Design by Degrees

Usele

FROM GRAPHICS THEORY

TO PRACTICE

Upper and Lower Case The International Journal of Graphic Design and Digital Media Published by International Typeface Corporation

Volume 22, Number 4, Spring 1996 \$5.00 US \$9.90 AUD \$4.95

Design by Degrees: From Graphics Theory to Practice

Volume 22, Number 4, Spring 1996

Design: Interpreter of the Millennium

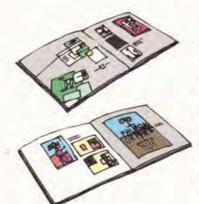
In the future, designers will be deeply involved in shaping content and culture, and schools must prepare students for that role, advise educators Katherine and Michael McCoy.

Good

Best

Better





10

on How to Find Work What's that special je ne sais quoi employers are looking for in an entry-level designer? It depends on whom you ask, according to Karen S. Chambers.

Words from the Wise

26 **Printed Matter**

E

New typefaces from ITC range from a brooding calligraphic script to contemporary, elegant headline faces.



Masters of the Universe

An overview of educational approaches in international graduate design programs, with reports from: Yale University, by Steven Heller, The Royal College of Art, by Joyce Rutter Kaye, The Royal Academy at The Hague, by Margaret Richardson and The California School of the Arts, by Darcy DiNucci.

1	- (1)	左上の角と左下の間	3
ł		たいうとな下の月	
ĺ		(1)の中京と (2)の9	
ł	(4)	左上の角とる上の	ł
ì		左下の角と方下の	
2	- (6)	.(4) = 中东上(5) = =	1
	-(2)	在上的海之 (1) m	
1		(4) 0 4E x (3) x (6)	

44

48

35 **Eastern Influences**

How We Did It

How does an issue of

In collaboration with

Dutch designer Petr

team documents

our own learning

experience.

U&lc come into being?

van Blokland, the U&lc

Four educators in Japan use experimental methods to teach students sensitivity to elements of design, writes Hiroko Sakomura.



Beyond Quark & Illustrator

A useful guide to groups, associations and organizations that can help you develop technical skills. By Gene Gable.

creeping into your backyard.

Be afraid. Be very afraid.

49

Book Review: Desktop Security Is someone reading your e-mail? Two books present ways to make you less vulnerable to infiltration. By Rusty Weston.

EXECUTIVE PUBLISHER: MARK J. BATTY EDITOR: MARGARET RICHARDSON MANAGING EDITOR: JOYCE RUTTER KAYE GRAPHIC DESIGN: PETR VAN BLOKLAND

CREATIVE SERVICES DIRECTOR: JANE DIBUCCI ART/PRODUCTION MANAGER:

> CLIVE CHIU ART/PRODUCTION: JAMES MONTALBANO OPERATIONS: **REBECCA L. PAPPAS** SUBSCRIPTIONS:

ELOISE A. COLEMAN ADVERTISING SALES: REBECCA L. PAPPAS (212) 371-0699 LIST RENTAL OFFICE: CMG INFORMATION SERVICES

(800) 677-7959 © INTERNATIONAL TYPEFACE

CORPORATION 1996. U&Ic (ISSN 0362 6245) IS PUBLISHED OUARTERLY BY INTERNATIONAL TYPEFACE CORPORATION 866 SECOND AVENUE NEW YORK, NY 10017.

ITC IS A SUBSIDIARY OF ESSELTE LETRASET. U.S. SUBSCRIPTION RATES,

\$30 FOR THREE YEARS; FOREIGN AIRMAIL SUBSCRIPTIONS. \$60 U.S. FOR THREE YEARS; U.S. FUNDS DRAWN ON U.S. BANK.

> TO CONTACT ITC CALL: (212) 371-0699 FAX: (212) 752-4752 E-MAIL

GENERAL: itc@eworld.com intitypco@aol.com EDITORIAL/PRODUCTION: designedit@aol.com **OPERATIONS/ADVERTISING:** UlcRPappas@aol.com

SECOND-CLASS POSTAGE PAID AT NEW YORK, NY AND ADDITIONAL MAILING OFFICES. POSTMASTER: SEND ADDRESS CHANGES TO U&/c SUBSCRIPTION DEPARTMENT. P.O. BOX 129.

PLAINVIEW, NY 11803-0129. ITC OPERATING EXECUTIVE BOARD 1996 MARK J. BATTY. PRESIDENT AND CEO RANDY S. WEITZ. CONTROLLER ILENE STRIZVER, DIRECTOR OF TYPEFACE DEVELOPMENT

ITC FOUNDERS: AARON BURNS, HERB LUBALIN, EDWARD RONDTHALER

ITC. U&Ic AND THE U&Ic LOGOTYPE ARE REGISTERED TRADEMARKS OF INTERNATIONAL TYPEFACE CORPORATION MICROFILM (16mm OR 35mm) AND MICROFICHE (105mm) COPIES OF U&/c ARE AVAILABLE FROM UMI, 300 NORTH ZEEB ROAD, ANN ARBOR, MI 48105-1346. PHONE: (800) 521-0600 OR (313) 761-4700. FAX: (313) 761-3221.

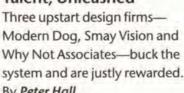




32

46 PaperPlates, **Envelopes** and Alphabets No, not the contents of your desk drawer, but a trio of digital products to address a

wide range of design needs.



The Learning Curve:

Proceed with Caution

Acquiring new technical skills can give

you an edge, but selecting the right

learning experience can be tricky.

Gene Gable provides a road map.



THE DESIGNER

International Typeface Corporation would like to thank Petr van Blokland of Buro Petr van Blokland + Claudia Mens, Delft, The Netherlands, for the design of this issue of U&lc.



2



Putting out U&lc is a collaborative process involving the magazine's editors, production staff and a guest art director. The U&lc staff approached Dutch designer Petr van Blokland about working on this issue during the Fuse 1994 type conference in London. That is where the issue began.2

Issues of U&lc are thematic. Design education emerged as a pressing topic since colleges and universities are addressing the changing nature and esthetics of design and the impact of rapidly evolving technology-issues we all face working in a digital environment.

We felt Van Blokland was the logical choice to design this issue. He is a natural teacher, we discovered, while watching him organize and work with students and guests in TypeLab at ATypl. Van Blokland also teaches typography at the Royal Academy of Art and Design at the Hague. His Buro Petr van Blokland + Claudia Mens in Delft is not only 'wired,' but databased with a program he has customized for his studio and his clients.

New Yor

In New York we began shaping the editorial mix by seeking content based on the theme and supplemented by strong visuals. As usual, we were helped by our repertory company of writers who contributed their ideas for "design education for the millennium." We consulted with Van Blokland continuously since the designer's editorial gestalt and visual acuity is a strong influence in our final selection of feature articles.

3 ITC Officina San Bold 4 ITC Leawood Bold

November

signers to find out what their hiring needs are. Gene Gable provided an overview of methods of learning technical skills. Kaye, Steven Heller, Darcy DiNucci and I profiled programs at four major educational institutions. Hiroko Sakamura visited with four influential teachers in Japan. And to emphasize that design is not just about theory, Peter Hall tracked three design firms who started up their own studios. BRIEROK . Intepreter of culture Van Blokland decided to work in our offices for a two-week period between Little Christmas (December 5) and Christmas so that he could be with his family for both holidays. We then continued our con-

Joyce Rutter Kaye es-

tablished a schedule

assembling the copy

and artwork. We contacted renowned edu-

cators Katherine and

an industry overview

and forecast. Karen

Chambers polled de-

Michael McCoy to write

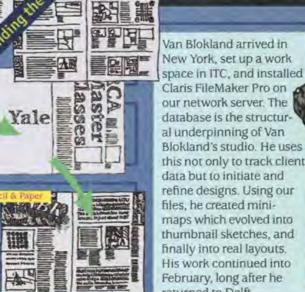
and we continued

tact with him by phone, fax and e-mail. (Transferring large image files electronically, however, proved to be problematic and slow, forcing us to rely on a shipping service to messenger disks and artwork.)

CYPE 7AB

Our first planning meeting took place at an outdoor cafe in Barcelona during the ATypl Congress in September. Managing editor Joyce Rutter Kaye and director of creative services Jane DiBucci and I talked to Van Blokland about the parameters and the logistics of designing this issue Heetin and finalized the editorial lineup for this theme.

December Januari



1 Par

ABC

AKAETGANA

returned to Delft Although we have worked with many designers over the years, we have rarely experienced the thrill and the terror of daily watching the designer work. This painstaking and formidable process is captured here in Petr's sketches. Our production team, with our editorial team, made these pages real...you are reading the result of our collective efforts. -Margaret Richardson

in the design of the second se

Van Blokland arrived in

Why Not Associates

Cautio

box sundoes

SEX

Februari 1996

How we did it... 💉

odern Dog

Smay Vision

1 ITC Kabel Bold

Oktober

3

HE GOLD DUELO M

KATHERINE AND MICHAEL MCCOY

As we approach the end of the century, powerful technological and cultural forces are reshaping the design landscape. The Internet, interactive multimedia, 'smart' and customized products, the rise of new communications services and the demise of the mass market are changing the way design is learned and practiced. Motion, sound and interactivity are adding three new design dimensions. The profession must develop new design tools and strategies to deal with these challenges, and design education must impart these methods and insights to students.¹

INTERPRETATION²

As the design profession grows more complex, its educators need to incorporate more disciplines, from technology to psychology. Design is about the interpretation of technology, information and situations for people, and, accordingly, education should impart strategies for interpretation that students can use as tools in their work. These strategies must be robust to prepare students for the scenarios they will encounter in their careers in the next millennium.³

A number of very useful theories are emerging from the social sciences, cultural anthropology, philosophy and cognitive studies that help designers understand the impact their work has on people's lives and perceptions. For example, communications theory illuminates the differences between how we see images and how we read texts. Understanding the differences between the seeing and the reading processes leads to the realization that we also can *read* images and *see* text. The application of this small bit of theory allows a graphic designer to make significant reinterpretations of both typography and imagery. New strategies give designers new insights, or new lenses providing the vision and clarity with which to develop their work.

Design for interpretation involves the audience in the creative process, countering the couch-potato syndrome of the television age. A graphic communication's meaning does not truly exist until each receiver decodes, or interprets, the message. Interpretive design challenges the viewer to participate and affect the outcome. This is especially important in interactive multimedia design if we are to move beyond a simple card-shuffling and page-turning approach.

Designers will be much more involved in the design of experience, rather than producing discrete objects.

They will be creating potential and open-ended situations for users to explore. Audiences will 'finish' designs as they negotiate nonlinear and malleable situations. New design research methods like videoethnography, appropriated from cultural anthropology, give designers advanced insights into the effects their work has on their audience.

END OF MASS

Technology is dissolving mass production and mass media. The forthcoming 500 interactive cable channels, wireless communication, the World Wide Web, high-quality desktop publishing, low-run color printing and flexible manufacturing will increasingly allow the needs of small audiences to be addressed. Narrowcasting is replacing broadcasting and designers can now play to smaller, more highly-defined groups. This is appropriate in our world of myriad subcultures.

Design is cultural production. Because designers construct a significant portion of the informational and material culture in which we live, they must understand their culture and recognize how it constantly re-makes itself.

Many designers are participants in the subcultures for which they are designing, from snow boarders and social activists to Harley-Davidson motorcyclists and Net surfers. This allows them to speak to and with their audiences in specialized verbal and visual languages with an intimacy not seen before in design. Narrowcasting allows for designs of very specific and intense flavors. When the designer does not have to speak to the broadest common denominator of a mass audience, a richer conversation among peers emerges.

Design: interpreter of the millennium

Design can be stronger, more innovative and experimental when tailored to a specific subculture.

New interactive technologies will make it possible to customize or individualize all kinds of communications, products and services, including personal magazines and newspapers. Designers will have to create systems that can respond to highly individualized needs and desires.

CONVERGENCE

The design disciplines are again converging, something that has not happened since the Modern Movement's experiments at the beginning of this century. Graphic designers and product designers will be working much more closely to accomplish the harmonious integration of electronic information and the physical world. The lines between software and hardware are increasingly blurring. It is becoming more difficult to differentiate between a manufactured product's physical service and its communication of information. The essence of this condition is 'haptic software', or software you can hold in your hand.

A fluid blending of hardware and software will make the access and manipulation of information and entertainment a comfortable and satisfying part of our lives. If done well, design can empower individuals and groups by providing them with access to the information they need to make intelligent decisions about their lives.

Products are becoming increasingly programmable and 'smart,' integrating computer intelligence to respond and adapt to users' individual needs, and to interact with each other. The contact site between the machine and its user is the electronic interface. Now, the search is for a paradigm beyond the desktop metaphor: what are nonlinear models for navigating through the cosmos of information and entertainment? New models must now be developed. This is the emerging domain of design.

DESIGN KNOWLEDGE

Given these trends it is crucial that the design disciplines begin collaborating with each other and with related disciplines. The days of specialization are over. We need culturally literate designers comfortable with philosophy, communications theory, cultural anthropology, cognitive human factors and electronic technologies. The discipline of design is about to get richer, deeper and more exciting. But it will also be more demanding of its practitioners. Sophisticated desktop publishing and multimedia software allow virtually anyone to do everyday design work; designers can no longer rely on their traditional skills alone. Designers must deliver conceptual innovations and new insights, the things that computers cannot do. This challenge will lift design beyond a service trade into the role of interpreter for culture.

Katherine and Michael McCoy are senior lecturers at the Institute of Design of Illinois Institute of Technology, visiting professors at The Royal College of Art in London and former co-chairs of the Design Department at the Cranbrook Academy of Art. They are partners in McCoy & McCoy, Buena Vista, Colorado. Additionally, Michael is a partner with Dale Fahnstrom in Fahnstrom/McCoy design studio in Chicago and lectures internationally on design strategies to professional and lay audiences. Katherine is president of the American Center for Design.

The McCoys have received many honors, including the American Center for Design Educator's Award, The Hall Distinguished Professorship at Kansas City Art Institute and the Chrysler Award for Innovation in Design. They recently co-authored Cranbrook Design: The New Discourse, a book published by Rizzoli International.

Everything you ever wanted to know about getting your first job, but did not know to ask Tak **Words from the w**i

By Karen S. Chambers

From Dubuque to Düsseldorf, veteran graphic designers are consistent about the fundamental qualities they seek in entry-level designers. Whether the candidates are recent graduates of community colleges or master's degree holders from prestigious art schools, computer literacy is, of course, a priority. The traits that *really* raise eyebrows, however, are a bit less tangible and harder to quantify. Interviewers are looking for imagination, creativity and an ability to communicate visually. It also helps if job applicants have a liberal arts background and know more than just how to make a page or package look pretty. To become the new kid in the office, you need to be a team player. A sense of humor doesn't hurt. And, more than once, interviewers cited passion as the most appropriate emotional response to graphic design.

