don't have to be told to breathe but, as I said, he was an executive. I regarded it as a mark of my professionalism that I never, ever inserted instructions such as "yank tongue out with pliers" or "skip breath at end and mark.

Lots of speakers realize that they can discharge their nervous energy through physical activity. Before they get up on the podium they'll do a couple of deep-knee bends or vigorously shake their arms, and the really good speakers take care to do this where the audience can't see them. Gestures are important in releasing nervous energy, so you should be sure to have a few around you when you're speaking. Many speakers make the mistake of gripping the lectern. This has the effect of routing the positive ions of their nervous energy into the microphone, which then makes a noise likeswerreernrrreeorr.

You've probably also seen speakers who jam their hands in their pockets and have to take out their nervous energy by jangling their keys and change, which is why it's always a good idea to rehearse your speech with your pants off.

Should you use visual aids? I don't recommend it. If an audience has a choice of either looking at you or looking at a bar.
First, I was persistent, pushing on with questions until I spotted an opening.

How had the weather been here this week? ("O.K.") What a nice, comfortable car. ("Yeah.") Did it get good mileage? ("It's O.K.") Boy, some of these drivers...he must see some wild ones. How did he cope with them? (A shrug.) Did he often have to drive until late at night? ("Some.") Did it bother his wife? (A shrug.) What was it she did? ("Travel agent.") Really? Did she sometimes get good deals for them for trips? ("Yeah.") Here was the opening! Any exciting places they'd visited? Information began to emerge in small drips.

Second, I responded enthusiastically to any promising answer, no matter how reluctantly it had been offered. Steadfast enthusiasm begets enthusiasm, even with grumps!

Third, I wasn't just chatting but going somewhere: toward genuine sharing. For instance, it turned out that the grump had gone on a lengthy trip to Australia. No doubt he could have been prodded into spilling out random information about the interesting sights he'd seen. However, since I'd never been in Australia, this would have turned into a one-sided conversation.

Remember, our definition of a good conversation calls for both parties to learn something new. So, I steered the conversation into shared territory: thoughts about cultural differences he'd noticed. Not only was there room for lively give and take, but it soon became clear that my conversational partner had some most interesting thoughts and feelings.

Fourth, I didn't care at all whether my questions and comments sounded intelligent or knowledgeable; I just let them tumble out as quickly and naturally as they would come. Besides avoiding unproductive silence, I think this conveyed a genuine interest in the other person. Clearly, I was there not to make an impression but to learn about his ideas.

Fifth, I kept my own contributions brief unless he showed a clear interest in details. My goal was not to talk about myself, but to get in touch with another person—to

We tend to use these wordy expressions for a variety of reasons. (Doozy! "For several reasons.")

We use them because we see other people using them, because we think they sound businesslike, or because when we were asked to write a 1000-word essay in a class they helped us use more words!

In his book The Presentation of Technique: Information (Macmillan, 1948) Reginald Kapp talks strongly about removing those words from our writing.

In the table we list some LIC words that may be creeping into your writing. Search for them and weed them out!

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TOOLS OF THE TRADE

(continued from page 6)

discover those aspects that are not immediately and publicly visible. I shared my own experiences only when they helped to widen the common ground.

The Real Lesson

So, there you have some ways to move a conversation forward, even with unwilling or incept partners. They are not techniques that you can apply mechanically. Rather, they must grow out of a desire to connect with people honestly and to make the conversation enriching for both. If you really want to make progress, this is the attitude you need to work on most of all.

The rule is simple. If you enjoy talking to people, are genuinely interested in them, and have no hidden agenda, they will like to talk to you. Put another way, it's hard not to like someone who likes you.

Cheryl Reimold has taught communication skills to engineers, scientists, and businesspeople for 15 years. Ee form, PERC Communications (6A Dickel Road,Scarclay, NY 10583, 914-725-1024; percem@aol.com), offers business customized business courses on writing, presentation skills, and on-the-job communication skills.

FLOCCI...PILIFICATION

(continued from page 15)

ers, brevity was lauded. It served well, as one might reflect this year, the centennial of the birth of Ernest Hemingway, the writer whose succinct style set the standard for 20th century literature.

