

design matters



October '98

What a Year!

by Cheri Taylor, ID SIG Manager

Welcome to the 1998-99 year for the STC Information Design SIG! We have just completed our first full year as an STC SIG. Here are the things we accomplished together as a SIG during the 1997-98 year:

1) *Design Matters*, our SIG newsletter, won the Distinguished award in the STC Newsletter competition for its very first year of publication. (Distinguished is the highest level of award.) Congratulations to our editor, Beth Mazur, and to all the invaluable guest editors and contributors who made the newsletter so wonderful! *Design Matters* published four times last year.

2) Our website now shows off the design-enhancing and content-organizing work that Lisa Pere and her enthusiastic team of web developers have completed. Her team is entering the second phase of the enhancement plan, so if you want to join a soon-to-be-award-winning team, contact Lisa! (Their goal is to enter and win next year's STC Public Relations competition in the website category.)

3) Karen Schriver, our Advisory Panel Chair, finished seating our Advisory Panel. We now have an established group of a dozen subject matter experts in information design to call on (and who can call on us).

4) Our membership increased from 239 to 1493 members between June 1997 and June 1998! That's a 625% increase in one year! Welcome to all our new members!!

5) Thanks to Mike Sharp, our website features the first edition of our FAQ (Frequently Asked Questions). If you would like to contribute questions or answers,

or both, to our FAQ, please send them to Mike at msharp@snip.net.

6) An article introducing our SIG appeared in the October 1997 issue of *Intercom*.

7) Two more volunteers joined the ID SIG management team: Mike Sharp as our FAQ Maintainer and Norman Stahlberg as our Assistant Newsletter Editor. Welcome!

8) And thanks to Mike Albers, our Membership Coordinator, and his university, we now have a listserv separate from the ID SIG listserv for emails related to administering the SIG. This separate listserv lets the volunteers share information and ideas without cluttering up the main list with mail not directly related to information design.

For more information about any of these accomplishments, or to contact one of the volunteers, please visit our website.

What a Conference!

I hope many of you were able to go to this year's STC conference held in Anaheim May 17-20. There were many interesting ID-related sessions and gatherings. You can find the presenters' materials online at http://www.stc.org/region8/occ/www/ana_conf/postconf.htm.

Our official ID SIG t-shirts made their debut at the conference and were very popular. We'll be having another sale of them later this year if you missed the first offering. Also spotted all over (on badges, bulletin boards, and even people) were our "Design Matters" stickers, so bright you couldn't miss them! Printed copies of our Spring online newsletter were available as advertising to let prospective members know about our SIG.

Beth Mazur and I attended the SIG Managers meeting on Sunday, May 17. Among other things, we learned that SIG membership in general is up 76% over last year. Our own ID SIG earned a special mention at the meeting for having completed so many activities in our first full year of existence.

...continued on page 3

The newsletter
of the STC
Information
Design SIG

- 3 Book Watch
- 4 Information Design (an excerpt)
- 6 Next Year's Goals
- 7 An ID Bibliography

Change

by *Beth Mazur, Assistant Manager, ID SIG*

It is hard to believe that less than a year and a half ago, I wrote the following in this very space:

Six months ago, I sent email to the TECHWR-L and InfoD-Cafe mailing lists looking for 25 people who might have "interest in creating an information design PIC." Well, nearly 500 email messages later, here we are ... over 100 members!

Well, here we really are ... now over **1,600** members! This means that our SIG now has more members (about 200 more!) than the largest STC chapter. Fortunately, many of our members have expressed an eager interest in volunteering! Like the rest of our membership, all of the ID SIG leaders and volunteers have full plates: jobs, school, and just plain life in general. We realize that now that you are paying for your SIG membership, you expect value in return. All of the ID SIG volunteers will do their best to make sure that you do get value...but keep us in mind in the event that a newsletter is late (like this one!) or we don't cover an issue that you are really interested in.

Of course, this is all a prelude to announcing that I'll be stepping down as the managing editor for *Design Matters*. While I am extremely proud of this SIG and this publication, I have recently begun a Masters program in Communication, Culture, and Technology at Georgetown University. Working full-time and carrying two graduate courses per semester means that I won't be able to do justice to the newsletter.