NORDS OF WI

A reverent study of the work of some of our predecessors, starting with Toulouse-Lautrec, would benefit the design output of many of today's young practitioners. *Keith Harris*,

Keith Harris Package Design, Düsseldorf

Be different from what you think people expect. Doing the opposite, you will be remembered. Petr van Blokland,

Buro Petr van Blokland + Claudia Mens, Delft, The Netherlands

Computer technology affords us many options and opportunities, but it is only a tool-It is not the end product-Tess Durham, Creative Staffing, Hallmark Cards, Kansas City

> If someone can't draw, I don't want to hire them. Joe Duffy, Duffy Design, Minneapolis and New York

Watch, listen, read, feel, enjoy, suffer, laugh, cry, love. Be yourself and throw yourself into design. Lucia Frey and Heinz Wild, Wild & Frey,

Erlenbach, Switzerland

The rewards for meeting such ideals were \$18,000, FF180,000, SWF42,000, DM42,000, £14,000 or 1£7,000 per year and a chance to show what you can do. It's also useful to come armed with experience in the real world from an internship. All of these things are deemed important in getting what is the most critical job of a designer's careerthe first. "The job market is tough now, but perhaps it has always been tough," observes Tom Bentkowski, director of design at Life magazine and president of the Society of Publication Designers. "But my advice is valid in any job market: I'm looking for an intelligent, well-rounded, curious individual. Computer literacy is a given, but he or she must also have ideas and taste."

Designers from around the world had similar advice for graduates: they should think creatively and visually and be able to use the Macintosh as a tool, like a T-square or an X-Acto knife.



What's important is not how something is done, but why. "For a junior designer the thought process is more important than knowledge of software," according to Jack Anderson of Hornall Anderson Design Works, Seattle. D.J. Stout, art director of *Texas Monthly*, notes that "over the last five years there has been a revolution in graphic design because of the computer. I hope this is just a trend and will be balanced out with more emphasis on the idea, the concept and communicating visually."

Whether it's type and images on paper or electronic design on the Web, communicating visually is the essence of the profession. And despite New York designer Milton Glaser's warning to new graduates to "look elsewhere; the field is glutted," there are opportunities, particularly ones arising out of new technology. "Graphic design has a much bigger role to play in today's complex communications panorama," observes Marc Gobé of Desgrippes Gobé & Associates in New York. "The advent of the Internet and the World Wide Web will increasingly require the tal-

e me, l'indifferent se on how to find

They have a broad-based liberal arts background (English, history, social sciences, cognitive sciences, anthropology, literature) besides having appropriate training and skills necessary for the job: strong sense of design, layout, composition, color. Balanced life ability to keep their priorities straight. Tess Durham, Creative Staffing and Development, Hallmark Cards, Kansas City

> Very open-minded, strong cultural background, multilingual. Peter Keller, Atelier National

GRADU

ES

FROM H

IEN

de Création Typographique, Paris

Excellent use of typography a must. A good working knowledge of design history and traditional methods. The ability to discern design styles and trends and implement them in a practical manner. Must be able to still illustrate or design with a marker and paper...get ideas down first. Computer skills will come with repetition. Must have a sense of humor; we're always looking for the perfect 'Lenny Bruce of graphic design.' Kurt A. Valenta, Valenta Platt Design Group, Pittsburgh

Some experience, no attitude, 'clean hands', a willingness to learn and work hard. Alexander Isley,

Alexander Isley Design, Redding, Connecticut

Self-governed.

Sigrùn Yngvadottir, Sigrùns Atelie & Idé, Malmö, Sweden

Self-organized with the will to be better than me. Lo Breier, Buro X, Vienna

Be someone who is highly literate and interested in many things. History. Literature. Painting. Sculpture. Dance. Theater. When I teach, I tell students to go to the opera, go to the theater. Ten years ago I would have said, don't spend so much time with your airbrush. Today I would say, don't spend so much time at the computer screen.

> Tom Bentkowski, Director of Design, Life Magazine, New York



ent, experience and skills of graphic designers."

Woody Pirtle, a partner in the New York office of Pentagram, advises neophyte designers to "go for the technology. That's where the future is. Interactive design, film, video all of those categories are virgin territory now."

Demand will continue, true, but how do you get that first job? "Students need to know that their first job is looking for a job," explains Tom Antista, partner in Antista Fairclough Design, Atlanta. "They have to operate as if it were a job. Get up early in the morning, make phone calls, design new pieces to replace weak pieces in the portfolio. It's work, not slack time."

Practical advice comes from Aad van Dommelen, creative director of Proforma Rotterdam: "Phone the company to get the name of the person in charge. Send a letter with your curriculum vitae to announce that you will call to ask for an appointment to show your portfolio. If you have no work, try to fill your portfolio with interesting stuff."

Above all, the portfolio is the way aspiring designers can show what they've done and what they can do. D.J. Stout of *Texas Monthly* says, "No one asks about your grade point average or your résumé; your portfolio is what counts. If you were a cowboy-boot maker, the employer would want to see the boots."

Joe Duffy of Duffy Design (with offices in New York and Minneapolis) advises students to "only show what you are really proud of and not too much of it. Don't show work you must apologize for. Work night and They're overconfident about their abilities. They have a lack of discipline to apply themselves to the basics of production and printing. They don't ask enough questions. Bernie Sexton, Dynamo, Dublin

Sometimes the artwork is finished sooner than the concept. Aad van Dommelen, Creative Director, Proforma Rotterdam, The Netherlands

Not aware of the nitty-gritty and all the little details that have to be taken care of in a design office. In a sense spoiled in a society that works on the principle of immediate gratification.

Lucia Frey and Heinz Wild, Wild & Frey, Erlenbach, Switzerland

Too dependent on the Mac for design solutions. Paul Davis, Paul Davis Studio, New York

Arrogant. Unwilling to roll up their sleeves and learn about the workings of a design organization. Marc Gobé, Desgrippes Gobé &

Associates, New York

They don't think before sitting down at the Mac. Little knowledge of typographic skills and basics. No attention to detail. Little creativity/exploration/imagination/ lateral thinking when approaching a new brief.

Bob Mytton, Newell and Sorrell, Ltd., London

Lack of understanding about the communication process. No eye for detail. No patience. Reading difficulties.

Hans Dieter Reichert, HDR Design Studio for Visual Communication and Production, East Malling, U.K.

Attitude. Wanting to be a star immediately. Trying to get press right away. Unwilling to look beyond what school has taught them. That's the biggest shock. Realizing that school has just barely given them the fundamentals.

John Jay, Creative Director, Wieden & Kennedy, Portland

Unfaithful. Selfish. Eun-Young Kim, Design House, Seoul day to make your portfolio the best possible expression of your abilities. Work and rework, hone and refine."

It is important to make the portfolio a reflection of your own style. John Jay, creative director at Wieden & Kennedy in Portland, urges the job applicant to "develop his or her own voice. Don't try to make the portfolio look like someone else's work or show that you can emulate a variety of well-known styles. If we want a David Carson look, we can hire David Carson. We want to hire people to develop their own styles, their own signatures." But, he admits, "That's hard."

A portfolio should also reveal the designer's thought process. Jack Anderson suggests presenting an "idea" sketchbook. For second interviews at Pedersen Gesk in Minneapolis, according to president Brian Muldoon, job applicants are asked to bring their "roughs; their conceptual material." With hundreds of graphic design programs turning out thousands of graphic design graduates annually, there are degrees aplenty. Potential employers are looking for something perhaps more valuable: experience. "Try to get into an office in any job, for any pay," says Aad van Dommelen of Proforma Rotterdam. "As soon as you're in, you have a chance to show your capabilities. It's a matter of being in the right place at the right time. So make sure you're in lots of places, lots of times."

Take me, l'

Take m

One formal way of getting such experience is through work internship programs. The University of Cincinnati is repeatedly lauded for its co-op program where students spend six quarters of a five-year course in paid internships. They are placed in firms all over the country. Some employers

Th knows is n

\mathbf{DOQ}

such as Duffy Design and Antista Fairclough Design have ongoing intern programs. Tom Antista says that his firm offers a three-month contract to recent graduates to introduce them to the studio's style and pace. Their reward for "working hard, having merit and jumping in and becoming a part of the team" could be another three- or six-month contract or perhaps being hired for a full-time position. The pay is "not much." But, he adds, "What we're offering is an opportunity to get into a design firm and work on mainstream projects." The Duffy Design program works similarly and allows the interns "to see if we're right for them" and the firm to see "if they're right for us," explains Joe Duffy.

That match may be as important as the graduate's visual thinking and technical capabilities. Despite emphasis in academia on the individual's design vision, graphic design is not usually done in a vacuum or an ivory tower in the real world. "We work on projects that require a group approach, rather than an individual one," explains Joe Duffy. "We work collaboratively, so a new hire has to be someone who can get along and work well with others."

Aspiring graphic designers must also be passionate about their chosen profession. Milton Glaser of Milton Glaser Design insists that "the passion and gift" are essential qualities. Jack Anderson describes the perfect new hire as someone who is "upbeat, hungry to learn and has a passion for the craft/profession." Lucia Frey and Heinz Wild of Wild & Frey in Erlenbach, Switzerland, have a similar description: "The perfect new recruit is eager to perform and to learn, has stamina and really wants to do well, and knows that graphic design is more a passion than a means to make a living." And Gerhard Schmal of Stohr Scheer Werbeagentur, Düsseldorf, advises first-time job seekers to "look, listen and choose, do that which touches the heart, where your passion is."

ART CENTER COLLEGE OF DESIGN, PASADENA, CALIFORNIA ART INSTITUTE OF BOSTON BRIGHAM YOUNG UNIVERSITY, PROVO, UTAH CARNEGIE-MELLON UNIVERSITY, PITTSBURGH CALIFORNIA COLLEGE OF ARTS AND CRAFTS, OAKLAND CENTRAL WASHINGTON UNIVERSITY, ELLENSBURG COOPER UNION, NEW YORK CORNISH ART INSTITUTE, SEATTLE CRANBROOK ACADEMY, BLOOMFIELD HILLS, MICHIGAN EAST TEXAS STATE COLLEGE, COMMERCE IOWA STATE UNIVERSITY, AMES KANSAS CITY ART INSTITUTE, MISSOURI MASSACHUSETTS COLLEGE OF ART, BOSTON MINNEAPOLIS COLLEGE OF ART AND DESIGN MOORHEAD STATE COLLEGE, MINNESOTA NORTHERN ILLINOIS UNIVERSITY, DE KALB OHIO STATE UNIVERSITY, COLUMBUS PARSONS SCHOOL OF DESIGN, NEW YORK PRATT INSTITUTE, BROOKLYN RHODE ISLAND SCHOOL OF DESIGN, PROVIDENCE **ROCHESTER INSTITUTE OF TECHNOLOGY, NEW YORK** SAN FRANCISCO ART INSTITUTE SCHOOL OF VISUAL ARTS, NEW YORK SYRACUSE UNIVERSITY, NEW YORK UNIVERSITY OF THE ARTS, PHILADELPHIA UNIVERSITY OF CINCINNATI **UNIVERSITY OF CONNECTICUT, STORRS** UNIVERSITY OF ILLINOIS, URBANA VERSITY OF MICHIGAN, ANN ARBOR UNIVERSITY OF NEBRASKA, LINCOLN VERSITY OF WASHINGTON, SEATTLE UNIVERSITY OF WISCONSIN, STOUT UNIVERSITY OF MICHIGAN, ANN ARBOR UNIVERSITY OF NEBRASKA, LINCOLN UNIVERSITY OF WASHINGTON, SEATTLE WESTERN WASHINGTON UNIVERSITY, BELLINGHAM VIRGINIA COMMONWEALTH UNIVERSITY, RICHMOND YALE UNIVERSITY, NEW HAVEN, CONNECTICUT⁵

SCHOO

ESS

ED

EM

While design firms emphasize that the computer is just a tool, they also insist on computer literacy. On the following list, the first four software programs were almost invariably mentioned. Knowledge of more peripheral programs is, of course, an added plus.

QuarkXPress Adobe PageMaker Adobe Illustrator Adobe Photoshop Macromedia FreeHand Macromedia Director Microsoft Word **Quantel** Paintbox Adobe Streamline **Adobe Dimensions** Smalltalk HTML SGI

COMPUTER REQUIREMENTS

... plus complete command of pencil on paper

e perfect new recruit that graphic design pre a passion than means to make a living

Karen S. Chambers is an internationally published writer on the visual arts and design. She is the author of TROMPE L'OEIL AT Home: Faux Finishes and Fantasy SETTINGS, published by Rizzoli.

9

THE GRADUATE AND UNDERGRADUATE PROGRAMS FEATURED HERE PREPARE DESIGN STUDENTS FOR AN ELECTRONIC FUTURE THAT DEMANDS SPECIFIC SKILLS TO NAVIGATE THE INCREASINGLY COMPLEX SPHERE OF NEW MEDIA. THE ACADEMIC PROGRAMS FOCUSING ON INTERACTIVITY TEACH STUDENTS TO CREATE ENVIRONMENTS THAT FUSE THEIR KNOWL-EDGE OF TECHNOLOGY WITH AN UNDERSTANDING OF HUMAN BEHAVIOR AND NEEDS. THOSE FOCUSING ON TYPOGRAPHY BEGIN WITH THE PUREST ESSENCE OF LETTERFORMS-HANDWRITING-AND GUIDE STU-DENTS ON TO DIGITAL-AND MORE ABSTRACT-EX-PRESSIONS. ALL OF THESE PROGRAMS ARE BASED ON A BELIEF THAT STUDENTS SHOULD DEVELOP INTO FREE-THINKERS WHO UNDERSTAND AND VALUE THE THOUGHT PROCESS BEHIND A BEAUTIFULLY REN-DERED TYPEFACE OR COMPUTER INTERFACE. ARMED WITH THESE SKILLS, STUDENTS LEARN TO INNOVATE AND CREATE DESIGN SOLUTIONS THAT ARE ESTHETIC, **EFFECTIVE AND USEFUL**²

YALE UNIVERSITY School of Art Graphic Design Program

As an increasing number of graphic designers work on screen-based environments, educators are beginning to redefine the designer's role, from manipulator of form to navigator of content. At the new interactive design program in Yale University's graduate school of graphic design, the process goes one step further. In a class taught by Juliet Jacobson, a former exhibition designer and information specialist with expertise in multimedia, designers are not only trained to be navigators, they are encouraged to be pilots, too.⁵

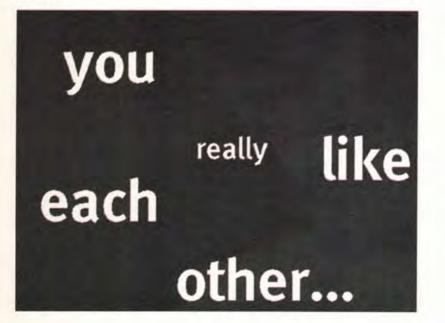
Although analogies have been made to books and magazines, new media, including the CD-ROM and the interactive kiosk, are not governed by the same design principles. Jacobson's class is as much about behavior modification as it is about teaching new technologies, and students accustomed to thinking about graphic design in purely formal ways must now adopt more abstract methods of communication. They must become as skilled in the use of metaphors as they are skilled in the creation of literal narratives; they must reinvent old visual tools and develop new ones. While typographic hierarchies are the primary signposts in the flow of printed pages, onscreen design is more about integrating graphical devices that will guide the viewer through labyrinths of information. Designing digital space is not as simple as creating a grid and flowing in text and image; it is about providing a basic context in which users can interact. In Jacobson's class new media design might be seen as a bridge between designing a book and directing a film.

Jacobson and her colleague, David Peters, a senior designer and multimedia expert at Two Twelve Associates in New York, began teaching a weekly class together in 1994 as a way to introDavid Israel's AIDS project is an interactive conversation about dating and sex.⁴





Rather than espousing a cautionary message about AIDS prevention, the interface allows the user to make strategic choices.