Arguably, the true threat to our art is not ultra Hemingway style, Houston space-talk, Hal remarks, or highway-sign brevity. It's the converse in which we wallow daily, from the software user manual that's larger than a desk dictionary to the airport bookrack novel that takes a thousand pages to say that the author regrets having grown up in New York City. Works such as these wear out the communication capacity of English from the star status of being only 50 percent redundant, as observed by Shannon in 1948. Perhaps, then, we who pound keyboards can do our part, by thinking more often of Shannon—and of Hal.
**TOOLS OF THE TRADE**

**The Art of Conversation**

By CHERYL REIMOLD

**Part 2: Keeping It Flowing**

We began with a summary of Jonathan Swift’s observations of conventional sinnights and we talked about what a good conversation is: an exchange that leaves both parties enriched by new knowledge and feeling good about themselves and each other. This definition holds the secret to both starting well and keeping a conversation going. Here are three simple principles you can easily remember and apply.

**Principle 1: Use the power of questions.** Questions are the way to get a conversation started and keep it moving. At the beginning of the conversation, be content with the obvious questions suggested by the context and don’t be discouraged if you don’t get much response. Just keep fishing and wait for a bite.

However, being persistent with questions doesn’t mean that you should “grill” people. Once you start getting responses, it’s time to move to a true exchange of ideas.

For instance, consider the following exchange: “Have you noticed that the cafeteria chef has ventured into all kinds of ethnic experiences lately?” (“Hmm.”) “It’s rather a nice change, isn’t it?” (“Yeah.”) “Do you ever try your hand at any kind of adventurous cooking?” (“No...making bread is as far as I go...just in a bread machine.”)

This is the first “bite” after low-key, obvious starters. It’s easy to fall into the trap of grilling at this point by asking endless questions about details of bread making: the machine used, the ingredients, how long it takes, how much everything costs, the kinds of bread made. In the end, you have a bunch of facts—but what does the other person have? Just the satisfaction of having talked a lot.

How can you move into sharing even if you can’t contribute any direct experience? By focusing on the larger issues—for instance, why people do whatever they do: “Really? That’s great! I love home-made bread. How did you get into that?” Now you may be able to share ideas on bread, nutrition, nostalgia for simpler times—all things in which both of you are similarly expert.

A special tool to cultivate is the focused question. Say you meet somebody who works in a high government office. A simple open question might be, “What’s it like to work in such an environment?” A more effective focused question might be, “I read somewhere that in political organizations all places, there seems to be less internal politics. What’s been your experience with that?” Think of it as a formula: food for thought + invitation to respond. It’s a way to jump-start a conversation. If you want to become skilled in this, watch master moderators such as Larry King.

**Principle 2: Contribute, but don’t overwhelm or show off.** Obviously, if you want to be a positive conversational force, you have to contribute something. As Swift puts it: “...if the majority of those who are got together be naturally silent or cautious, the conversation will flag...”

On the other hand, you don’t want to say so much that they haven’t a chance to talk. It’s not that you shouldn’t talk a lot, but you should leave room for lots of turning-taking. So think twice before going into fine details of a situation, problem, theory, or hobby. How long will your partner want to listen silently?

Showing off how intelligent or successful you are is another sure way to kill a conversation. But even innocent “topping” can backfire. Say a woman is starting to tell you about an extravagant trip she made to celebrate her 10th anniversary. How will she continue if you throw in, “Oh, really? We celebrated our 25th anniversary!”? You just stole her thunder!

But perhaps you have the opposite problem: You rarely talk, let alone show off.
Ron Blécz and Lisa Moretto are presenting a preconference tutorial at the IEEE-USA 1999 Professional Development Conference (Labor Day weekend in Dallas, Texas) called *Shortening Your Professional Communication Skills: Writing Action-Getting E-mail, Letters, Reports, and Proposals*.

**Awards**

PCS gives three annual awards to technical communicators. The Outstanding Paper Award recognizes a paper of unusual quality, originality, and significance published in the *IEEE Transactions on Professional Communication* in the preceding year. The Alfred N. Goldsmith Award recognizes outstanding contributions to the field of technical communication and thus the goals of PCS. The Emily K. Schleisinger Award recognizes an individual who has actively furthered technical and professional communication through outstanding service to PCS.

The PCS Editorial Advisory Committee selected the Outstanding Paper Award winner and the AdCom selected the winners of the Goldsmith and Schleisinger Awards. Winners will be announced at the IPCC '99 awards luncheon, September 9 in New Orleans.

**FROM THE EDITOR**

(continued from page 2)

located in Flanders, Wallony, and Brussels, with no apparent bias other than the spreading of word-of-mouth reputation.