Thus I am very pleased to announce that Norman Stahlberg has volunteered to take over the editor position. Norman is a senior member of STC who has been involved in information design for over five years, coming from a Scientific and Engineering background in which he was heavily involved in technical writing. He was newsletter editor for San Gabriel Valley chapter for two years, winning an Achievement Award in the 1997 STC Newsletter Competition.

Norman is looking forward to participating in a dialog concerning Information Design and encouraging other SIG members to participate. He shares, "I think a newsletter should provide the membership with a forum in which to express their ideas, and that members should take full advantage of the opportunity."

One great way of participating is by being a *Design Matters* guest editor (see page 7). Michael Sharp, Mary Ann Eiler, and (soon) Bonnie Davis have done a fantastic job of providing interesting issues for SIG members. Future issues await **your** creativity!

Beth Mazur is the founder and Assistant Manager of the Information Design SIG. She is also Communications Specialist for the American Association for Retired Persons. She can be reached at mazur@pobox.com.

Design Matters

Volume 3, No. 1 ♦ October 1998
Design Matters is the newsletter of STC's Information Design Special Interest Group (SIG).
<http://stc.org/pics/idsig>

Assistant Manager, Managing Editor

Beth Mazur
1114 S. Alfred St.
Alexandria, VA 22314
202-434-2991
mazur@pobox.com

Assistant Editor

Norman Stahlberg
stahlberg@acm.org

SIG Manager

Cheri Taylor
taylorcw@compuserve.com

Chair, ID SIG Advisory Panel

Karen Schriver
ks@e+@andrew.cmu.edu

Membership Coordinator

Michael Albers
malbers@acm.org

Submissions

We welcome submissions from SIG members for publication. Submissions via email are appreciated. Please send to mazur@pobox.com.

Reprints

You may reprint original material appearing in *Design Matters* as long as you acknowledge the source and send the managing editor a printed copy of the reprinted article.

© 1998, Society for Technical Communication. All rights reserved. Printed in USA.

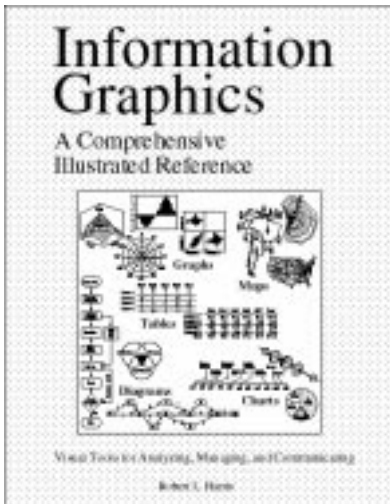
STC
society for technical communication

901 N. Stuart St., Suite 904
Arlington, VA 22203-1854
(703) 522-4114
<http://www.stc-va.org/>

Book Watch

Information Graphics

Robert L. Harris, an ID SIG member, has been receiving great reviews for his 1996 book *Information Graphics: A Comprehensive Illustrated Reference*. The flyer for the book says that “*Information Graphics* is to charts and graphics what a dictionary and thesaurus are to words.”



Information Graphics was written for the professional whose desktop software, such as spreadsheets and word processors, is making it easier to create all sorts of charts and graphics.

The book features over 850 entries arranged alphabetically. For example, Harris includes explanations for a variety of graphics such as the drop line graph, the flow map, the logarithmic graph, and the normal frequency curve. Accompanying the text are over 3,000 illustrations.

Harris brings to this effort his perspective as an electrical engineer with over 25 years of broad management experience. For more information, check out the review in the May 1997 *Technical Communication*.

Look for...

Keep an eye out for two books that should make an appearance soon in your local bookstore. *Designing Websites with Authority: Secrets of an Information Architect* by web usability guru Jakob Nielsen, will provide a tutorial and overview of web design. *Information Design*, a work edited by Robert Jacobson, is also scheduled for publication in 1998.

Call for Proposals

The STC Publications Series, **Teaching and Training in Technical Communication**, will consist of approximately eight short volumes of issues relevant to technical communication faculty and trainers.