BY STEVEN HELLER

pleted, the project did nevertheless

force students to focus on real topics

and actual audiences, which in itself

was a startling introduction to the es-

cal skills, and Peters, who prides him-

self on his instinctual way of handling content, decided that each semester

the students would be given a differ-

ent problem to work on individually or

in teams. The tasks included research

(visiting the health center and learning

what its clients needed most), concept

(developing a workable idea) and itera-

tions (developing the best metaphors

and navigational systems). For the first

semester, students had to devise functional scenarios for their demos. One

example was Julia Whitney's interac-

tive game about safe sex, which invited

the player to choose from a wide range

of sexual preferences. Next, selecting

appropriate behaviorial options from a

variety of acts determined whether a

player would reach a satisfying climax.

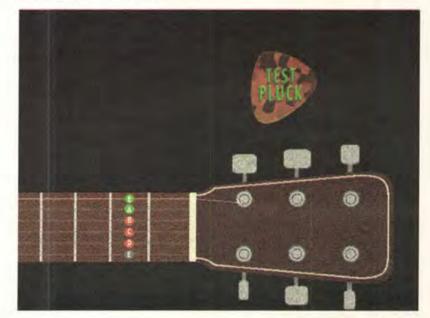
The game metaphor provided a context

Jacobson, who has strong analyti-

calating challenges of new media.

duce Yale students to the uses of Hypercard. Sheila Levrant de Bretteville, the head of the design program, wanted a class that would not only impart skills but result in a practical application; she decided that an interactive kiosk for New Haven's Hill Health Center would address a variety of community concerns and give students a tangible goal. Yet it quickly became apparent that this idea was also fraught with pedagogical problems, most notably how to keep students interested. For three semesters, Jacobson and Peters, who taught the class on alternate weeks, introduced students to the new technologies while struggling to keep up a learning curve too steep for even the most avid pupils to navigate. Jacobson says that the students were ill-served by a project that could not be finished during a single semester, which meant passing on the unfinished parts to subsequent classes, who were not excited by the idea of working on material initiated by other students. Although the health center kiosk was never com-

Mark Olsztyn's digital biography of his half brother, a rock guitarist, is an interactive game that teaches chords.

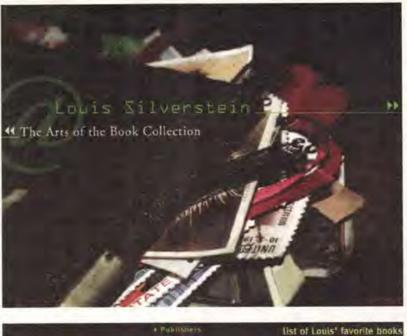


in which users could be entertained and educated at the same titillating time. Likewise, Weilin Wu developed a nutrition game, which showed kids what a well-balanced diet could be. Users were invited to design their own diets, and the winner was the one who selected the most balanced meal and successfully built a food pyramid. These and other puzzle-like programs not only use the potential of the media effectively, they also suggest that the novelty of the digital environment alone is not enough to capture user attention.

During the second semester the program was changed so that teams of students were assigned specific human body parts as components, or what Jacobson calls the "pillars of the architecture," for the entire kiosk. This "body map" used age (parents, children, old and young, etc.), to provide an organizational system for the body parts. Cynthia Flaxman used the womb of a pregnant woman as a device for conveying a wide range of information, such as tips on nutrition and disease. A roughly-drawn schematic of a pregnant woman contained hot buttons that linked to more specific screens about prenatal care. Getting all the students' components to work uniformly was not so easy, since in addition to different content concerns, each had more or less a unique, albeit often primitive, style.

By the third semester, Jacobson and Peters realized that this commingling of efforts at such an early educational stage was too constricting, and encouraged students to develop their own content modules. David Israel's AIDS project is a good example of independent thinking and design. Like Julia Whitney's first-semester project, it also focused on safe sex, but evoked a more interactive, flowing conversation about sex with abstract visual components and a more subtle approach to sexual issues than the earlier programmatic game. It could have been made more explicit with more directed goals and opportunity for feedback, says Jacobson, but Israel chose to tell a "casual" story based on "personal" encounters so that the user might better relate to flirtation and the sexual act-as if it were in a real-life context.

For all the social value, however, the Hill Health project imposed an agenda that Jacobson admits placed an excessive emphasis on concept alone, leaving little time or room for anything more than basic design concerns. For the next





Yuri Sebata's biography of Yale librarian Louis Silverstein features a tour of "The Arts of the Book Collection."

semester the health kiosk was abandoned and replaced by a project called "Portraits," or what Jacobson calls an "interactive biography"-a narrative built around the facts of someone's life. This meant going into the community to find an individual whom the student wanted to get to know and presenting the findings through unique narratives. The project required "using new media and traditional theatrical premises," explains Peters, "to explore and report on the identity of a person and thereby present a human story." Throughout this semester students were asked to complete weekly assignments that served as building blocks for the overall project, with each block being of greater technical and documentary complexity. First, the subject was developed-student Chris Paul, for example, selected as his subject a Yale professor named David Rose, who talked about a rafting trip, which became the metaphor for an environmental exegesis.

A concept statement was then written and a rough outline devised. Handdrawn sketches of screen layouts and storyboards were developed. The look and feel of the screen was further refined, and the form (be it 3D imagery, collage or photo-illustration) was chosen. Storyboards were scanned and an interactive mock-up was built in Macromedia Director, allowing students to experience what is impossible to approximate in the hand-drawn sketch. Another refined set of storyboards was then drawn by hand. Before the final demo, a digital sketch for each different screen and menu was presented. Just when the students thought they had it down, Jacobson requested two or three more demonstrations, because, as she says, "with every iteration one learns so much." Finally, the software was tested and feedback was incorporated into the final piece.

Among the most successful of the biography series is Dina Radeka's interactive piece about artist Leon Blitshetyn, who creates installations using various symbolic icons. Radeka's main menu opens with three rhythmic circles, each one highlighting a thematic unit, which, when clicked, calls up a sub-menu or screen. One of the screens reveals a photograph of an installation with many bathroom fixtures and plumbing parts; when each fixture is clicked, it triggers an info screen or sidebar about the work. While the basic





Different screens explore the subject's favorite books, while allowing the user to examine works of personal interest.

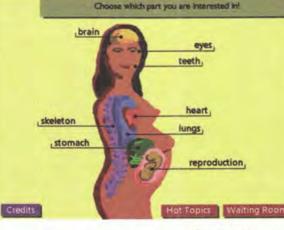
design is simple, the interactive details are complex. Another smartly conceptual, though simplified design, is Mark Olsztyn's biography of his half brother, a rock guitarist, whose narrative is presented in a kind of game metaphor. Each subscreen shows the neck of a guitar that the user must finger within a certain time frame before a cigarette stuck between the strings burns down to the frets.

At this early stage of Yale's interactive program, Jacobson and Peters have gotten students to author a wide range of conceptual pieces. Although the emphasis is on structure and organization, getting students to concentrate on usable, well-thought-out programs does not remove the need to bring the tenets of good design into the digital realm. Jacobson is the first to admit that "type and imagery can be refined," but also acknowledges that "students are sometimes at a loss for how to get imagery on the screen." Since not all students with print backgrounds are good at creating screen-based imagery, she lets them follow their own visual styles, "or else we wouldn't get to the rest." So before these future pilots can really fly, they have to navigate an entirely new medium with a distinct set of new standards. If the classwork produced so far is any indication, the students are fast approaching the runway.

Steven Heller, the co-author of Cover Story (Chronicle Books) is working on a book that is a critical survey of digital interfaces with Jessica Helfand (PBC International) and a handbook on designing for the digital with Daniel Drennan (Watson-Guptill).



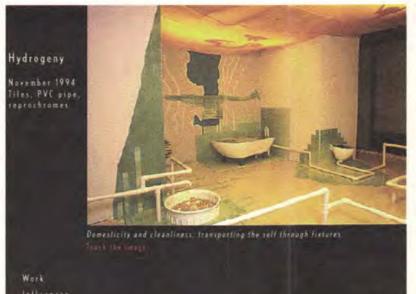
Julia Whitney's interactive game about safe sex encourages the user to select from a wide menu of sexual preferences.

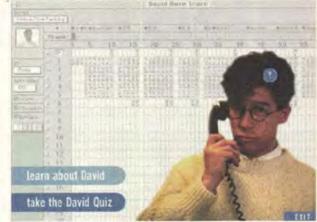




MASTERS OF THE UNIVERSE

Cynthia Flaxman uses a womb and waiting room as entry-points for her project on prenatal care.





Screens from Dina Radeka's interactive piece about artist Leon Blitshetyn, and Chris Paul's biography of Yale professor David Rose.

THE ROYAL COLLEGE OF ART COMPUTER RELATED DESIGN PROGRAM

by Joyce Rutter Kaye

First-year master's students in the Computer Related Design department at London's Royal College of Art begin their studies with a mission that takes them literally underground. Dispatched to London tube stations, students covertly observe commuters and tourists attempting to purchase tickets from vending machines. Though seemingly basic, this operation reveals volumes about interactive behavior and the frustrations that arise from bad design. The ticket machines, for example, present a barrage of information and choices in a fractured hierarchical manner. When selecting a destination, patrons are forced to laboriously scan through an entire station list in alphabetical order. Several buttons mysteriously have no function at all. And only English is spoken here, thank you very much. As second-year student Katie Waters observes, "Most people-especially tourists—just give up and queue up at the ticket booth, where there is a live human being."2



This one-week "pressure project" underscores the main objective of the department: to scrutinize technology as well as human behavior to find ways interactive digital tools can better relate to human needs. From there, electronic environments can be made to be more functional, easier to use and more pleasing to look at, hear and touch. In short, they could live up to the standards foreseen more than a decade ago by the department's course leader, Gillian Crampton Smith. "One of the problems with digital things," she says, "is that technology has been moving so fast that people have been putting all their effort into making things work and keeping up with the market. They haven't considered it important to look at how to make things easy to use, or, indeed, beautiful to use."3

Above all, the program sets out to make technology feel natural, so that when a person touches an ATM screen, programs a VCR or clicks through a CD-ROM, he or she intuitively knows what to do. Ideally, the interface should be virtually invisible. "Ten years ago, one could think of computers as tools," says Crampton Smith. "But now they're in everything. When you go to the supermarket, there are computers doing your checkout; when you need cash, you get money out of a computer in the wall. It's exciting, but if they're going to be a part of life in this way, we have to think about designing them in the way we think about designing other things."

The Computer Related Design department is preparing students for a future where designers will play an integral role in developing the function, as well as the form of intelligent products. The dozen students who enter the two-year program are chosen from a multidisciplinary design base: about one-third come from a graphic design background, and others may have studied architecture, industrial design, computer design, or even fashion. Students from varied backgrounds bring an array of perspectives to interactivity, a realm Crampton Smith acknowledges is far too new to be fully understood. Because interactivity is such a new territory, designers should be tapped at the outset for their greatest asset: their ability to think laterally.

Lucas Girling's "Physics Music" allows users to control sound by moving blocks of virtual material⁴

1 ITC SEREMOETTI

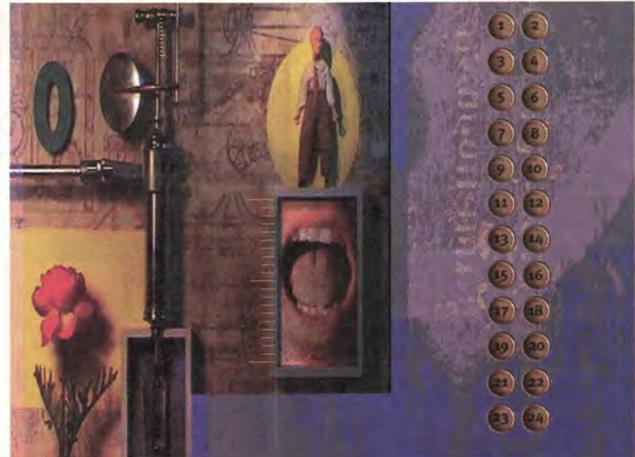
2 ITC Usherwood Medium Italic 3 ITC Usherwood Medium

4 ITC Usherwood Book Italia

Bishop and Herniak's project explores random narrative by presenting a collage of choices.



Durrell Bishop and Andrew Herniak's application tracks factory production in real time: if you slip behind in your quota, you could get sacked.



"The designers are the interface between the manufacturer and the user," she says. "They are good at thinking about what users will like, and at gauging their reactions. Engineers aren't trained to do that."

While the computer industry has been slow to recognize a designer's virtues, Crampton Smith took all this for granted when she bought her first computer-an Apple II-in 1981. A graphic designer, she taught herself the languages Basic and Pascal, and created programs that would allow her to draw thumbnail sketches of magazine layouts on the screen. Crampton Smith had expected the computer interface to be developed by those with a visual vocabulary, since its form was so much like other kinds of information design. But she was wrong. "I expected graphic designers to be in there helping people design computers that were easy to use, and that they would be beautiful and engaging and understandable. But that's only beginning to happen."

Students in Crampton Smith's course aim for those ideals by initially sorting out and examining various "languages" of interactivity. Following the first-term Underground exercise, they delve into a sucession of crash courses on type, sound, animation, three-dimensional space and other elements. Developing a fluency in interactivity, Crampton Smith explains, gives students the ability to navigate the rapidly changing technology they will encounter in the years ahead. During the second semester, projects are more in-depth and are often sponsored by technology companies. Recently, for example, Philips hosted a project that asked students to develop ways of using sound as part of the interface.

In the less-structured, more exploratory second year, students combine these skills with their growing knowledge of circuitry, sensors and authoring and illustration software programs such as Macromedia Director and Adobe Photoshop to develop interactive projects on their own. These can range from creating interface design to enhancing operating systems or inventing 'smart' haptic products. In recent years, for example, students have improved on the design of mobile telephones. One



Giles Rollestone's "Urban Feedback" layers snippets of overheard conversations and images to demonstrate non-linear narrative and movement.

Girling's thesis project aims to make music composition software more accessible. The cubist shapes, he says, allow one to "mold sound like clay."



sorhie greenfield sorhie @mcorpicom giles rollestone g.rollestone@rca.ec.uk

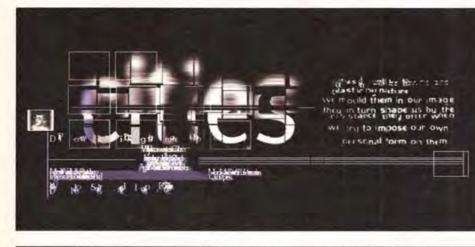
9/11/95

resonal maps reflecting journings through streets exploring the chaos of overheard conversations texts ampled sounds and sound sculptures abandoned words and fragments of found dialogue





Rollestone's "Urban Feedback" incorporates layered type and sound to enhance the sensory overload.





decay psychogeography interference NENDER COMES RADEDISTALL FERZARCUIVE panks transparent In continuity, as is used particular COMPAR COLORANCE CHARACTERISTICS COMPAR COLORANCE CHARACTERISTICS Is continued, the constitution of our activities is that are have been OFFEND SECTION OF THE CONSTITUTION OF THE Section of the constitution of our activities is that are have been of file time of the constitution of the one of the section of spirit escalate tube function of still scene the faces in the crowd for the one of know



123 Transition, a typeface by Neil Wilson, was created specifically for the computer screen with blob-like capsules that are designed to mutate.