—Jean-Luc Doumont, Kortenberg, Belgium

Luc Bouquet's Response:

I read Mr. Doumont's letter very attentively. I don't want to polemicize on this issue. Mr. Doumont is right in that the article reflects my own experience; that's why I had it peer reviewed by a colleague in Brussels. As the technical writing business in Belgium is relatively new, any article on it will just reflect the author's personal experience. I'm looking forward to reading an article with Mr. Doumont's opinion. I am also prepared to collaborate with him on an update sometime next year.

—Luc Bouquet, Gent, Belgium

Info for Authors

One thousand words makes a nice page-and-a-half article, although longer and shorter articles may be appropriate. Proposals for periodic columns are also welcome.

If you use a w program, keep your formatting simple: multiple fonts and sizes, customized paragraphing and line spacing, personalized styles, etc. all have to be filtered out before being recoded in Nuuige style. Headers, footers, and tables lead the casual reader. Embed only enough specialized formatting and highlighting—boldface, 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.

I prefer to receive articles by e-mail; most WordPerfect, Word, and ASCII files are acceptable. My addresses are in the backplate at the bottom of page 2.

**Deadlines**

The 15th day of each odd-numbered month is the deadline for publication in the succeeding odd-numbered month. For example, the deadline is November 15 for the January/February issue, January 15 for the March/April issue, etc. You won't be far off—and never late—if you observe the dates of November, January, etc.

**NET NOTES**

**DEVELOPING A WEBSITE—PART 3**

Now that you have decided you need a Web site and have chosen a designer and an Internet service provider (ISP), the next step is the actual design of the site. Remember that your site is the Internet gateway to your business. You need to work closely with your designer to create a site that accurately reflects your business and meets the needs of your intended audience. The procedure followed by many designers can be broken into the following six steps.

1. **Determine Audience Technical Abilities**

For the majority of Web sites you should design for the lowest common denominator—a screen resolution of 640 pixels by 480 pixels, 256 colors, and a modem speed of 33.6 kbps. While many people have migrated to computer systems with at least a screen resolution of 800 pixels by 600 pixels, there are many organizations and government agencies for which this is not the case.

There are special cases, however, in which designers can justify designing for monitors with higher resolutions, more colors, and computers with faster Internet connections. For example, if you can guarantee that your primary audience is connected to the Internet over a T1 line, you can design a Web site with larger graphics or animations—something that would take too long to load over a dial-up connection.

If you know that your primary audience members all have large monitors, you can design for a faster screen resolution and more colors. The key word, however, is "guarantee." You must be able to guarantee that the people you need to reach have the capability to view your site with minimal download time and no horizontal scrolling.

2. **Decide on a Navigation System**

A good Web site allows visitors to find the information they need quickly and easily. This is the navigation system. How do visitors move around your site and how do they find the information they need? Some sites provide site maps, some provide search capability, but all useful sites provide good navigation links on each page. The next question is how to design these links. Designers have a number of tools available. There are straight text links, which every visitor can follow no matter which browser is being used; image maps, in which visitors click on a portion of a graphic; and expandable menus created on the fly using Java or JavaScript. One caution to using cutting edge technologies, such as Java, is that not everyone can access the latest technology. For example, some people have turned off browser images to speed downloads. Others have disabled Java access due to potential security issues. It is critical that all site visitors be able to access navigation points. Keep them simple enough for everyone.

3. **Determine the Graphical Interface**

Ideally, your graphical interface should complement your existing print materials. Unless it is time for a complete overhaul of your paper image, do not create something completely new and different for your online image.

Jakob Nielsen's *Alertbox* columns (found at http://www.useit.com) remind designers what works on the World Wide Web and what does not. For example, splash screens, an initial screen that sometimes announces the company name with an "Enter Here" link, are often viewed as annoying and a waste of visitors' time. Frames can also hinder visitors because they make bookmarking difficult.

At this point in the process your designer should provide you with two or three design options from which to choose. This does not mean that you choose one of them. You can take elements from each to create your final Web site.
4. Determine the Level of Interactivity
Your site can be an online brochure or one that allows visitors to customize it for their specific needs. At the very least you must include contact information. Visitors should be able to e-mail, fax, or phone you without needing to search further.

A feedback form provides the next level of interactivity. You can ask survey-type questions of your visitors or simply provide room for their comments in either a public or a private forum.

The level of interactivity is almost limitless. Some Web sites allow you to customize information so you can see what you want quickly. An example is The Weather Channel (http://www.weather.com), which allows you to create a "My Weather" page so that when you access TWC's home page the first thing you see is the information you requested.

Other sites provide recommended paths based on previous visits. Amazon.com (http://www.amazon.com) provides book recommendations based on books previously purchased from that site. The key is finding the right level of interactivity for your purpose and audience.