Series editor Dr. Deborah Bosley has over 15 years experience both as an academic and as a professional trainer. The Association for Teachers of Technical Writing will join STC as co-publisher. The volumes will be published at the rate of two per year over the next three years, and will address such issues as:

- presenting information orally and electronically
- developing online documentation
- assessing audience

- editing technical documents
- writing and publishing on the Internet
- developing document design strategies
- designing visual information.

The mission of this project is to provide quality books for both teachers and trainers of technical communication, including:

- experienced technical communication faculty who are new to particular issues
- technical communication graduate students
- trainers working primarily with adult learners and employees
- teachers who are new to the field of technical communication.

The goal of the project is to provide quality technical material in order to:

- provide pedagogical materials that are based on theory, research, and practice
- influence the market for materials in technical communication.

Invited authors will have practical experience in the field of technical communication as will the members of the editorial committee (which works closely with the series editor). If you are interested in participating in this series, contact:

Dr. Deborah S. Bosley
Associate Professor of English
University of North Carolina at Charlotte
Charlotte NC 28209 (704) 547-3502
dsbosley@email.uncc.edu
fax: 704-510-6988

What A Year!

...continued from page 1

The ID SIG hosted 10 tables at the SIG Luncheon on Tuesday, May 19. What an opportunity for current and prospective ID SIG members to meet and get to know each other!

We held our ID SIG business meeting on Wednesday, May 20, with 20 people attending. We generated a nice list of potential goals for our SIG, and several people volunteered on the spot to head up certain tasks and projects! See the article about our goals elsewhere in this newsletter for more.

In summary, it certainly was a great conference and a great year for the ID SIG. If you had a part in any of it, you should be very proud. If you'd like to be a part of the ID SIG's next successful year, we'd love to have you!

Cheri Taylor is the owner of TechWords and the manager of the ID SIG. She can be reached at taylorcw@compuserve.com.

Information Design

The Knowledge Architect's Toolkit

by Graziella Tonfoni

Note: This article is an excerpt from a forthcoming book by the author and is reproduced with permission.

In order to identify basic criteria for planning advanced visual interfaces, the first step is to define accurately the term "visualization".

A productive distinction should be made among "envisioning" and "viewing" and "visualizing" processes: just one term "visualization" is not adequate to represent qualitatively different aspects of information rendering through visual codes. By



"envisioning information" we mean to represent the planning of global three dimensional models, dynamically changing in space and time, whereas information is viewed at a macrolevel as a flow to be organized into a set of more stabilized configurations. By "viewing information" we mean to represent the dynamically evolving process of analysis of each single layer, which has been previously identified, by recognizing patterns and meaning configurations within broader textures of information. By "visualizing information" we mean the progressive identification and analysis of those phenomena, which were not known before,

because [they were] not named consistently, after having had them surface in the first place.

Because of the diverse nature of events observed in information processing, any model for consistent visual representation is bound to accurate performance and execution according to a specific set of instructions, both at a macrolevel and at a microlevel.

The overall concept of "model performance and execution" refers back to the general framework of a complex and dynamic conceptual environment for interpretation and packaging of dishomogeneous information to be interpreted and reorganized into homogeneous dynamical structures.

Any information processing model is by nature complex, but complex does not mean fuzzy. Complexity requires a high degree of accuracy and precision to be appropriately handled.

Relevant research in the field of information seeking (Sless, 1978; Marchionini, 1995; Schriver, 1997) aimed at addressing specific problems in information

accessing needs to be taken into account [...] indicating that a global vision on "information rendering", based upon enhancement of specific sensitivity on the interface designer's side, needs to be developed.

It is therefore most relevant to be able to analyze the specific nature of information to be processed at each given time, the respective users' needs, and the specific communicative context (Friedman, 1997), in order to be able to consistently decide whether such information should undergo "envisioning" or "viewing" or "visualizing" processes or ultimately all three. This would be based [according to] a specific set of priorities which have been previously identified.