In Jason Lewis' "Wordnozzle," type can be applied expressively and interpretively, like paint on a canvas.

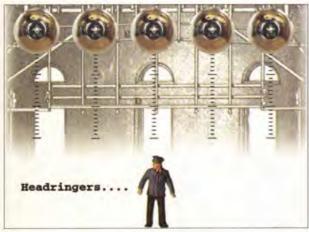


Beyond point and click: Katie Waters' virtual postcard uses sound, hot spots and real-time morphing.









CRD works-in-progress: 123 Transition (top), and screens from the Bishop/ Herniak collaboration.



A better mousetrap: Waters' vision of an improved onscreen calculator, created in one week.



student envisioned a "phone glove" that could be worn as an accessory. Currently, several students are interested in exploring ways narrative can be presented and altered. CRD student Katie Waters' thesis project, for example, looks at various ways of exploring different stories in Aesop's Fables and studies how navigational devices can affect the outcome of these venerable tales. Others are creating applications that work in real time. A project developed by Andrew Herniak and researcher Durrell Bishop humorously tracks work production in a housewares factory. If pots are not manufactured according to schedule, the user will face suspension and, eventually, the pink slip.

Working with a bevy of sophisticated tools, their own growing insights and the support of large research corporations, students are working to create solutions that are ready to fly outside of the classroom-indeed, a few of their projects are being considered by the patent office. Impressive though this may be, Crampton Smith is as concerned with the thought process behind a finished project as she is with its physical refinement. Before her students build a better mousetrap, she would say, they must first stop to ask a multitude of questions, such as, what kind of mouse is this? How long are its whiskers? What kind of bait would it like? As technology evolves and our relationship with intelligent environments becomes more intricate and intertwined, the world should benefit from these gumshoe designers who are constantly querying and keeping our best interests in mind.

Masters of the Universe



The design philosophy behind Girling's "Physics Music" and other CRD projects is to make digital environments accessible...even beautiful.

Koninklijke Academie van Beeldende Kunsten Den Haag

BY MARGARET RICHARDSON

In this era of digital fonts, a significant number of the most innovative and influential type designers are Dutch. Although the Netherlands has a long and venerable tradition of creative typography and respected foundries, contemporary Dutch type designers, including Lucas DeGroot, Erik van Blokland, Just van Rossum, Peter Matthias Noordzij, Petr van Blokland and Rudy VanderLans have precipitated a digital type renaissance. These designers have one important experience in common: all attended the Koninklijke Academie van Beeldende Kunsten (The Royal Academy of Art and Design) in The Hague?



box sundogs 1234567890(£\$¢%)[14]["?!?!?"}-__& aåáàäâæbcdeéèëêffffiflghiíiïîjklmnñ oóòöôøæpqrsß§tuúùüûúvwxyz

Jöel Ultra Light [------]("'::,.'") ÀÁÄÅÅÅBCDEÉÈËÊFGH IÌIÎİJKLMNÑOÒÓÖÔÔP QRSTUÚÙŨÛVWXYZaàá aâaäbcdeèéëéffifighiìiĩijklm nňoòóöôöpqrstuùúüûvwxyz 1234567890

started a postgraduate course in type design and typography, building on the success of the type curriculum in the four-year undergraduate program in the department of Graphic and Typographic Design. The two programs are interrelated. To date, most of the students taking the postgraduate course have graduated from the undergraduate program and have stayed to pursue their studies and interests for a fifth year. Students accepted from other universities can take the postgraduate course in two years, starting with a crash course in type design and typography based on the essentials taught in the four-year degree course!

In 1992, the Koninklijke Academy

Both courses focus on the study of handwriting as the essence of the structure of letterforms. This starting point

reflects the tenets established by one teacher who is credited with creating the academy's approach to type and typography: Gerrit Noordzij. Noordzij, now retired and working as a designer and typographer, is considered a catalytic force in inspiring both graduates and current teachers at The Hague. "The reason why there are so many Dutch type designers is mainly because of Gerrit Noordzij," says Petr van Blokland, who teaches in both programs. Noordzij's son, Peter Matthias Noordzij, principal of the revived Enschedé foundry and another academy teacher, was also taught by his father. "The Ministry of Education gave the academy the opportunity to establish postgraduate courses in areas where The Hague was strong," he says, "and they thought we should have a postgraduate course in type and typography based on what my father did in the initial courses."

Gerrit Noordzij's affinity for teaching is captured in an anecdote he tells of two students who arrived late to class. "I asked them, 'What are you doing here? The weather is nice—why didn't you go to the beach?' They replied that they were halfway to the beach when they decided to peep into the school, because something might happen there. That feeling that something might happen is very important for me to enjoy teaching." Noordzij promoted an open, benevolent learning environment in his classes by "intentionally destroying all self-nominated authorities like Jan Tschichold, Stanley Morison, the Bauhaus, deStijl, the Swiss and everything. If nothing has predetermined authority then the students can make their

Jöel Book

[Ji@\$¢%??§] (*';:,.'") ----AÀÁÄÀÄÅÆBCÇDEÉĖĖFG HIÌIĨIĴJKLMNÑOÒÓÖÔŒ PQRSTUÚÙŨÛVWXYZaàá äâāàæbcçdeèéëêffiflghiìiĩîjkl mnñoòóöôõœpqrsßtuùúūûv wxyz&1234567890

Jöel Italic

[!!@\$¢%??§](*';:,.'")----AÀÁĂÂĂĂÆBCÇDEÉÈËÊFG HIÌIÎİJKLMNÑOÒÓÔÔŒ PQRSTUŮÜÜŮVWXYZaàá äàāàæbcçdeèéëêffiflghiìIîjk lmnñoòóööōœpqrsßtuùúüûv wxyz&1234567890

Jöel Display Black [----]("';:,.'") AÀÁÄÅÅÅBCÇDEÉÈËÊF GHIÌÍĨÎJKLMNŃOÒÓÖ ÔÕPQRSTUÚÙŪÛVWX YZaàáäåååbcçdeèéëêffig hiìfĩîjklmnñoòóöööpqrst uìúüûvwxyz1234567890

Jöel Outline

[II72\$]("'::'")----AÀÁÀÀÁÅBCÇDEÉÈÈÈF GHIÌIÎIÌIKLMNÑOÒÓÖŎ ŎPQRSTUÚÙŪÚVWXYZ aàáàâââbcçdeèéëéfghiìIîij kimnñoòóöôöpqrstuùáûûv wxyz 1234567890

Typeface families currently being developed by postgraduate student Eyal Holtzman.

adventskranz im wald jedoch fliegt quax per

NORMANDIA REGULAR

(\$c£¥f%‰+±≠){"'!?;,.:¿i'"}[@#§‡†]----& AÁÀÄÂĂÅÆBCÇDEÉÈËÊFGHIÍÌÏÎJKLMNOÓÒÖÔØPQRST UÚÙÜÛVWXYZAÁÀÄÂĂÅÆBCÇDEÉÈËÊFGHIÍÌÏÎJKLMN ÑOÓÒÖÔÔØPQRSTUÚÙÜÛVWXYZ1234567890

NORMANDIA SLANTED

(\$¢£¥f%‰+±≠){"'!?;,.:¿i'"}[@#§‡†]----& AÁÀÄÂĂÅÆBCÇDEÉÈËÊFGHIÍÌĬÎJKLMNOÓÒÖÔØPQRST UÚÙÜÛVWXYZAÁÀÄÂÂÅÆBCÇDEÉÈËÊFGHIÍÌĬÎJKLMN ÑOÓÒÖÔÔØPQRSTUÚÙÜŰVWXYZ1234567890

> Holtzman's work on his typeface family Normandia, with emphasis on accents for capitals, small caps and italic caps.

Individual characters then pasted them up to test typographic color.

own contributions and discover for themselves what is important."

By the same token, Noordzij avoided presenting and discussing type in an historical context. "I didn't want to tell the old story of type being influenced by tools and developing independently from handwriting. So instead we returned to handwriting-the basic stroke made with a pen. We tried to find what was common for all pen strokes and tried to express this in parameters. Then we transferred these parameters to our drawings and this resulted in something like a typeface," he says, stressing that the drawings of the letterforms were key. Although Noordzij acknowledges that this approach avoids teaching the influence of hot metal typography on letterforms, he feels it also liberated his students and made them fluent at creating letterforms and alphabets for any medium. Drawing allowed them to be primed and flexible in designing typefaces on the computer. "We had our approach to making typefaces and to creating

typography with no link to the hot metal tradition, so we were ready [for the computer]," he adds. "That might explain to a degree the importance of contemporary Dutch design."

KABK graduate Claudia Kernberger created

While Anno Fekkes, head of the department, and the teachers now at KABK have been taught by and clearly influenced by Noordzij, they have added their own contributions and professional expertise to the graduate and postgraduate courses. The type and typography program within the undergraduate graphic design course begins with an approach to handwriting using a broad-nib pen and a pencil and focuses on drawing as the background for type design. This is taught by Frank Blokland of the Dutch Type Library. In the second year, Peter Matthias Noordzij has students do contrast research on the thicks and thins in letterforms, progressing to whole words as forms. Peter Verheul, a graphic designer, has students make complete typefaces in the third year. In the fourth year, designer Petr van

Blokland integrates the earlier work, moving the students from the theoretical to the practical with typography projects incorporating their own typefaces.

In the postgraduate program, Peter Matthias Noordzij, Peter Verheul and Petr van Blokland collaborate as mentors with students, who are required to select individual projects. Noordzij elaborates on the course structure: "We don't give lectures, but we ask other people to give lectures, mainly about typography or type. When students need to do research, we direct them to where they might find information. For example, the Museum of the Book is located next to the academy, and the Royal Library is also very close. When we do talk about type, we try to encourage students to make their own judgments. We ask them to try to solve a problem usually with their own typefaces. This tends to make them very critical of other existing typefaces." Noordzij adds that students are expected to come up with some good type designs,



Kernberger's graduation project: a completed, printed version of her type design Jasper.

kontrast kontrast

Kernberger's study in thick and thin contrasts for a developing typeface. Rain Birds Regular (\$¢£¥f%‰+±≠⁹°)[@#§‡†] {"'!?;..:Ji'''}----& aàdâääåæbcçdeèéëêffiflghiìíĩïjklmnoóòööøœ pqrsBtuùúüûvwzyzAÁÀÄÅÅÅÆBCÇDEÉÈÈÉFG HIÌÍĨĴKLMNĨĨOÒÓÖÖØŒPQRSTUÙÚÛÜVW¥YZ 1234567890

Rain Birds Slanted (\$¢£¥f%‰+±≠ªº)[@#\$‡†] {"'!?;,.:¿i'"}----& aàáâäãåæbcçdeèéëêffiflghiìíîïjklmnoóòöôøœ pqrsBtuùúüûvw¥y₹AÁÀÄÂÂÅÆBCÇDEÉÈĚÉFG HIÌÍĨĴKLMNĨIOÒÓÔÖÕØŒPQRSTUÙÚÛÜVW¥Y₹ 1234567890

Rain Birds: an experimental typeface by Holtzman.









Book design incorporating typefaces and samples of contrast studies for the letter "S" by Kernberger.

and complex typography. "We don't demand a finished piece of work, but we want students to show what progress they have made in these areas. The process is the most important aspect."

Peter Verheul adds that he and the teachers don't want to appear as if they have "a box filled with information" for the students. Van Blokland agrees: "Our approach is more a way of looking at things. The whole program is built upon the idea that we don't teach solutions; we teach the student how to define a problem and how to find a solution within it. Finding a solution is the important part."

The students themselves have the last word. Eyal Holtzman, a postgraduate, sees type design as fine art. "Try to think of characters as abstract paintings in black and white," he suggests. "You make one painting, a character, that has to stand in perfect harmony with itself. The other characters have to harmonize with it and with each other." One long-range project for Holtzman is designing a Hebrew typeAlchimia Regular ["'!?;,.:;;'"]@#§f (\$c%%†;+)+----& aàáâäãåæbcçdeèéëêffiflghiìíîïi jklmnoóòöôøœpqrsßtuùúüûvwx yzAÁÀÄÂÂÂÂÆBCÇDEÉÈËÊFGH IÌÍIÎĴKLMNÑOÒÓÔÖØŒPQRST UÙÚÛÜVWXYZ1234567890

Alchimia Italica abcdeëfghijklmnoöpqrstuüvwx yzAÄBCDEËFGHIÏJKLMNOÖPQR STUÜVWXYZ1234567890et

face with a corresponding Latin alphabet. "These could be used together in a Bible, with Hebrew translated into English or Dutch, for instance," he says.

Henno Drop, another current postgraduate, is working on grayscale fonts for the screen. "I am creating bitmapped fonts in nine, twelve and fourteen point sizes," he explains. One is called Ragnarok, he says, "based on Celtic handwritten faces from the Middle Ages that combine lowerand uppercase shapes in the Alchimia Bold ["'!?;,.:;;'"]@#§f (\$¢%%†‡)+----& aàáâäãåæbcçdeèéëêffiflghiìíîï jklmnoóòöôøœpqrsßtuùúüûvw xyzAÁÀÄÂĂÅÆBCÇDEÉÈËÊFG HIÌÍĨĴJKLMNÑOÒÓÔÖØŒPQR STUÙÚÛÜVWXYZ1234567890

Astrology ၜၣၓၟႍϘၟၓၣၓႅၓႅၜႍᡩ᠋᠋᠋᠋ᡸᢩᠵ᠌ᢅᢗᢞᡒ᠋ᡃ᠍ᢞᢐ

The typeface Alchimia and related astrology symbols, designed by postgraduate student Henno Drop.

same alphabet." The second is called Alchimia, a family of regular, bold and italic forms.

The program offers a great opportunity to focus on type design, concludes Drop. But, he adds, "I do not think you can create typefaces when you haven't been a typographer. You need quite a lot of experience in using and testing typefaces to know what characteristics they require. That's why I also want to be a graphic designer rather than just a type designer."

BY DARCY DINUCCI

GALIFORNIA

SCHOOL

OF THE

ARTS

"My students were hoping I was only joking," says Jeff Keedy. Advanced BFA and MFA students at the California School of the Arts, enticed to the Valencia school by the chance to study under iconoclasts such as Mr. Keedy, Edward Fella and Lorraine Wild, are initially dismayed, it seems, when they're told that the first few weeks of the type design course will be spent practicing calligraphy. Since Keedy's own typefaces, from the popular Keedy Sans to the outrageous Fuse font Lushus, are far from the calligraphic model, it's easy to see why a joke might be suspected." This academic year marks the first time type design has been formally taught at CalArts. While Keedy had taught one or two students per term in independent studies, growing demand finally induced him to start a formal course and prodded him to think seriously about how the topic should be covered.³

To start with the extremely practical, Keedy says he considers calligraphy the best way to learn about the basic structure of a typeface. "When you just start the traditional way, by studying the five basic groups [oldstyle, transitional, modern, Egyptian and sans serif] of typefaces, it's difficult for students to understand where the stroke weights come from, and the relationship between the x-height and the stroke width," he says. Two weeks of studying examples from the masters and practicing one of the five type groups is just enough, he figures, to learn some basic proportions and "to see how hard it is to do well."