5. Decide on Bells and Whistles
Once you know how the interface will be designed, including the size of the graphical images and any other cutting-edge technologies, it is possible to decide whether you can include any extra "bells and whistles" without hindering the overall usability of your site.

These extras could include two- and three-dimensional animation, enhanced three-dimensional images, scrolling text, sound effects, video, or any other extras that could add to your Web site. However, it is very important to determine how these extras would enhance your image. It is best to include them only if they serve a specific purpose. Gratuitous use of animation that serves only to increase download time will just annoy visitors to your site.

6. Create Content
Although this step is the last one in the design process, it is the most important and most basic one. While the World Wide Web continues to grow at an astounding rate, the amount of usable content on it seems to be dwindling. Web sites that provide useful information for their visitors stand out among their competitors. Do not be afraid to start small by providing smaller sections of quality information. The wonderful thing about a Web site is that it is a document in progress. As your business grows and changes, so can your site.

Finally, your site has been developed and is online. Your work is not yet done. Your site needs to be maintained and updated regularly to keep the content current and remind visitors why they want to return to your site time and again.

Elizabeth Wise Moeller is a PCS AdCom member and chair of the Publicity & Marketing Committee. She owns Interactive Media Consulting (518-356-8765, beto@emidconsult.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.

"Good communication is as stimulating as black coffee, and just as hard to sleep after."
—Anne Morrow Lindbergh

"A few words, well chosen and distinguished, will do the work that a thousand cannot."
—John Ruskin

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HIGHLIGHTS OF THE JUNE ADCOM MEETING

By Muriel Zimmerman

The Professional Communication Society's Administrative Committee (AdCom) held a two-day meeting in Waltham, Massachusetts, on June 26-28, 1999. Major discussion issues were conferences, publications, publicity and marketing, education, and awards.

We held productive breakout sessions on education, finance, and membership, and created an agenda of action items for accomplishing goals. The next AdCom meeting—the annual election meeting—is in New Orleans at the Omni Hotel on September 7, 1999, at 2:00 p.m. All PCS members are welcome to attend.

Conferences

The AdCom approved the final report from IPCC 98 and once again applauded chair Ron Blicq for the successful Quebec conference. Michael Goodman, chair of IPCC 99, reported that plans for the New Orleans conference are proceeding on schedule. Thanks to Dave Milley and Beth Moeller, the IPCC 99 Web site is available through the PCS site and is updated regularly. Tony Temple of IBM has accepted the invitation to be keynote speaker.

Beth Moeller, chair of IPCC 2000, reported substantial progress. The conference is scheduled for September 25-27, 2000, in Cambridge, Massachusetts, and it will be a joint venture with SIGDOC. Nicholas Negroponte of the MIT Media Lab will be the keynote speaker. Berenadette Longo is program chair for PCS and Michael Prioleau is program chair for SIGDOC. Terrance Malkinson will edit the proceedings and Steve Chu will create and maintain the Web site.

IPCC 2001 will again be co-located with SIGDOC, this time in Santa Fe, New Mexico; Joe Chew will be chair. For IPCC 2002, Laurel Grove and Paul Seesing will host a conference in Oregon.
communication and humanistic arts camp? If my observations are limited in scope—are true, we could be making big progress in that area.

And those of us in the IEEE Professional Communication Society may see less of a distinction between our twin goals of helping engineers communicate and advancing the field of technical and professional communication.

Now that's what I call progress!

—Roger Grice, r.grice@ieee.org

PCS Survey Results

By ELIZABETH WEISE MOELLER

This spring we asked you to answer 20 Questions. First, we thank 70% of you who have done so. Second, the survey is still online at http://www.ieee.org/pcs/survey.html and we encourage everyone who has not yet responded to do so soon. The results of this survey help us in our strategic planning.

Results

Almost 70 percent of our members describe themselves as a technical writer (24%), an engineer (21%), an educator (14%), or a project manager (10%). This information is very useful to us as we start to define member recruiting strategies. People are very pleased with the Transactions on Professional Communication and our bimonthly Newsletter. Almost 90 percent of the respondents read the Transactions and 95 percent the Newsletter. All Transactions and Newsletter features listed on the survey received a positive reaction. The top three Transactions features are research articles, editorials, and book reviews. The top three Newsletter features are Tools of the Trade, one-time articles, and Master of the Style.

The only question we really wish we had received more positive responses to is the willing-to-volunteer question. PCS is an all-volunteer organization. We welcome members who would like to help on any of several committees or run for a position on the Administrative Committee. As always, AdCom meetings are open to members of PCS and we look forward to meeting you as we move our meetings around the country.