The final goal is to provide designers, concerned with advanced visual interface planning, with both theoretical models and practical tools to allow them to proceed toward decision making, after accurate problem search and definition has occurred. If some repetition is well planned and a specific topic is processed according to different and various visualization tools harmoniously combined or alternating, users will have to become aware of various means and modes of packaging to be able to perceive and consistently process different kinds of knowledge. Style continuity and consistency as well as homogeneous choice of information to be organized and packaged will constitute a very helpful device for ensuring accurate perception and for minimizing loss of information due to overwhelming diversity in the presentation of the material.

In order to make sure that a certain "knowledge package" has been effectively processed, multiple repackaging of the same body of knowledge according to different visualization criteria is not only desirable but also very productive. A visual interface information designer needs to be able to plan and organize knowledge buildings as well as information territories and open spaces consistently.

Sensitivity to informative matter to be processed, information coming in different states, such as natural language or icons or visual languages at different levels of complexity, needs to be specifically developed.

Just as Architectural Studies entail some Physics, especially regarding basic physical principles and laws regulating the construction process and some Chemistry and knowledge of the specific properties of the material being used throughout the building process; so Information Visualization, as part of Information Design Studies, will have to entail accurate teaching of basic principles of text construction as to develop awareness of physical laws of communicative equilibrium and balancing between and among different codes being used.

Just as Architectural Studies entail specific presentation and accurate choice of a wide set of examples

of different styles, developed by architects in different ages, to promote interpretation skills about the various types of buildings, according to different perspectives and ideologies adopted throughout the construction process (Salvadori,1980; Levi and Salvadori,1987), so Information Design Studies will entail reading and presentation of current literature and accurate analysis of current examples, inspired by different construction criteria (Tufte,1990; Tufte,1991). Knowledge about current literature in the field and about different perspectives and styles and personalities active within the Information Design tradition of visual interfaces planning is important, consistent and parallel development of context sensitivity and awareness about duration in perception and time span concerns and needs is to be addressed as well. In "designing information visually" and in "architecturing knowledge spatially" and with time constraints concerns, a solid and comprehensive theoretical framework will positively reflect upon final output results.

Both theories of text comprehension and of text compression (Tonfoni,1996) may respectively be viewed as viable conductors for sharing a common vocabulary meant to define different kinds of operations to be performed upon texts in the course of an advanced visual interface planning process, just like blue prints are meant to convey the architect's plans to a crew of carpenters and workers. This is where and how a specific need for a multilayered analysis comes in, together with the need for developing a specific competence in working through analogies and metaphors for planning advanced visual interfaces.

Analogical reasoning is in fact an extremely valuable cognitive tool, meant to facilitate information organization, by enhancing a more global vision on complex issues (Hollis,1994). The process of design-

ing metaphors will have to entail very precise rules and principles such as accuracy, visibility, consistency, and continuity.

Advanced visual interfaces design, resulting from a dynamically evolving process of rethinking about the inner nature of information, needs to be based on very accurate envisioning of information flows.

Accurate rethinking of such cognitive processes as focussing, selecting and balancing between the visual code and the linguistic code is therefore crucial, as is accurate planning. Transporting information from books and papers and videos to be then reorganized in an advanced visual interface format requires various and complex skills to be developed for appropriate and cognitively sound reconfiguration.

Graziella Tonfoni conceived this book while she was Visiting Professor at the CLIS at the University of Maryland. She has been a Research Professor in Computational Linguistics at the University of Bologna, Italy. She is internationally known for her contributions to textual theory, cognitive science, artificial intelligence, and multimedia education. She can be reached at tonfoni@umiacs.umd.edu

Coming in December!!

The guest editor for the December '98 issue of *Design Matters* is Bonnie Davis. Her focus is how information designers are involved in developing and managing information delivery, storage, and access tools for electronic media. Articles will highlight types of tools that include document management systems, data warehouses, data imaging systems, the Internet, intranets, and training and knowledge bases. It is not a comparison of different types of tools, such as different document management tools. Instead, it looks at these various types of "new" tools and discusses how information designers are involved in helping companies use the tools to "get a handle on information."