Without resorting to a step-by-step history of type development (it's a studio, not a lecture class, Keedy points out), beginning with calligraphy also helps the students understand the problems of type design historically. "You start with ideas that were important early in the history," he explains. "You can't start with serif and sans serifs and then go into the history." The students continue their metaphorical reenactment of type history in the second section of the class, in which they redraw their calligraphic forms in Macromedia's Fontographer, turning the letterforms into mechanically reproducible shapes using contemporary technology. During the digi-

Posters by Scott Lau reveal how his Geothic typeface was inspired by traditional Modern Gothic calligraphy.





tizing process, the students also learn the basics of letterspacing and kerning.

Such traditionalism is an unexpected side of Keedy. At first, it's surprising to learn that he sketches his own typefaces using antique Montblanc pens and to hear him lace his talk with the history of type design. Elsewhere, after all, he has been called one of the young Turks of typography, with typefaces that break traditional models and deconstructed graphic design that refuses to assume the pedantic clarity sometimes thought to be the sole goal of the profession. On closer inspection, however, his methods can be traced to motivations more expected from this scion of Cranbrook (MFA, 1985).

Calligraphy, says Keedy, "connects the letters with writing. You're writing whole words, and not just focusing on different letterforms. With calligraphy, you can't disconnect the letters from words." Here we can see Keedy planting seeds of the expressive typography he practices professionally. Calligraphy "emphasizes the relationship between writing, language and letterforms," he says, and helps the students understand that the letters "are not just abstract forms, but a method of communicating ideas visually." Taking that idea a step further, the students are next asked to create a poster using their newly digitized font in a way that showcases its expressive, as well as typographic, qualities. Finally, they will turn their letter designs into full typefaces. "We take it to something more complete and more original," says Keedy, explaining that the final stage includes tweaking the letter shapes, completing the uppercase and lowercase alphabets,

Weston Bingham's Ahysteria (bottom) is based on traditional uncial letterforms.





Karalon, a typeface by David Ewald, is based on a Carolingian hand.



a B c D d e e F c b i I j k L L O N O P Q U R S T T V W X Y Z

now odd in see soo malent fare done compares with the the search and ho of record acy, the

how dob to see such awarden lace does not according the that is the nearby of the completer cellapse of histogic the such and, we can make the were wappen give the completer cellapse of histogic the such into the such cases of the such is the global cases of pacterises, and such the wave appen give and were the such is the global cases of pacterises, and such the such is the such is the such were the such is the such is the such is the such were the such is the such is the such is the such were the such is the such i

rarius cause, has a point of the pear of the bor of the pear of the or of the

This is a typeFace called modern, CREATED IN FONTOCRAPHER-NOT TO BE CONFUSED WITH the medieval SCRIBE who squandered his pathetic, impoverished Life REPRODUCING THE WORDS OF COD. cod has so BLOODY much TO COMMUNICATE, $I S \lambda y$ Let bep cet an E-mail ACCOUNT. THE POOR MONK COULD AT LEAST EXCHANCE Those sandles and THAT UNPULY QUILL FOR a decent pair of adidas and

a BLessed, BLoody

C

cods sake.

24

".:,;?"



and fine-tuning the letterspacing. The goal, he says, is to create a typeface that expresses an idea that hasn't been seen in an existing type design, as well as one that has the proper letterfit and color on the page.

The students' final typefaces turn out very close to their original calligraphic models, a fact that Keedy views with some satisfaction, but which might seem anachronistic to others. After all, typeface design made the leap from calli graphic, pen-based forms to shapes that reflected the move to metal a few centuries ago. Now, when technology is even better suited to geometric, or even randomly-generated shapes, what is the inherent value in hand-drawn letters? Keedy's reasons are political, and they hark back to a deconstructivist belief in non-objective design. "It connects the individual to the work. Nothing says 'person' like the design of the hand," he says. "Without that, it's easy to assume an objective authority. The personal can't assume that position." Keedy says he hopes that the hand-drawn

esthetic is clear in all his typefaces; it can be seen, certainly, in such faces as his ManuSans (which he says was inspired by grade-school lettering) and Jot Bold (a cross beween script and typewriter faces). Keedy says he expects to see more of the calligraphic esthetic in coming years. "It would make sense," he observes. "We're seeing so much evidence of the hand in design these days. Combine the typeface and the hand and you have calligraphy."

æ

Keedy says his approach to the class stems teaching them, here are more from the hope that he'll save students from with one of our ol any idea of having them replicate his path. "I said, 'You know, didn't actually learn type design," he says, noting that when he was in school in the early 1980s, the craft was still arcane and specialized. Keedy's master stays firm first typeface, called Neo Theo (after modernist architect Theo Van Doesberg) was created as a help them accom way to tie together a campaign he was doing as a freelancer for L.A.'s Fashion Institute in 1987. It was only after he started drawing his own type-

MASTERS OF THE UNIVERSE

faces that he began to recognize the lasting importance of calligraphy, which he had studied briefly as an undergrad design major. "I was terrible at it; I got D's and everything," he says. "We would just design a sheet with the phrase 'Today is the first day of the rest of your life' over and over." Now he is considering creating some of his own calligraphic faces, growing out of his experience of teaching this class. "And if you don't see them from me, you might see them from my students," he says.

Keedy adds that many of his students enter the class with ideas for their own typefaces, and if the face that comes out of this lesson isn't the one they had in mind going in, they know they'll have their chance to develop their own ideas later on. In fact, one of the special strengths of CalArts, he says, is helping students find their own design personalities and develop practices that suit their own interests. The type design class just provides students with one basic tool. "I really think every designer should learn type design," he says. "Once you actually design a typeface, you're working with the bricks you'll be building with. Once you study type design, no matter what you do, you'll be a much better typographer."

Let the students grumble about calligraphy, then. "That can be frustrating about teaching," Keedy says ruefully. "You think the students should be grateful for the great things you're teaching them, but they just don't realize their value yet." He laughs. "An incident just happened with one of our old students. She saw Ed Fella and said, 'You know, when I was a student I didn't realize how cool you were.' It's hard to know how to take a remark like that." Mr. Keedy the schoolmaster stays firm. He thinks the students will be grateful—later—for the traditional skills that will help them accomplish their untraditional designs.

Darcy DiNucci writes about design from her home in San Francisco.



ITC introduces 20 new typefaces, from a subtle block serif font to a theatrical calligraphic face. These typefaces are shown practically and poetically through excerpts from recent releases from Alfred A. Knopf.³

ITC Verkehr ABCDEFGHIJKLMNOPORSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890&fifl@*#%\$¢£¥ÇØÆŒB("!?"---,.:;)[†‡§»«]{~~~~~~

John Updike Collected Poems 1953-1993 Alfred A. Knopf, New York, 1995

Cigarettes	12.76
Drinks	18.23
Coffee	6.45
Fonts	153.99
Paper	4.33
Time	271.45
Snacks	36.28
S/T	503.49
Tax	40.27
Tips	7.00
Total	\$550.76

Passing by a local fruit stand day after day, Mott Jordan was struck by a hand-lettered sign that gave the illusion the letterforms were "top-heavy" and narrowed toward the baseline. Perhaps the ink flow lightened as the markers went down the paper. The intriguing effect inspired Jordan's design for ITC Verkehr. A stylized sans serif face based loosely on Grotesque No. 9 (also known as Monotype Headline Bold), ITC Verkehr is particularly effective at large sizes. Jordan envisions creative and colorful uses of the face. For instance in a movie poster, gradated color might follow the narrowing shapes of the letters.

A painter and a graphic designer with a passion for lettering that began at the age of 10, Jordan draws illustrations for magazines, designs posters for arts organizations and creates typefaces at his studio in Santa Cruz, California.

Home Movies

How the children have changed! Rapt, we stare At flickering lost Edens where Pale infants, squinting, seem to hark To their older selves laughing in the dark.

And then, by the trellis of some old Spring— The seasons are unaltering— We gather, smoother and less bald, Innocently clowning, having been called

To pose by the off-screen cameraman. How strangely silently time ran! We cannot climb back, nor can our friends, To that calm light. The brief film ends.

JOHN UPDIKE

22

Calder's Hands

In the little movie at the Whitney you can see them at the center of the spell of wire and metal:

a clumsy man's hands, square and mitten-thick, that do everything without pause: unroll a tiny rug

with a flick, tug a doll's arm up, separate threads: these hands now dead never doubted, never rested.

JOHN UPDIKE

2

23

Mott Jordan Painter and Graphic Designer



Bob Anderton



ITG Blackadder abcdee-fgghijjkklmnoppgristuvwxx yyzzABCDEFGHIJKIM NOPQRSTUVWXYZ1234 567890&bbddffiffBshth\$¢EY{~~~~} CØÆCE("!?"---,.:;)[†#\$~]

Bob Anderton's design firm is located in York, England, not far from the school attended by the infamous Guy Fawkes, who tried to blow up the Houses of Parliament in 1605 while King James I was in attendance. Intrigued by this local insurrectionist, Anderton looked into some of the historical materials that were available about Fawkes, and found among them documents with his signature. The archives revealed that after being captured and tortured, Fawkes' handwriting changed markedly, taking on a shaky, frayed quality. It was this eerie transformation that inspired Anderton's new design, ITC Blackadder. Basing his design on handwritten letterforms that were typical of that time, Anderton captured the flurried scrolls and curlicues of the era and then added the sinister tremble that defines the typeface. This elegant, yet menacing display face is perfect for theatrical uses like posters, programs and fliers. ITC Blackadder shares its name with a river and village in Northern England.

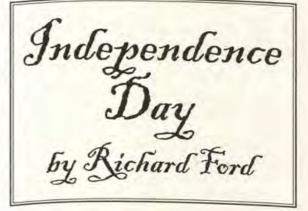
In Haddam, summer floats over treesoftened streets like a sweet lotion balm from a careless, languorous god, and the world falls in tune with its own mysterious anthems. Shaded lawns he still and damp in the early a.m. Outside, on peacefulmorning Gleveland Street, I hear the footfalls of a lone jogger, tramping past and down the hill toward Jaft Lane and across to the Choir College, there to run in the damp grass. In the Negro trace, men sit on stoops, pants legs rolled above their sock tops, sipping coffee in the growing, easeful heat. The marriage enrichment class (4 to 6) has let out at the high school, its members sleepy-eyed and dazed, bound for bed again. While on the green gridiron pallet our university band begins its two-a-day drills, revving up for the 4th: Boom-Haddam, boom Haddam, boom - boom - ba - boom. Haddam-Haddam, up'n-at-em! Bcom-bcom-ba-bcom!

Elsewhere up the seaboard the sky, J know; reads hazy. The heat closes in, a metal smell clocks through the nostrils. Already the first clouds of a summer J-storm lurk on the mountain horizons, and it's hotter where they live than where we live. Far out on the

64

main line the breeze is right to hear the Amtrak, "The Merchants' special," hurtle past for Philly. And along on the same breeze, a sea-salt smell floats in from miles and miles away, mingling with shadowy rhododendron aromas and the last of the summer's staunch azaleas.

Though back on my street, the first shaded block of Gleveland, sweet silence reigns. A block away, someone patiently bounces a driveway ball: squeak...then breathing... then a laugh, a cough..."All rilight, that's the waaay." None of it too loud. In front of the Zumbros' two doors down, the street crew is finishing a quiet smoke before cranking their machines and unsettling the dust again.



65

Richard Ford Independence Day Alfred A. Knopf, New York, 1995

The ITC typefaces shown in this issue of U&Ic will be available to the public in various formats for the Macintosh and PC on or after February 16, depending on each manufacturer's release schedule. Only ITC, ITC Subscribers and ITC distributors are authorized to reproduce and manufacture ITC typefaces."





František Štorm

In case we are not here, you may leave a message at the neighbors. And if they are not there either, please go away. During his studies at the School of Graphic Design in Prague, František Štorm learned the art of lettering for projects ranging from banner design to advertising to warning labels. During that time he encountered typographic forms based on restrictive geometric rules that he considered to be particularly unattractive.

Štorm's new typeface, ITC Malstock, is based on a sign-painting technique that uses a flat brush and an instrument called a maulstick (from the Danish *maalstok*), a wooden or aluminum bar about 18 inches long with soft padding on the top. The tool is used as a rest for the painter's hand and works like a straight edge for vertical lines.

The split-stem endings of ITC Malstock recall the traces of the sign writer's brush as if drawn along the maulstick. It is a narrow typeface well suited to headlines, invitations and advertisements. Štorm recommends combining ITC Malstock with a sans serif (except Helvetica) in text sizes to create "harmony," or with a classic serif type to achieve tension between the headline and body text.

ITC Malstock[™] ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890&fifl@*#%\$¢E¥ÇØÆEfi["!?"---,.:;][††§»«]

Waiting Room Reading the signs, We learn what to expect-

The trains late, The machines out of order.

We learn what it is

To stare out into space Great farms surround us, Squares of a checkerboard. Tolice our places, we we'l

Taking our places, we wait, We wait to be moved.

21

47

Donald Justice

ולל מוֹאפּאמ

Light

 Image: Comparison of the second state of the second sta

Medium

 лвсоеfghtjkLmnopqrstuuv/xyzฮ1234567890

 двсреfghtjklmnopqrstuvwxyz

 @*#%\$¢£¥ÇØZ@@("!?"---,..;)[++§»«]{````}}

Bold

лвсәеfghijkĹmnopqRstuuv/x¥Zð1234567890 явсре†ghijklmnøpqRstuv¥Xy @*#%\$¢£¥¢ØЉœ@("!?"---,.:;)[++§»«]{~~~~}

> Designer Carl Crossgrove incorporated a combination of upperand lowercase shapes to create ITC Minska, a striking display face with Cyrillic overtones. Crossgrove has drawn on his knowledge of historical forms, such as uncials, to create variations that are extremely unconventional, yet recognizable. With its incomplete geometry—opulent rounds juxtaposed with sharp angles—ITC Minska projects an unorthodox energy of its own.

It's minera has three weights: Light, medium and **bold**, each of which includes two variations of each letter that can be combined for unusual effects and high impact in many display settings.

Carl Crossgrove has stodied printmaking, printing, calligraphy and typography, and has been fascinated with letterforms since childhood. He earned his degree in printing from rochester institute of technology, where he was immersed in a typographic coltore that led him to specialize in typography and design.



CARL CROSSGROVE

46

SONDAY RAIN

THE WINDOW SCREEN IS TRYING TO DO ITS CROSSWORD POZZLE BOT APPEARS TO KNOW ONLY VERTICAL WORDS.

john uppike

Crossing Kansas by Train

the telephone poles have been holding their rrms out r long time now to birds that will not settle there but pass with strange cawings viestward to Where Dark trees Gather about a Water hole this Is kansas the Mountains start here just behind the closed eyes Of a farmer's Sons asleep In their work clothes

DONALD JOSTICE

59

Donald Justice, New and Selected Poems Alfred A. Knopf, New York, 1995

28

58

ITC Odyssée

Light

ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz T234567890&fifl@*#%\$cf.¥ÇØÆŒB("!?"---,.:;)[†‡§»«]

Light Italic

ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890&fifl@*#%\$¢£¥ÇØÆŒB("!?"---,.:;)[††§»«]

Medium

ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890&fifl@*#%\$c£¥ÇØÆŒß("!?"---,.:;)[†+§»«]

Medium Italic

ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890&fifl@*#%\$¢£¥ÇØÆŒB("!?"---,.:;)[†‡§»«]

Bold

ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890&fifl@*#%\$¢£¥ÇØÆŒß("!?"---,.:;)[†+§»«]

Bold Italic

ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890&fifl@*#%\$¢£¥ÇØÆŒB("!?"---,.:;)[†**†§**»«]

Ultra

ABCDEFGHIJKLMNOPORSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890&fifl@*#%\$c£¥ÇOÆŒß("!?"---,.:;)[†‡§»«]

Whether a letterform is engraved in stone or printed on paper, the serif has historically served as a support for the alignment of a character. With digital imaging of type came new visual illusions that inspired French designers Roselyne and Michel Besnard to develop ITC Odyssée. The serifs on ITC Odyssée recreate the virtual lines formed by "optical residue" on television screens, which appear to be horizontal serifs trailing off to the right of the character.