MEMBERSHIP

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Make optional choices clear and point out conditions before a user takes a step.

One thing often said about PCS is that we are "the best kept secret in the IEEE." Our goal is to change that image. We want people both within and outside the IEEE to know who we are and how we can benefit them. Over half our members learned of PCS through the IEEE Society listing. Another 20 percent joined on the recommendation of a colleague. These results indicate that we really need to market ourselves outside the IEEE and especially encourage our members to recommend PCS to their friends and colleagues.

Beth Moeller is a member of the AdCom and chair of the Publicity & Marketing Committee. Her Net Notes column appears regularly in this newsletter.

Professor Grammar

Optional and Conditional Steps

Later the Professor has been annoyed by commercials, junk mail, and peaky telemarketers. Although the Professor is in the habit of ignoring commercials and junk mail and summarily hanging up on bothersome calls, she pays enough attention to notice the marked difference between this sort of communication and technical documentation.

Marketing information, whether on television, in the mail, or over the phone, is full of phrases like "Sign up now and we'll add an additional 20 free minutes" and "To simplify your life, you need to switch to our new plan." They all hide what they want you to do is totally optional (of course, you know that it's optional, but they don't want to remind you).

In marketing information, the conditional phrasing (such as "Not valid with any other offer" and "Only on alternate Tuesdays when there is a full moon") is usually in fine print or whispered in "fast speak" at the end of a commercial. In contrast, in technical communication we try to spell out when something is optional.

In technical communication, we begin steps with their conditions. It is not our purpose to mislead the user. Our purpose is to make optional choices clear and to point out conditions before a user takes a step. As we all over ourselves to be clear, we need to remember a few simple things about optional and conditional steps.

The Difference Between Optional and Conditional Steps

Many writers and editors do not spend much time thinking about the difference. But confusing the two types by using them interchangeably or improperly can confuse your users. The Professor has seen hundreds of steps like this one:

1. Optional: If you want to specify a description for the widget, type one in the Description field.

What's wrong with step 1? Is it the step optional? Yes, it is. Is it conditional? Well, that depends. It is conditional on whether the user "wants to," but is that the same thing as conditional? No, that's the same thing as optional. (The Professor knows that she just lost half of you, so do not be embarrassed to go back and read that again.) More simply put, the phrases "Optional" and "If you want to" are redundant. Users should be able to assume that a step that starts with "Optional" means that they can skip it.

Further, they should assume that a step that starts with "If such and such" means that the step applies to them in the case where "such and such" is true for them. Users cannot skip an if-step unless they determine that it does not apply to them. Unfortunately, if your writing is careless, the difference between an optional step and a conditional one becomes muddied. Consider these steps:

2. Optional: Specify a description for the widget in the Description field.

3. If your widget contains whatnots, select the ABC check box.

Step 2 is clearly optional, whereas step 3 applies only to users whose widgets contain whatnots.

Steps That Are Both Optional and Conditional

How do we combine optional and conditional steps? Consider:

4. Optional: If your widget contains whatnots, specify details on the Whatnots Properties page.

In the case of step 4, we have a step that is both optional and conditional. All users can skip the step, but only those with whatnots can choose to follow the step. Compare step 4 to step 3. Both apply to only a subset of users, yet one is optional for those users and one is required.

Overuse of Optional Steps

Not only must you be careful not to confuse the two types of steps, but you must also avoid overusing the word "optional."

Use optional steps only when taking a step is clearly an optional part of the task...
that you are documenting. If it’s not really a part of the task, consider omitting the step. If it’s not really optional, don’t call it optional.

**Final Exam**

Use the following steps to test your editing skills and your grasp of this month’s lesson. Why are these steps incorrect?

5. Optional: Click Change to change the description that you specified in step 4.
6. Optional: Use your mouse instead of your mouse for these tasks.
7. Optional: Repeat steps 2a through 2e for each additional item that you need to add.
8. Optional: Click OK to submit the SQL.
9. Optional: Click Cancel to close the window without doing anything.

Take a minute to come up with your own answers before you read on. Then compare your solutions to these:

Step 5 is optional, but is it part of the task? Doubtful. It documents a button on a window but isn’t really related to the task. If a user specifies a description in step 4, it’s not likely that the user will be inking to change that description by step 5. Omit step 5.

Step 6 is not a step of any task. It’s trying to fit some extraneous tidbit of information into a step. Omit step 6.