Planning Next Year's ID SIG Goals

by Cheri Taylor, ID SIG Manager

One of the responsibilities of each STC Special Interest Group is to plan and execute a program of activities that promotes the professional development of its members. Twenty of us attended the ID SIG business meeting at the Anaheim conference, and we spent the majority of the meeting listing several possible goals for our coming years. Many thanks to all of you who contributed ideas then and since, and a special thanks to those who've already volunteered to bring a goal to reality!

As a SIG, we want to "push the envelope" in terms of activities, creativity, and benefits both inside and outside STC. As information designers, we are in a unique position to develop and complete activities not usually associated with STC SIGs: information is all around us, and we're not limited to the usual genre of technical writing!

STC recommends selecting three or four key goals for a year, keeping the effort focused on deliverables that are achievable, on time, and within budget. What I've done is taken our list of ideas, added in the goals that STC recommends for SIGs, put them into a schedule, and listed them as follows.

Goals for Each Year

These are the goals we'll accomplish each year:

- Publish *Design Matters* four times each year.
- Accomplish the basic SIG activities at each annual conference, including the business meeting, SIG luncheon, and at least one session.
- Publish at least one article related to the ID SIG each year in *Intercom*.

Goals for This Year (1998-99)

These are our selected goals for this year:

- Win a second Distinguished award for *Design Matters*.
- Enter the ID SIG website in the STC Public Relations competition.
- Enhance the bibliography on the website.
- Set up an efficient volunteer coordination effort.
- Hold an ID Progression session at the 1999 conference.
- Hold an ID Student Panel session at the 1999 conference to highlight resources and programs.
- Hold an ID Workshop at the end of the 1999 conference, or plan for a 2000 one.[p;

Future Goals

These goals are in our idea pipeline for future years, grouped into topics:

Special Projects

- Do a design review of the STC web site.
- Develop a plan to help with STC's technical literacy effort.
- Help STC Press in redesigning its offerings.
- Produce a video about ID to be available to chapters, workshops, etc. (this could be a research grant project?)

Literature/Research

- Sponsor an ID column for *Intercom*.
- Do a special issue or section of *Technical Communication* on ID.
- Compile an STC Press anthology or book on ID practice.
- Propose a research grant project.
- Start a materials exchange between the US and the international ID community (such as a list of reprintable articles from IIID).

Conference Activities

- Set up a presence at regional conferences.
- Hold an ID mini-conference associated with the annual conference.
- Hold an online conference.
- Suggest ID-related keynote speakers for conferences.
- Hold website/online help evaluations at conferences.
- Hold poster displays at conferences.

Member Outreach

- Add a Chapter SIG Coordinator position.
- Add a Student Chapter SIG Coordinator position.
- Add a Community Service Coordinator position.
- Explore interest and need for a membership directory.
- Develop membership questionnaires (ID practices, volunteer interests, etc.).
- Add liaisons to other SIGs.

I welcome your input and participation as we strive to achieve all of these goals! This SIG's usefulness is in direct proportion to the energies invested by its members. Help us with these goals (or tell us your own ideas). Please write me and let me know what you think!

And if you are going to Cinninnati, write! We are already looking ahead to next year's conference.

Cheri Taylor is the owner of TechWords and the manager of the ID SIG. She can be reached at taylorctw@compuserve.com.

An ID Bibliography

by Chris Prell

As an interdisciplinary subject, information design requires familiarity with a number of related fields. As resource coordinator for the Information Design SIG, I have begun to compile a list of useful resources for information designers.

The latest version can be found on our web site at <http://stc.org/pics/idsig/bibliography.html>. Please send your comments and suggested resources to me at prellc@rpi.edu.

Human Factors

- Alessi, S.M. & Trollip, S.R. 1991. *Computer-Based Instruction: Methods and Development*. Englewood Cliffs, NJ: Prentice-Hall.
- Coe, Mariana. 1996. *Human Factors for Technical Communicators*. New York: Wiley.
- Shneiderman, B. 1992. *Designing the User Interface: Strategies for Effective Human-Computer Interaction* (Second Edition). Reading, MA: Addison-Wesley Publishing Co.
- West, C.K., Famer, J.A., & Wolff, P.M. 1991. *Instructional Design: Implications from Cognitive Science*. Boston: Allyn and Bacon.