Michel Besnard, a painter, sculptor and art teacher, and Roselyne Besnard, a graphic and textile artist, initially designed ITC Odyssée in 1983 for an embroidered alphabet primer. The letterforms of ITC Odyssée have been subsequently drawn, painted, engraved, sculpted and embroidered. But it was the computer that enabled the Besnards to digitize ITC Odyssée and restore it to its true typographic form, in all its vigor and contemporary beauty.

A quest for legibility and clarity dominated this design and ultimately yielded a simplicity in the curves and vertical lines. The ITC Odyssée family includes seven weights and styles: light, medium and bold with corresponding italics, and an ultra weight.



A Dog's Life

is unfair, as we all know, and a good thing, too. If it had gone according to plan, I would still be chained up outside some farmhouse in the middle of nowhere, living on short rations and barking at the wind. But fortunately, some of us are marked by fate to overcome humble beginnings and succeed in a competitive world. Lassie comes to mind, for instance, and that small creature who seems to spend his entire life with his head at an unnatural angle, listening to an antique gramophone. Rather him than me, but I suppose there's not a great choice for terriers-noisy little brutes with limited intelligence, in my experience.

As my memoirs unfold, I shall describe my progress through life in more detail—all the way from birth to my present eminence, not forgetting the times of struggle, the months in the wilderness, house hunting, curious encounters, milestones, turning points, and so on. But for the moment aside and turn to more for ters: my emergence as a decision to air my views

It started as these thi chance. A photographer house, looking for a free text of doing artistic stur patch. I didn't pay him t apart from a cursory snif his glass long enough to portraits. I was in silhous with the sun behind mewe say in France-and I ing something about the I stopped to water a gene

At the time, I thought of us are photogenic, an a few weeks later, there full color, whiskers brist the living essence of the dog. And they say the ca Little do they know.

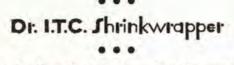
Peter Mayle A Dog's Life Alfred A. Knopf, New York, 1995

Roselyne and Michel Besnard

PRINTED MATTER

ITC SERENGETTI

ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890&@*#%\$¢£¥ÇØÆŒ("!?"---,.:;)[†‡§»«]{~~~~~~



For All Your Problems with Type Relations 866 2nd Avenue, New York, NY 10017 USA t: (212) 371-0699 f: (212) 752-4752



A lettering artist at Master Eagle/Photo-Lettering for over 30 years, Bob Alonso has spent his career tailoring type—modifying faces, revising designs, filling in families, fashioning bits of type for hand-lettering jobs and creating original typefaces. ITC Serengetti began as just one word. Years later, Alonso returned to that one-word, hand-lettering job, and used it as the foundation for an all-capital, condensed sans serif display face. ITC Serengetti is composed of clean, geometric lines that give the face a universal appeal and make it useful in virtually any headline setting. ITC Serengetti also works well in many text situations.

BOB ALONSO



Tim Donaldson

ITC Farmhaus

abcdefghijklmnopqr/tuvwxyz ABCDEFGHIJKLMNOPQR STUVWXYZabcdefghijklmn opqr/tuvwxyz1234567890effifl @*#%f¢E¥ÇØÆŒß("!?"--,..:;) [+≠ø»«]{~~~~^}

> In the words of Tim Donaldson, ITC Farmhaus is where "Neil Young meets Paul Renner." Donaldson took the perfect circles and clean, straight lines of Paul Renner's original drawings for Futura and set them on a collision course with crinkly edges and uneven, thick strokes. Although he is a Modernist sympathizer, Donaldson is annoyed by the dogmatic rules the art movement lays down. In this rebellious extrapolation, his respect for Modernist design principles merges with his objections to excessive discipline.

> ITC Farmhaus contains two sets of lowercase characters. In one version, larger counters formed by thin strokes are juxtaposed with thicker linear strokes. This combination of thick and thin lends a certain dynamic to the text, much as you would get with a broad-edged pen. The other version of the lowercase is heavier overall and quite sturdy.

Greeting! from our farmhoule. Greeting! from our farmhoul

DEAR MOM, As you can see from the other side of this postcard, I am having an utterly good time on the farm. I'm milking this vacation for all it's worth. Love, Suzy

30



Mrs. Alons Serengetti Two Hammarskjold Plaza New York, NY 10017 evin Bailey, a graphic designer in Dallas, Texas, developed his first typeface family, ITC Bailey, over a period of three years. The original idea for this design came several years ago when Bailey was looking for a subtle block serif face to use in a design project, but failed to unearth one. The image of this elusive typeface stayed with him until the advent of Fontographer enabled him to create it himself, digitally.

here were many twists and turns in the evolution of ITC Bailey Sans. Bailey initially intended to create a serif face, but finding that the skeleton of the design worked well as a sans serif, he pursued that. He also abandoned plans to design a single display face only, and decided to explore other weights and styles, including a true italic. As the design took shape, more variations presented themselves.

n the end, he sought to create a utilitarian typeface that was distinctive, but not eccentric. He pared down the design along the way, striving for a simple, yet expressive form. The sans serif design is fairly hefty and has a warm quality. Both the book and bold weights work well for text and display. Also part of this release is ITC Bailey Quad Bold, a sturdy design with very subtle slab serifs.



Kevin Bailey

ITC Bailey

ITC Bailey Sans Book

ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890&@*#%\$¢£¥ÇØÆŒ("!?"---,.:;)[++§»«]{~~~~}

ITC Bailey Sans Book Italic

ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890&@*#%\$¢£¥ÇØÆŒ("!?"----,.:;)[†**†§**»«]{~~~~}

ITC Bailey Sans Bold

ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890&@*#%\$¢£¥ÇØÆŒ("!?"---,.:;)[++§»«]{~~~~}

ITC Bailey Sans Bold Italic

ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890&@*#%\$¢£¥ÇØÆŒ("!?"---,.:;)[+**†§**»«]{~~~^}

ITC Bailey Quad Bold

ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwx yz1234567890&@*#%\$¢£¥ÇØÆŒ("!?"---,.:;)[+**†**§»«]{

LANDSCAPE and MEMORY

It was only when I got to secondary school that I realized I wasn't supposed to like Rudyard Kipling. This was a blow. Not that I much minded leaving Kim and Mowgli behind. But Puck of Pook's Hill was a different story-my favorite story, in fact, ever since I had been given the book for my eighth birthday. For a small boy with his head in the past, Kipling's fantasy was potent magic. Apparently, there were some places in England where, if you were a child (in this case Dan or Una), people who had stood on the same spot centuries before would suddenly and inexplicably materialize. With Puck's help you could time-travel by standing still. On Pook's Hill, lucky Dan and Una got to chat with Viking warriors, Roman centurions, Norman knights, and then went home for tea.

I had no hill, but I did have the Thames. It was not the upstream river that the poets in my Palgrave claimed burbled betwixt mossy banks. Nor was it even the wide, olive-drab road dividing London. It was the low, gull-swept estuary, the marriage bed of salt and fresh water, stretching as far as I could see from my northern Essex bank, toward a thin black horizon on the other side. That would be Kent, the sinister enemy who always seemed to beat us in the County Cricket championship. On most days the winds brought us a mixed draught of aroma, olfactory messages from both the city and the sea: heavy traffic and fresh fish. And between them hung the smell of the old man himself: sharp and moldy as if it exuded from some vast subfluvial fungus growing in the primeval sludge.

Ten miles further downstream was the gloriously lurid seaside town of Southend, developed at the end of the last century as "the lungs of London." The pier was strung with colored lights and loud with the blare of band music. cracklingly amplified over the black water. The promenades were littered with flaccid, vinegar-saturated chips and you could, literally, get your teeth stuck into cylinders of Day-Glo-pink rock candy, the letters bleeding as you gnawed optimistically through the stick. Closer to home, the little port of Leigh still had shrimp boats in its harbor and cockle sheds on the dock. In St. Clements were buried its fishy fathers: not merely Richard Haddock (died 1453) but Robert Salmon (died 1641), whose epitaph claimed he was

18

Simon Schama Landscape and Memory Alfred A. Knopf, New York, 1995 19

Help Wanted: Web Master

Your mission is to make our content jump on screen, and to challenge our editor to keep the material as exciting as the technology allows. We're looking for a proven graphic designer who also possesses great technical skills—familiarity with the AOL toolkit, strong HTML skills and an ability to learn Java, VRML, etc. Outdoors person preferred.⁶

Graphic Designer

Nonprofit medical association seeks a full-time graphic designer with strong typographic background. Must be proficient in Mac-based software, including QuarkXPress, Illustrator, FreeHand and Photoshop. Director skills a plus. 3-5 years' experience in design and print production.

The Learning Curve...

by Gene Gable

with Caution

Digital Photographer

Catalog sales company seeks individual with at least two years' experience using digital cameras. Must be proficient in Photoshop, Quark and Illustrator. Mac Ethernet Networking systems knowledge a plus. Responsibilities include: photo shooting, scanning, silhouetting, retouching, pre-press prep and archiving.

Graphics

Innovative, internationally recognized furniture manufacturer looking for a highly disciplined designer who is fluent in both Mac & PC platforms with Quark-XPress, Photoshop, Illustrator, PageMaker and FreeHand expertise (interactive multimedia design a plus). At least three years' experience. NE glance at the classifieds lately, and you'll quickly

realize that virtually no one has the full set of technical skills

demanded of a graphic "specialist" these days. The ideal candidate

not only has to be a technical whiz, Photoshop guru,

Take my advice. Rather than trying to learn all these network specialist, Web expert and print-production veteran, attributes in advance of a job search, career change or but also blessed with **"award-winning"** design skills. new project, fake it—just get the job and worry later.

If you understand the basics of computer-aided produc-

tion and own technically capable equipment, there are

plenty of ways to learn specific applications and tech-

niques as you need them. While the worst time to learn something new is amid deadline pressures, I suspect you have more important things to do with your spare time than bone up on gamma-curve adjustments or figure out the difference between under-color removal and gray-component replacement.

If you are actually a real student, then by all means indulge yourself in the luxury of learning for the sake of it. Take classes. Hang out at coffee houses and talk about the Web. Read all the computer trades and spend a month in Photoshop working

on Christmas cards. But most of the professional

world tackles the learning of new skills on an "as-Unfortunately, my favorite way of learning computer applications has been needed basis." Thankfully, we're all in the same boat, modified somewhat for the times. In the early days of personal-computer and an entire training industry has grown out of software, you could call up Adobe or Quark, for example, and have them talk our information needs. you through a problem on the phone while you sat in front of your screen

trying to get something to print. There was nothing like a direct link to a roomful of experts who were all eager to help you get through the rough spots of a new program. But customer service and tech support as sources of primary training aren't what they used to be, thanks to considerable abuse and the evolution of tech support as a profit center. But the idea behind tech support lines is still valid: to have someone explain it directly to you in simple terms.

Personal training is a great way to learn, whether you're after computer skills or more defined abdominal muscles. There are plenty of well-trained people willing to come to your office or home and work with you on a custom program tailored specifically to your needs and skill level. You can expect to pay at least \$50 an hour for someone good, especially if you're looking for advanced skills. But a few hours of custom training can go a lot further than days of generic onesize-fits-all classroom work.

But aSKING' a spouse, loved one, co-worker or friend to teach you how to use your computer or new program is asking for trouble. It's worth paying to learn from a pro who knows as much about the art of teaching as they do the specific application. This is particularly important with computer skills-watching someone show off how fast they can click a mouse and make things happen is not an effective teaching method.

Whenever possible, learn on the machine you use regularly, running the applications you usually work in. It's been my experience that the majority of unexpected and confusing problems have to do with conflicts between applications, or with the system itself. There is nothing more frustrating than trying to learn a new application that, for one reason or another, is not behaving the way it is meant to. Better to discover these problems right away and fix them, than to wonder why something that worked perfectly well in the classroom or computer store suddenly goes south when you boot it up on your machine.

Picking a personal trainer is not always easy-in the more arcane areas of graphic arts programs and in new media like the Web, finding someone who knows more than you may be tough. Calling a reputable service bureau or high-end printer in the area to get their opinion, or checking with friends and colleagues can help. Many companies, like Quark and Adobe, will refer you to authorized trainers and training centers. Learn from someone who is confident, knowledgeable and, most important, patient. Testing their knowledge of program minutia is not so important-learning how to find answers together is just as vital as knowing the answer itself. A good deal of computer training should focus on how to use the manuals-they often contain everything you need to know.

The CAYS of unlimited free phone support may be over, but many tech-support departments are run online, offering free problem solving. Depending on timing, your **on**line question may be answered in hours or in days. Companies like Quark and Adobe have access through commercial services like CompuServe or directly through their Web sites (http://www.quark.com or http://www.adobe.com). Most companies also have their most frequently asked questions posted on their Web site and it's unlikely

you'll run into a question that hasn't been answered before. There are some good resources out Sharing the Experience While not every-

there, including some sites by individuals who seem to have little more to do than show off their considerable knowledge one can afford a personal trainer (though in the long

of applications and obscure techniques. A quick check of one of the graphic arts Web sites (like Publish magazine's run, it's the cheapest way to go), the next best option

at http://www.publish.com or the Global Prepress Center at http://www.ledet.com/preis group learning. All sorts of classes, both private

press/) will Show you some important Web links. and public, are available for the taking.

Classroom training is often inconvenient because it takes place off site, but it can provide many of the basics and is particularly good for confronting a new application from scratch.

> Remember, though, that classroom settings are very limited in the depth they can impart-more complete learning comes from hands-on lab sessions or group lab projects, which should be part of a formal class structure. A two-day seminar may cover quite a bit of territory, but unless you get your hands on the equipment and have to apply the skills to a specific project, you may lose the information quickly. And the academic community is often slow to recognize the need for certain skills-many post-secondary programs are only now incorporating substantial computer training in their graphic arts programs (budget considerations are a factor here). For that reason, one of the best classroom training choices is from local service bureaus and printers, many of whom now provide either free training for their better customers or paid weeknight classes. Trade groups and associations like the United Digital Artists in New York have similar programs, and often conferences like ATypI, the Seybold shows and AIGA events have concurrent labs set up for spontaneous learning (often from volunteer pros you would rarely find in formal classroom settings).

The Solitary Student

If you're of a certain temperament and work best on your own, there's nothing wrong with sitting down with the software manuals and going through them to teach yourself. You get to work at your own pace, skip over the obvious things, and you can try something over and over again until you get it right without being embarrassed. The dangers of self-learning, though, are that you'll skim over important basics and devise shortcuts and workarounds. They may do the job, but they often lead to work habits that are inefficient.10

> In the deluxe CD-ROM versions of many applications (most notably Adobe's), there are excellent interactive training programs that will help keep you on an organized learning path. Most complicated programs also come with tutorial lessons-which many people skip in favor of going straight to the things they need to know. But this is a big mistake-it's much easier to understand some of the more arcane commands if you have the basics down first.