Step 7 is not optional. Users also need to add an additional item and need to perform steps 2a through 2e. Remove the word “Optional.”

Steps 8 and 9 go together. The writer is trying to document every possibility, so making both optional. In reality, the user must do one or the other. However, the user doesn’t really have the choice of step 9 because, to complete the task, the user must perform step 8. Remove the word “Optional” from step 8 and omit step 9.

That’s more than enough for one lesson. In closing, the Professor bids you an optionally pleasant summer, if you want one, that is.

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**BAD NEWS FOR TREES**

(continued from page 23)

Xerox local print centers and sold in hotels and colleges. Bloomberg, the London Times, and the Miami Herald have all announced PrinPoint editions. The company hopes to sell 500,000 copies a month in 12-18 cities by the end of 1999.

Digital printing could also let book publishers cut their stocks while keeping their whole back list permanently available by printing books only when retailers—or even individual customers—ask for them. Lightning Print, a subsidiary of Ingram Book Group, America’s largest book wholesaler, offers such a service to 180 publishers. Titles can be ordered by retailers one copy at a time. Les Editions 00000.com offers a similar service to individual shoppers from its website. In addition to customized reprints—mostly French literary classics, science fiction, and humanities—the company also sells electronic books for download and preprinted books.

Online publishers and digital-printing outfits are in many ways keen followers of Gutenberg. They rail against the effects of consolidation in the publishing industry and the tyranny of bestsellers. By reducing the costs of making and distributing books, digital publishing could restore the world of reading to the state it enjoyed in the 15th century when print runs were small.

By lumping computers and televisions together, as if they exerted a single malign influence, pessimists have tried to argue that the electronic revolution spells the end of the sort of literary culture that began with Gutenberg’s press. On several counts that now seems the reverse of the truth.

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**STUDENTS SEE COMMUNICATION IN THEIR FUTURE—BUT WHAT KIND?**

DURING the summer break from classes, I’ve been talking with juniors about their future and their careers—what they plan to do when they leave Rensselaer (that’s Rensselaer Polytechnic Institute in Troy, New York). These students are among the best and the brightest, so their thoughts and views may give us good insight into what we might expect as we move into the next millennium.

The students can be divided into two groups: those majoring in technical communication and planning to go into that field as professionals, and those majoring in other disciplines (engineering, science, and management) who see technical and professional communication as part of their chosen profession, though not their main focus.

Both groups seem to be aware of the importance of communication to their professions and to their own professional development. Both groups (or at least the students who spoke with me) are sharpening their communication skills so they can be effective on the job. The two groups, however, see different communication activities as being crucial to their success.

Those preparing to be professional technical communicators look to careers in some of the exciting new venues of communication:

- As designers of Web sites and as Webmasters—responsible for creating effective communication using all the latest tools and technologies.
- As communication consultants—responsible for helping organizations develop an image and spread their message to clients.
- As multimedia designers—responsible for combining text, graphics, sound, and animation to produce communication that is both effective and technologically impressive.

Those preparing to be engineers, scientists, or managers also look to careers in which communication plays an important role:

- As innovators—responsible for developing and refining technology that will benefit society and, of course, their own organizations. Many of these students are well aware that it is not enough to be technically proficient; they must also be able to communicate the application of their creativity.
- As leaders of industrial organizations—responsible for communicating within their organizations the goals to be achieved and the measures of success, and outside their organizations the merits of the organization’s output.
- As leading members of technical professions—responsible for communicating with others in their profession so that they can advance the state of the art.

I was—and am—intrigued by these observations. On the one hand, those who will enter the market as professional technical communicators are aware of the need to become technically proficient and are preparing themselves for careers by developing this proficiency and applying their knowledge to communication tasks at hand.

Those who will enter the market as technical professionals are aware of their need for what are generally considered the more traditional aspects of communication: awareness of audience, shaping a message to fit an audience, and including communication as an integral part of any development project.

We could assume as generally true that the first group already possess traditional communication skills and are working to round themselves out; we could also assume as generally true that the second group already possess technical ability and are rounding themselves out by focusing on traditional communication skills.