Writing

- Barnum, Carol M. & Saul Carlner, Eds. 1993. *Techniques for Technical Communicators*. New York: Macmillan Publishing Co.
- Flower, L., Ed. 1980. *Problem Solving Strategies for Writing*. New York: Harcourt Brace Jovanovich.

Visual Design

- Bringhurst, Robert. 1996. *The Elements of Typographic Style* (Second Edition). Hartley & Marks.

- Heller, Steven & Pomeroy, Karen. 1997. *Design Literacy: Understanding Graphic Design*. New York: Allworth Press.
- Horton, William. "The Almost Universal Language: Graphics for International Documents." in *Technical Communication*, 4: 682—693.
- Keys, Elizabeth. 1993. "Typography, Color, and Information Structure." *Technical Communication*. 4: 638—654.
- Williams, R. Thomas. 1993. "What's So Different About Visuals?" in *Technical Communication*, 4: 669 — 676.

Visuals and Text

- Horton, William K. 1991. *Illustrating Computer Documentation; The Art of Presenting Information Graphically on Paper & Online*. New York: John Wiley & Sons, Incorporated.
- Horton, William K. *Icon Book; Visual Symbols for Computer Systems & Documentation*. New York: John Wiley & Sons, Incorporated.
- Meggs, Philip B. 1992. *Type & Image; The Language of Graphic Design*. New York: Van Nostrand Reinhold.
- Schriner, Karen A. 1996. *Dynamics in Document Design; Creating Text for Readers*. New York: John Wiley & Sons, Incorporated.
- Sless, David. 1996. "Better Information presentation: satisfying consumers?" *Visible Language*. 30.3: 246-267.

Web and Multimedia Design

- Hunt, Kevin. 1996. "Establishing a Presence on the World Wide Web: A Rhetorical Approach." *Technical Communication*. 4: 376 — 387.
- Ippa, Nick & Lippa, Nicholas V. 1998. *Designing Interactive Digital Media*. Focal Press.
- Pfaffenberger, Bryan. 1997. *The Elements of Hypertext Style*. New York: AP Professional.

Social Dimensions

- Smith, Marilyn Crafton. 1994. "Culture is the Limit: Pushing the Boundaries of Graphic Design Criticism and Practice." *Visible Language*. 28.4: 298-316.

Chris Prell is a doctoral student at RPI and the Resource Coordinator for the ID SIG. She can be reached at prellc@rpi.edu.

You be the editor!

Have you always wanted to talk about information design from your point of view? Interested in editing a newsletter but not quite prepared for a major commitment? Then you may want to consider guest editing an issue of *Design Matters*.

Guest editors write, solicit, or otherwise acquire 2000-5000 words for a single issue. These articles can be of general interest to information designers or they can be themed on a particular topic.

Design Matters layout and production is handled by Norman Stahlberg. For more details on these positions or just to comment in general, please send email to Norman at stahlberg@acm.org.

Information Design

The field of information design applies traditional and evolving design principles to the process of translating complex, unorganized, or unstructured data into valuable, meaningful information.

The practice of information design requires an interdisciplinary approach which combines skills in graphic design, writing and editing, instructional design, human performance technology, and human factors.

Although its reach extends far beyond traditional boundaries of technical communication, the essentials of information design profoundly affects our work. The products of information design occur in any domain in which clear communication is essential, from those familiar to technical communicators, such as reference manuals and online help systems to those outside the traditional realm of our work, such as public signage in public buildings, insurance and tax forms, and user interface design.

Our Mission

The mission of our SIG is to meet the professional development needs of our members and to act as a vital conduit between STC and information designers at large. Our objectives include:

- advancing awareness of information design among STC members;
- assisting members interested in acquiring information design skills;
- encouraging information design research and making available information design resources;
- examining the roles and practices of the information designer;
- and providing a forum for the discussion of relevant topics.

Please visit the ID SIG website at <http://stc.org/pics/idsig/>



The Information Design SIG

c/o Beth Mazur

AARP

601 E St., NW

Washington, DC 20049