One piece of advice about tackling computer manuals: use the menu commands as a guide. If you go through each menu and review the functions via the manual, you'll pick things up in a logical order and will better know where to go when you run into a question. Manuals are not always organized the way you work, but menus are. And many menu commands are common between applications, so you'll already be comfortable with them.

Supplement Your Efforts An entire book publishing industry exists to try to fill the gap left by software manuals. And there are many excellent books-the best are those that teach by real-life examples. In these, you can see a result, then seek out the specific steps that were used to get there. Bible-sized tomes may be more helpful than a manual because they're laid out better to your way of thinking, but don't expect a book to magically give you what a manual could not-if you don't learn well on your own, no number of books on your shelf will help you.

As a bridge between learning in the privacy of your own office and the discipline of structured training, you may want to consider some of the third-party interactive CD-ROMS. or video-training programs from companies like ViaGrafix or ColorExpert. These range from straightforward recordings of classes to step-by-step lessons that provide specific exercises, sample images and walk-through examples. Personally, I've always found the idea of watching a video an odd way to learn computer skills, but many swear by it.

Whichever learning method you choose, the secret is to not be intimidated. The future of computing is likely to center around global networks and move away from the current scenario of individuals trying to do everything on their desktop computers. We're edging toward a global community of experts all willing to do small parts of the whole. Why should you take the time to silhouette an image in Photoshop when there's probably someone out there who specializes in (and maybe even enjoys) that type of work? Once we're all hooked up, and can send files around speedily-as well as collect fees for serviceswe'll see the return of talented specialists, only this time, they'll be up on the Net instead of down the street. Good typesetting, proofreading, animation, trapping, photo retouching, problem solving and other services will once again be available to the design community. So hearing talk of screen resolutions, GIF conversions and Java need not cause you sleepless nights. Someone out there wants to help you learn.

Gene Gable is publisher of Publish magazine.

- 6 ITC Legacy Sans Bold 7 ITC STURIT
- 8 ITC Humana Sans Medium 9 ITC Humana Sans Light 10 ITC Legacy Sans Book Italic

ITC Legacy Sans Medium 2 ITC Legacy Sans Ultra ITC Legacy Sans Book ITC Legacy Sans Bold Italic ITC Humana Sans Bold

There are about 180 design schools or universities with design departments in Japan. The most notable in the art and design field are all located in the Tokyo area: MUSASHINO ART UNIVERSITY, TAMA ART UNIVERSITY and TOKYO UNIVERSITY OF ART & DE-SIGN. Each has a long history and a reputation for excellence in design education. A fourth,

EASTERN INFLUENCES Interviews with four respected design instructors in Japan

KANAZAWA INTERNATIONAL DESIGN INSTITUTE, is a new school outside of Tokyo that is affiliated with Parsons School of Design in New York, and prides itself on its internationality.²

The four teachers featured in this article are top professionals in the design field in Japan whose creative works and unique approaches to design education are inspiring to students. All of them stress the importance of originality and freeing oneself from dependence on tools such as computers. They also encourage students to become more comfortable in expressing themselves verbally, graphically and esthetically, which is the foundation for design students everywhere, but is espe-

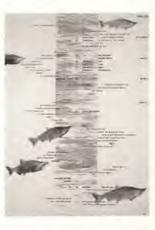
cially important in Japan.³ HIROKO SAKOMURA has taught Japanese as a full-time lecturer at San Diego University, has taught at several universities in Tokyo and has written books and articles on the English language, communication and cultural differences. In 1986, she founded the Transform Corporation to help businesses bridge cultural, linguistic and strategic gaps, and since then, she has been actively involved as an international coordinator in the areas of communication, culture and education. She is an adviser for the International Design Conference in Aspen and also serves as a board member of Kanazawa International Design Institute.4

by Hiroko Sakomura

hen I was asked to teach a typography class to sophomores, I discovered that no curriculum existed that would train their eyes to their maximum capability. I believe typography is dependent on how carefully your eyes can work during reading," says Minoru Niijima who is a widely reputed graphic designer and now also teaches at Musashino Art University. The first segment of his class focuses on gradation of colors. Niijima has observed that, in general, the Japanese are sensitive to contrast, but lack the ability to distinguish the subtlety of color gradation. Nevertheless, according to Niijima, "people can train

Minora Niijimas PART-TIME LECTURER-VISUAL COMMUNICATION DESIGN DE PARTMENT-MUSASHINO ART UNIVERSITY

"People can train their eyes if encouraged to take off the hard shell that is a barrier to their or sensitivity."







their eyes if encouraged to take off the hard shell that is a barrier to their own sensitivity."

The next step is learning the relationship between space and letters. Students are given a cooking recipe in English as text and then must reconstruct it, based their individual interpretations. Their compositions may alter the semantics of the text, but not the syntax. This exercise teaches students to understand that tools become useful only when they are controlled by their personal vision and original thinking.

"I stole the idea of using recipes from Yale," said Niijima, who completed his graduate work at the Yale School of Art. "You may think that I am teaching something backward in this technologyoriented society. I do not reject the computer. I consider the computer a friend, but I'm counted among the old generation in this digital age because I still believe human eyes have a higher resolution than any monitor."

While he encourages each student to seek his own thinking pattern and process to reach a solution, Niijima also thinks sharing a work space with others is very important for Japanese students in developing their communication and critical skills. "Therefore, I insist that the students work only in the classroom," says Niijima. "I don't allow them to work at home. In our classroom, you will often see students busily working until midnight-which is a rather unusual scene in Japan."

1 ITC GIOVANNI BOLD SMALL CAPS 2 ITC GIOVANNI BOld, BOLD SMALL CAPS 3 ITC GIOVANNI BOOK 4 ITC GIOVANNI BOOK Italic; BOOK SMALL CAPS 5 ITC Hamman Stript Sold 6 TC Humans Stript Sold n his class on information design, John Maeda is trying to teach students to understand digital media without the use of computers. It is an experimental program, but he seems to have achieved some effective results. His goal is to encourage students to build a new lan-

John Maeda

"I think students in the digital age tend to confuse what is a skill and what is a tool."

ART-TIME LECTURER-DESIGN DEPARTMENT-TAMA ART UNIVERSITY:

guage for drawing graphics on the computer screen. The first task is to draw lines indirectly. Students work in groups of five. One becomes a commander and the remaining four become pens, in the colors of red, black, blue and green. In order to draw a line, the commander must give very precise verbal instructions. Insufficient or wrong instructions will cause errors in drawing. Through this process, students are required to invent new ways of drawing without using their





	な斜め上にきセンチをひく。
	の取録の上にちセンチをひく」
	とお料め下にさないすをひく。
	5市鮮め下に5センチをひて。
(8) 左下の角	
(8) 上に16セン:	
	ところから右にちセンチをひく。
(8) 赤上の角	
(約) 右に16セン3	
(位) ペンのある	ところからアにちゃンチをひら、
(11) 右上の角	
(12) TE1042	·F
(13) ペンのある	ところから左にちもンタをひら、
(11) 右下の角	
(12) 左に10やン	*
(111) ペンのある	ところから上に5センチをひく。
(14) カーシルと	(1) の納点モビアぶ。
	(2) の終点をむすみ。
(物) カーゴルと	(2) の読点をむすぶ。
(15) カーソルと	(4) 前輕成至七下芬。
(15) カーンルと	(7) の絶点をおすぶ。
(15) ガーンルと	(10) 約納成をむF-F。
	(13) の構成者をすぶ。
(11) カーレルと	(18) OBACT

own hands. They also come to understand the concept of defining their own expressive space, since they start off with nothing. Having written specific instructions for each drawing, students use their new language on the Macintosh in a stand-alone programming environment developed by Maeda. By the final stage of the class, the students are creating interactive visual forms in their own constructed languages.

"I think students in the digital age tend to confuse what is a skill and what is a tool," says Maeda. "If you start studying design from the technology level, you misunderstand the meaning of creativity. The aim of making students draw indirectly is to develop their ability to create in the digital medium-but only if they can express their ideas specifically. In this way, students find that building a tool is one of the necessary critical skills for adding expression to digital design." In the course of Maeda's program, the students eventually learn how to convey ideas concretely, using precise language. "If you only use the tools available in the market," says Maeda, "you will miss the opportunity to develop your own skills."

ndrieu Cecile Kawakami teaches at the Kanazawa International Design Institute (KIDI), one hour away from Tokyo by plane. Founded three years ago, its affiliation with PARSONS SCHOOL OF DESIGN in New York is a key part of the Institute's identity. The design curriculum is set up so that a student who successfully finishes the foundation year is able to transfer to Parsons after one or two years at KIDI. Kawakami, who was born and educated in France, came to Kanazawa in 1986 and has chosen the city as the base for her career as an educator and artist. She speaks Japanese perfectly.

In her design class, Kawakami encourages students to work in groups to come up with solutions for social and environmental problems that exist outside of design studios. Kawakami explains: "This project

was originally aimed at introducing students to the interdisciplinary capacities of two- and threedimensional activities. It is a process-oriented and experience-based class that started as an experimental course and not a part of the Parsons curriculum. It gives the students an opportunity to understand the various aspects of Japanese culture in a concrete project and become aware of the Western way of thinking and expression, which is important because they will be transferring to the States to continue their education. It is also very critical for them to develop good communication skills to survive and succeed at Parsons.

Andrien Cecile Kawakami

"Being able to communicate well is the basis of being a good designer."

HEAD LECTURER-FOUNDATION PROGRAM-KANAZAWA INTERNATIONAL DESIGN INSTIT









"Compared to Western students, Japanese students lack the training to express themselves in order to make critical judgments openly or to carry on discussions in public. So it is especially valuable for the students to work in small groups, for they must then exchange ideas and communicate with each other. After all, design is a process that involves many people. Being able to communicate well is the basis of being a good designer. In many ways, Kanazawa is the perfect site for this project because of its history, its size and the Japanese cultural traditions found here."

Hiroshi Kashiwagi is a professor at the Tokyo University of Art & Design. He is also a wellknown design critic, specializing in modern design history. One of the courses he teaches is advertising, targeted to junior students whose major is visual design.

Hiroshi Kashiwagi

"My focus is not on theory but on skill-building."

"There are two specific goals I set for this class," Kashiwagi explains. "Both are aimed at having the students make









their own discoveries, rather than being taught everything in lectures. The first goal is to perceive the visual side of the advertisement-what kinds of visual elements such as logo, layout and typeface are being used. The second is to understand the ways in which social images and merchandise interact. In other words, I am creating an active and participatory learning environment for students to discover the methods of constructing visual language, including the methods that employ cutting-edge technology."

The 180-minute class meets 30 times a year and the average number of students is 20. This means that every student has a chance to present his or her research on a Japanese advertisement every week. "It is a very intense course," says Kashiwagi. "My focus is not on theory but on skill-building. Recreating or imitating existing advertisements is the core activity for this class. Students' drawing techniques improve but more importantly, the project leads to a better understanding of products, organizations and human nature. At the end of the year, the students create an original advertisement based on what they have learned about the essentials of visual communication."

Talent, unleashed

"Graphic design can still be a cottage industry," says David Ellis of the London design firm Why Not Associates, "and you can still do it in your own bedroom, traditionally, with very little outlay." Though a low overhead is becoming increasingly difficult to maintain with the need for evermore-powerful computers, it is still not uncommon for a young firm to start up without backing or previous studio experience. Graphic design, unlike architecture or law, is still an uncertified profession that requires no apprenticeship. In some instances, a lack of mainstream experience actually helps designers retain an uncompromising approach that attracts attention and work, especially from clients with an eye on younger consumers.

The three groups featured on the following pages all began working with little or no experience in the professional world. In all three cases, the designers' education served less to prepare them for running a business than to equip them with self-belief. And in a profession frequently thwarted by cautious marketing strategies, focus groups and fierce competition, a little persistence, originality and single-mindedness can go a long way² Three young design firms opt out of the mainstream to follow their own course of independent study. The results have teeth³.

by Peter Hall

Talent, unleashed

Robynne Raye and Michael Strassburger started up their own graphic design firm in Seattle in 1987 because, as they say in unison, "No one would hire us." This they truly believe. Both were graduates with general studio arts degrees from Western Washington University. "I always wanted to be a graphic designer," says Strassburger, "but our portfolios were so awful we had no other choice than to start our own company." After a halfhearted launch under the dull name Raye Strassburger, followed by a six-month trip around the world that left them broke, the two partners reconvened in Seattle with another college friend, mus-Kindern Dog College did not, apparently, et an abbreview of the set Strassburger to run a de tered \$250 each and formed Modern Dog.4

College did not, apparently, equip Raye and Strassburger to run a design business. "We'd take on four-color jobs and have no idea how to do separations or scans," says Raye. "We were so baffled by how people made things look slick." The result was the beginning of what Raye calls a "raw, naive quality" that became inimitably Modern Dog."We tried to mask that part," she says, "but now we think it's cool." Raye maintains that the group's ignorance of convenal production techniques has been tained by deliberately hiring new designers straight from college. With the exception of Strassburger, who worked at a screen-printing shop and an exhibition production company. none of the group members-Vittorio Costarella, George Estrada, and the most recent Modern puppy, Coby Schultz-had worked in a commer-

cial studio before Modern Dog.

Below: a concertina promotion for the Alice B. Theatre in Seattle.

Mode

Selected highlights of the Dog box: promotion for Gilbert Paper, Total Jazz CD for Warner Brothers/Reprise Records, refrigerator magnets, K2 comic book.

> Feedback, the newsletter of the Experience Music Project, posing as a CD.

1 ITC Usherwood Bold ITC Usherwood Bool 3 ITC Usherwood Bold Italic 4 ITC Usherwood Book Italic

WEInk

self-promotion. For Modern Dog, this quickly developed into a peculiar mix of Raye's tenacity-entering design competitions "nonstop," because, says Strassburger, "as soon as people see your name in a book, they think you've got to be great"-and charmingly impractical ideas. After the first few lean months of business, the group came up with a wish list of dream clients and portfolios of work contained in heavy wood-and-metal boxes coated with fake fur and studded leather collarseach cost \$80 to produce, but received many enthusiastic responses. They have continued to function as a litmus Modern Dog's \$80 client littest to ascertain a client's openness mus test. "If the furry box to the Dogs' idiosyncratic approach. scares them," says Raye, "If the furry box scares them, they're "they're not going to want not going to want to work with us,"

The charm of the quirky wit, vibrant

colors and homespun type and illustration is only half of this fable of how a bad education produced a success-

ful design firm. The company's first

revelation about running a design busi-

ness was the need to master the art of

says Raye, who claims that the group turns down "more than half" of the work offered it.

The most recent refusal was a Budweiser beer account, which the Dogs felt had too much of a "babes-in-bikinis and frat boy" heritage to allow them a long enough leash to do their thing. But increasingly, the theater groups, snowboard manufacturers and record companies that have been the mainstay of the group's business are being joined by bigger and more impressive clients, including the department store Nordstrom and the Showtime network. The firm's approach remains remarkably consistent, no matter how big the projects get: be liberal with ideas, don't overwork and don't try to second-guess the client. "The biggest problem is when designers get into patterns," says Strassburger. "They feel most of the time that they have to water down their work and make it homogenous to please the client. We try to teach people how to talk about their work and tell them that if they can sell themselves to the client, that's half the battle."

For the evening class of "frustrated designers" that Raye and Strassburger now teach at the School of Visual Concepts, Seattle, there is a simple canine adage: "We don't pretend," says Strassburger, "that we have a dogma we're trying to pass along."



to work with us."