Could it be that we are finally seeing a blending of C.P. Snow’s “two cultures”? Will the professionals who follow in our footsteps have a solid grounding in both the science and technology camp and the
LETTERS TO THE EDITOR

newsletter issued by the church where I play the organ and train the choirs. There I have had the benefit of the subject of music and its demise under church auspices, but that is a subject about which I feel a little more comfortable than I do about technical writing. Best wishes to you.
—Joe Chapline
Newbury, New Hampshire

Jean-luc Doumont:
I am very surprised at the strong regional slant of Luc Bouquet’s article “Technical Communication in Belgium” in the July/August issue of the Newsletter. As evidenced by the sidebar, the article’s main point is that “the technical communication business is mainly located in the Flemish part of the country and in Brussels,” apparently because “technological valleys are growing in Flanders” and “the Flemish people are doing quite well in English.” I fail to find in the article convincing evidence of such Flemish dominance; on the contrary, I see three weaknesses in the argument.

First, I am surprised at the lack of definition for the “technical communication” business. I fear that it is taken to mean “writing manuals” (Luc Bouquet’s main line of business). If I judge by the opening words of his Web site, an equivalence I would find too restrictive.

Second, I doubt that the (low) membership of the Belgian Chapter of the Society for Technical Communication is a faithful image of the profession in Belgium. An STC member myself, I heard but recently about the existence of a Belgian Chapter and, for lack of clarity about the benefits of membership, have not enrolled yet. I place within that Chapter, created by Luc Bouquet, its 80 members primarily among Bouquet’s (Flemish) professional network.

The argument about membership may moreover confuse geographical location and language use. I am a native French speaker now living in Flanders. Am I a Flemish person by Bouquet’s standards? I do not think of myself as one.

Third, and maybe most important, I fail to see the relevance of geographical bias (if any) within a country as small as Belgium in an age in which workers move freely across Europe, more and more people work from home or from remote locations, and the Internet makes geography largely irrelevant for business. (The topic sentence “Belgium is a split country” reflects the author’s bias from the start. As far as I know, Belgium is a federal country; so is the United States.)

If the article merely reflects the author’s opinion or experience, I understand better but would have appreciated it being stated as such. My own experience, indeed, is different. As an example, my company has been teaching technical communication all over the country to Dutch-speaking and French-speaking people (often mixed) and to foreigners, in industries, federal and regional research centers, and universities.

—Edgar Ormiston
Chicago, Illinois

Bad News for Trees


Several companies and research laboratories are already developing what they regard as the second generation of electronic books. These aim to mimic conventional reading materials even more closely than e-books while still reaping the benefits of digital publishing, namely quick updating, cheap manufacturing, and virtually cost-free distribution. They are building electronic paper.

Joseph Jacobson and his colleagues at MIT’s Media Lab have developed inkjetted paper with tiny capsules that change color when electrically charged and which can be printed on flexible paper-like materials that can carry charge to the inks. Even the prototypes are strikingly easy to read, though the ultimate aim of the project—an electronic book with hundreds of pages that can display any text—is three to five years away (just as all the best gadgets always are).

The first applications of the technology, from E-Ink in Cambridge, Massachusetts, are due next year [mean 1999]. They will probably be signs in retail stores which can change their messages by radio command.

Xerox’s Palo Alto Research Center is also working on a form of digital paper known as e-ink.

Yet there are two reasons why even the most ambitious champions of digital technology still do not think they can kill ordinary paper. One is the problem of durability. Atoms tend to persist, but electronic signals disappear unless they are recorded. Unfortunately, both the recording media and the software used to retrieve digital data quickly become obsolete. This problem cannot be solved by technological progress because it is caused by technological progress. Texts that people want to keep for a long time, or to give as durable gifts, are likely to remain in physical rather than digital form.

The other disadvantage of digital media is that people are not digital. They are physical objects who live and work in three spatial dimensions. This situation is not expected to change. People prefer to work and play with objects arranged around them and their memories depend on cues provided by their location. Today homes can have dozens of digital displays and e-books, paper is therefore likely to keep a place in our culture for a while. Until home environments do their job perfectly and tend to stick around.

The spoon is one example, the lawn roller another. Paper may well be a third.

According to Xplor International, a broad association of companies in the information business, the number of documents produced by organizations in any format is growing so fast that paper will continue to boom even as electronic documents grow. Xplor expects the proportion of documents that are printed to decline from 90 percent to 30 percent between 1995 and 2005, but the total number of documents printed to double over the same period. One reason for thinking that printed paper will continue to thrive is that the printing industry itself is going digital.

American print firms already receive about 60 percent of their jobs in electronic format. Some are starting to use digital presses, which print straight to a plate without the need to make a film for each page. Fully digital presses can economically produce short runs of a handful of copies or even customize each copy. They can already match the quality of conventional lithography and increasingly outstrip it (thou book or glossy-magazine covers remain a problem). Roughly speaking, most print runs under 1000 copies can currently be more cost-effective on a digital press.

The implications of digital printing are twofold. First, digital pressures promise to reduce the cost of publishing by distributing publications before rather than after they are printed. Text and illustrations can be broadcast cheaply in the form of electronic files and then printed at thousands of print shops close to where the copies will be sold. One company is already exploiting this idea as a way of selling newspapers.

In 1998 PressPoint began publishing editions of Spanish and Austrian newspapers in Washington and New York. The papers are in color on A3 broadsheets, printed in
THE PIRATES OF PCs
BY MARCUS BALES

[Gilbert and Sullivan must be twirling in their graves. Currently making the rounds on the I-way in cyberspace is an adaptation of their comic song "The Very Model of a Modern Major-General.]"

I am the very model of a modern cyber-netizen: All logic I dispense with, and all taste and manners jeraison. I'm found on TV, radio, and many other "medias". But cyberspace is where I'm most particularly tedious. I come in every stripe, from the conservative to radical, And know all except for how to spell or be grammatical. I haven't got a clue about the use of logic, And drive on with made-up-factoid second-hand banality. I flame opponents hoarse from a dozen different pseudonyms, Each one a ruder, lower pun on Anglo-Saxon crudonym, And where I find civility and hot debate have been at ease, I break it up with spamming, flaming, scrolling, and obscurities. I'm ignorant in every field, poetic to statistical, Which only makes my points of view more thoroughly sophistical; My attitude's aggressive and my tone is sanctimonious, My facts are bad, conclusions wrong, and arguments erroneous; My posts are pure unparaphrased expressions of my vanity, Impossible to parse except perhaps for the profanity. I'm known for disputatiousness and other sorts of knavery. From purposeful mendacity to things yet more unsavory. The places civil reason is accounted most ignilous Are places where you'll find me incautiously tedious. In short, all logic I reject, all taste and manners jeison Because I am the model of a modern cyber-netizen!

To communicate with the author send e-mail to mbales@cybergate.net or visit http://www.bongbull.com.

LETTERS TO THE EDITOR

I seldom write here but occasionally it is pure. In July I received two letters to the editor!

Joe Chapline, a founder of PCS in 1957 and president in 1958-59, reflects on the changing context of our profession; and Jean-Luc Droux, our Good Intent, Poor Outcome columnist, takes issue with Luc Bouquet's view of technical communication in Belgium (Newsletter, July/August issue). Ed.

Joe Chapline: I bear your pleas for articles for the Newsletter. I would love to write one, but I gave a talk at the SIGDOC meeting down in Massachusetts about four years ago and while I was there I listened to some of the other talks being given at that conference. I felt so out of it that I went home realizing that the world has passed me by. I loved the old PENGUS (Professional Group on Engineering Writing and Speech), the original name of PCS in the late '50s and early '60s. I worked at presenting conferences at Michigan State University and other places. Back then we talked about grammar and knowing what you were talking about. Now it seems that computer technology and the many wonderful ways to escape from the obligation to know what you are talking about have advanced so far that I feel helpless to help. I taught more than 200 courses in writing to various technical organizations in the Philadelphia area (Philadelphia Electric Co., Philadelphia Electric, Philadelphia, RCA, RCA, the Navy Yard, Aberdeen Proving Ground, and so on). I used to tell the classes along about the eighth edition of ten: "You thought I was going to teach you how to write. Well, no one can do that. But I can teach you how to think clearly, and if I succeed, the world will understand you. I have heard people who did not know my language nazi who explained the most complicated things in the most broken English, yet I understood what they said." As an engineer since I was 15, I have heard many seminars, many with the most beautiful rhetoric, that didn't say a thing! And I read computer manuals hoping to understand the programs on my computer. I'm my own computer that my son has compounded for me out of trade parts. I love it. But when I buy manuals to understand the newest program he has given me, I find the manuals do more to confuse me than help.

I have coined an expression: George Washington Bridge Problem. Anyone who has gone over the Hudson River on the George Washington Bridge knows that if he misses the correct turn at any point on the bridge, his life will be forever changed; his old karma will never be retrievable. He is in a new life pattern. He will never be able to get back to the point where he made his first error. That's the feeling I get when I try to figure out how to use a new program. I suspect that the sales departments have had such a large influence on the manual writers—to tell me all about the wonderful program and all the things it can do—that they swamp me with information long before I have even plumbed the first things it can do. Whatever, they're terrible and I see little improvement.

I feel real tongue-tied when it comes to writing a paper for you. I normally write a page-long article each month for the...