Rendered as spoofs of tabloid newspapers, Modern Dog's chaotic basketball shoe fliers for Nike carry headlines like "Scottie Pippen, Profile of the Running Man" and "Late-Breaking Developments on Michael Jordan's New Shoes."

A series of screen-printed sample cards (immediate left) for Gilbert Paper. The cards were packaged in a brown bag (far left) and distributed at Gilbert's Envision 21 conference.

Modern Dog's projects are also neatly summarized in a pack of playing cards (fanned out from center) that show selected posters between the card number and suit marks.

The "Jiffy Pow" popcorn (center) doubled up as a custom invitation for a K2 snowboards promotion.

Photographs by David Hughes

Talent, unleashed

One bitter February day in 1994, like lambs to the slaughter, Phil Yarnall and Stan Stanski went to New York City Hall to register their new design company, Smay Vision. Naively, they'd named it after a word from the dummy text in Letraset rubdowns. "A guy in a sweater vest told us to fill out a form, WW7, available from a guy in the lobby, who was blind, with only three fingers on his left hand," says Yarnall. "We had this notarized by the candy man at 77 Center Street, and went back to the guy in the sweater vest. 'All right,' he said, 'what does Smay mean?' We told him it didn't mean anything. 'If it doesn't mean anything, you can't have it,' he said. We said, 'Can it mean Smart Monkeys And Yams?' He looked like he wanted to kill us."

Smay's original Ginrickey typeface for MTV.



CD cover for Quicksand on the Polygram label.

Happily, there was a fortuitous end to this foul day now annually celebrated as Smay Day: the woolly City Hall official acquiesced to Yarnall and Stanski's hasty retraction and subsequent proposition that 'smay' was, in fact, a printing term, and the company was born. For Yarnall and Stanski, two graduates from Temple University in Philadelphia who'd grown tired of working for The Man for three years, it was the beginning of a shaky start.

Smay Vision

They had a sprinkling of work. Stanski had quit a job as creative director of *Guitar* magazine and subsequently had the job offered to him as a freelancer, and Yarnall brought some useful connections over from his stint as designer at Polygram Records. But they set their sights a little low, working out of a shared apartment in the East Village. "Our overhead was so low we were banging our heads on it," says Yarnall. "At times I was selling the free CDs I'd got at Polygram just to be able to eat."

Gradually, things began to pick up, largely due to a resourcefulness picked up at college-under their mentor Stan Sagorski, a master of "simple focused conceptual work," according to Stanskiand an ability to turn projects around on tight deadlines. Finally, last summer, Smay Vision was persuaded by its accountant to move into an office space uptown in New York's Flat Iron district. 'Coming here was the best thing that happened to us," says Yarnall, gazing half-ruefully out of the relative palatial splendor of the premises overlooking Fifth Avenue, while a new assistant taps away on a hefty computer in the corner.

Yarnall and Stanski are not planning to turn Smay Vision into the kind of corporations they left, however. Not yet. In these two short years, they have developed the conceptual approach of Sagorski with a vintage comic book style and gritty esthetic befitting two former band members (Philly college group The Slim

Guys) and designers from the music industry. Smay's specialty is creating funky custom lettering, with characters derived from sandwiching different types of food (banana skins scratched with letters, alphabet breakfast cereal, steak) under the office scanner. The group's work is frequently characterized by eye-catching juxtapositions, such as a cover for a Meat Puppets CD called "Scum," featuring a vintage postcard of a pastoral scene and the word 'Scum' rendered in dainty Linoscript. Bigger projects include a boxed set for the Velvet Underground (reprising Andy Warhol's famous peel-off banana skin) and a series of on-air promos for MTV.

And thankfully, good fortune, or perhaps a Smay angel, is helping the group keep up with the expansion of its business. Shortly before the first client meeting in their new premises, Yarnall and Stanski realized they didn't have anywhere to sit, so they tore out to a local antiques store to purchase a suitably Fifties dining table. "The conference table arrived," says Yarnall, "Thirty seconds before the client."

> Spread from Guitar magazine featuring a specially prepared chili pepper font.

The elegant Smay treament, with flowing Linoscript type, of the delicately-titled Meat Puppets CD "Scum." Red Hot Chili I Dave Nava Joins The Flea



Lee

Two original typefaces. Rhino (top) and Duh (below) are featured on this Dwellers CD from Smay's "gritty" collection. The image was provided by the band from a photo shoot in a sleazy hotel on 23rd St., Manhattan.





Images were gleaned from an old movie poster for this Greta CD cover.

Still from the MTV spots designed by Smay last fall, featuring the original typeface Ginrickey, the result of a "happy computer accident."

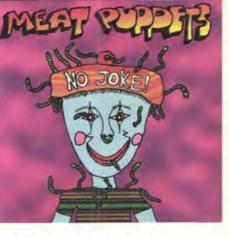


pper TO Lircus





tisement in an old LIFE magazine, Smay found this image of a "trippy space chick" for The Figgs CD.



Meat Puppets CD cover featuring an illustration by the young daughter of one of the band members.

Talent, unleashed

Appropriately enough for the name, Why Not Associates was founded not with a master plan, but with a shrug. In 1987, after finishing master's degrees at the Royal College of Art in London, David Ellis and Andy Altmann had a good idea of what they didn't want to do. "Andy and I both had an inherent distrust of large design companies," says Ellis, who'd spent one Easter vacation as an intern at the then-gargantuan Michael Peters Group. "It was a horrible scenario," he recalls of MPG. "The junior designers were doing work and not meeting the clients, and everyone seemed to be more interested in playing softball after work than designing. I decided I'd become a freelancer."

He didn't have to. By chance, Ellis and Altmann's classmate Howard Greenhalgh had landed a job producing a quarterly magazine for the American cosmetics company Sebastian, and since Greenhalgh had more experience in film than print design, he enlisted Ellis and Altmann's help. The folks at Sebastian were relatively generous. "They paid us more money than we'd ever seen in our lives," says Ellis, "£8,000 (\$12,000) a year each, which seemed colossal at the time." A friend of the client, it turned out, also needed some design work, and Ellis, Altmann and Greenhalgh "fell" into working together. For a company name they chose a label they'd been given at college by a student contrasting their non-linear, somewhat whimsical design approaches with the functional methodology of Bob Gill. "Our client heard us referred to as the 'why not boys,'" says Ellis. "It wasn't a name we ever liked or wanted. We just got stuck with it."

Moving into their own studio a year after graduation, the why not boys began chalking up a reputation for their smart experimentalism. They produced a lavish mail order catalogue for the booming retail fashion chain Next that looked like a deconstructed coffee table book, featuring layered images and finely interwoven typography. Their dislocated type treatments were called "crazy," but that didn't deter surprisingly mainstream clients from seeking them out, including Barry Robinson, the design director of the Royal Mail philately department. He commissioned the group to come up with a design proposal for the 40th anniversary stamp for the Queen's accession to the throne. Robinson, a connoisseur of design talent, clearly recognized the value of applying Why Not Associates' brand of exuberance to a subject that tended to bring out the most reverential conservativism in stamp designers.

Robinson perhaps also saw that Why Not Associates' typographic acrobatics were rooted in a classical understanding of proportions and letter spacing, a quality that has enabled the group to

mature over subsequent years. "When we left college we saw clients as vehicles for our graphic art," says Ellis. "But after a while certain jobs came along that weren't going to let us go crazy in a million years. We realized it was ducking the issue to bring out our bag of mannerisms and apply it to another client. With the stamps, the question was how on earth to design a stamp that would make us happy and that our Auntie Ethel would think was fitting."

Why Not Assoc

The one part that hasn't matured is Ellis and Altmann's fear of large companies. That healthy corporation-phobia still leaves them reluctant to expand the company by appointing a marketing manager to help find new work.

film Orphée.

"There have been times when it's been tricky and we've had to go out and look for projects ourselves," says Ellis. "But we never did cook up any work by doing that. And then, thankfully, the phone would ring." And why not?

Peter Hall is a journalist who specializes in design. He writes for several publications in England and the United States.

Right hand page: poster from the Philip Glass opera of Jean Cocteau's

> Proposal for a forthcoming slide installation at the Museum of Fashion in Kobe, Japan.

Left page: brochure and

point-of-sale material

in Holland.

for Oilily Women's Wear

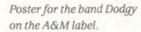


Spread from In Soccer

Wonderland, a book

about the culture of





CDEFGHI COEFGHI KLMNOPO RSTULWXY

Section divider from the book, Typography Now.

Final spread (right) from Why Not's pristine book of work featuring the literature and signs for a 1992 arts festival in the city of Hull, England, and (far right) a poster for Smirnoff.

iates



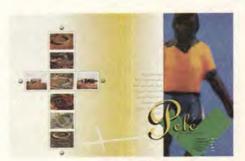
Page (above) from a promotional brochure for the television editing facility NTR.





Cover of a collector's pack for the Royal Mail. The design needed to say "stamps" without showing any of the special issue stamps inside. Why Not based the design on the structural forms inherent in perforated stamp sheets. Print ad for Nike (above) and poster (right) for a 1992 exhibition of British industrial design in Brussels.

Spread from In Soccer Wonderland, published by Booth-Clibborn editions.



Goony 'Toons

Four new fantasy fonts creep out of the sketchbook of Steve Zafarana.



As far back as he can remember. Steve Zafarana has wanted to draw cartoons. This lifelong passion is clearly the driving force behind his latest unconventional batch of type and spot font designs: ITC Fontoon. ITC Fontoonies, ITC Gargoonies and ITC Backyard Beasties.

ITC Fontoon is based on Zafarana's own hand lettering, which he uses for cartoon "bubbles." He converted

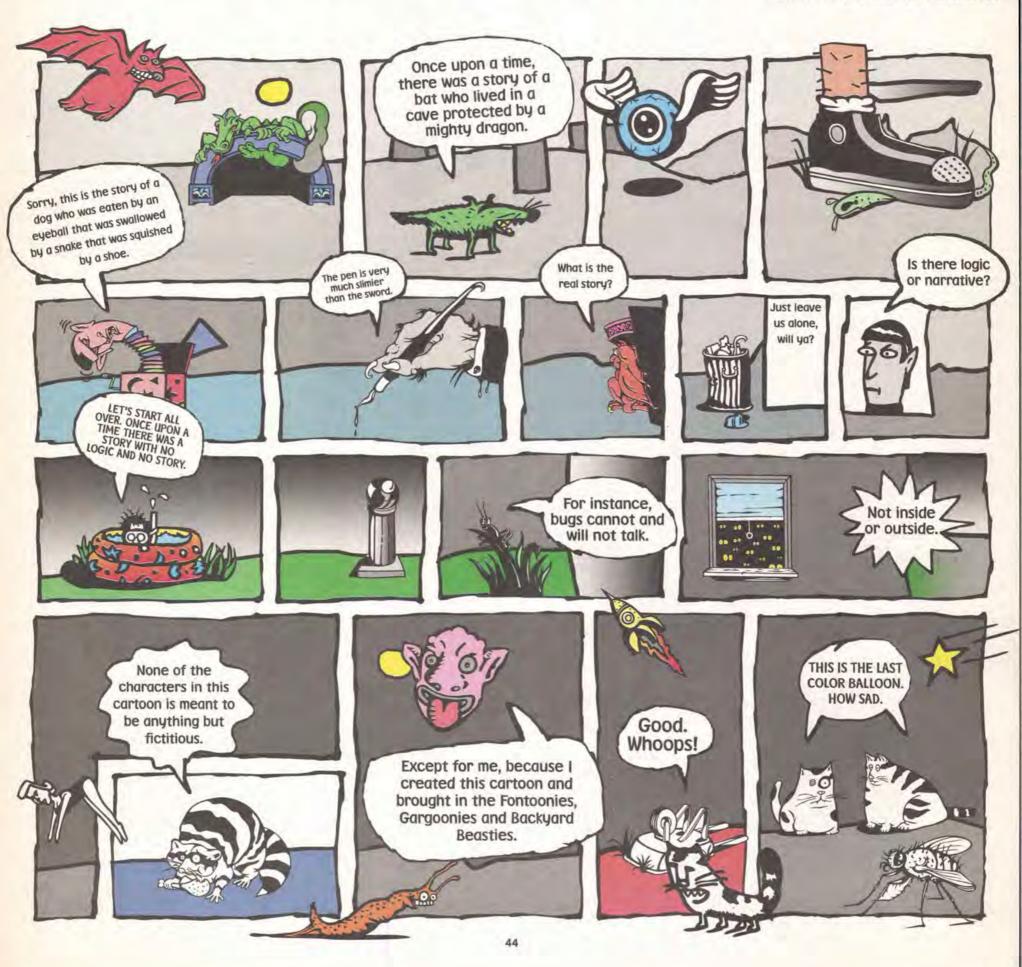
it into a digital font for a comic strip he had planned to create on the Mac. ITC Fontoon is the voice of the wacky drawings that you'll find in ITC Fontoonies, ITC Gargoonies and ITC Backyard Beasties. These three farcical spot fonts offer an eclectic, zany assortment of illustrations. Zafarana transformed doodles from his free-form sketchbooks into ITC Fontoonies. There's no rhyme or reason to the collection of drawings

ITC Fontoonies"

ITC Gargoonies"

AND PORFACE BOD DO READ DO PETROPEN The Cherry A Barren Bar

(The above showings are samplings of each collection.)



other than to amuse. Anyone trying to assign deeper meaning to these images is heading into a dark and disturbing territory where Zafarana himself fears to tread though he does concede that the figures with glasses and large noses are self-portraits.

ITC Gargoonies are Zafarana's rendition of gargoyles depicted with "toony" ink. The result is a collection of fantasy characters who are ready to haunt, hover and spook. If you can find it in your backyard, you'll find it in ITC Backyard Beasties. This recreational font is populated with creepy critters, nosy neighbors and buggy babies. All three spot fonts can be manipulated (stretched, colored, outlined, shadowed) like a typeface, but they maintain clarity even at large sizes. They are provided in font format (not Encapsulated PostScript) so they take up much less of your computer's memory than clip art.

Lest you think it's all fun and games for Zafarana, he is an accomplished illustrator who began his professional career animating educational films. His typographic career spans nearly two decades and includes positions as a senior type designer at Compugraphic, Bitstream and currently at Galápagos Design Group in Littleton, Massachussetts.

ITC Fontoon"

ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890&@*\$¢£¥ÇØÆŒß ("!?"---,.:;)[†‡§«»]{~~~}

Where

has he taken

off to?





in all in

hree new products distributed by ITC suit a wide range of graphic design needs.

Fontek* **Envelopes**² is an Adobe Illustrator Plug-In that creates remarkable effects with type and graphics. Envelopes allows the user to condense, stretch, slant, scale, skew, rotate, flip, resize and reshape type without losing the integrity of the typeface. Designers can choose from 218 envelopes to manipulate the shape and appearance of type and graphics, or create customized envelopes of their own. A Starter Pack includes the Plug-In utility and 58 Envelopes. The Portfolio Pack contains the Plug-In utility and all 218 Envelopes. Additional Envelopes (without the Plug-In utility) are also available. Fontek Envelopes for Macromedia FreeHand are now available.³

Phototone^{*} Alphabets is composed of photographs of actual objects, from typewriter keys to stone carvings and graffiti to street signs. These royalty-free photographs of individual letters, numbers and punctuation come in digital format and can be mixed and matched to create arresting headlines and graphics. The Phototone Alphabets CD-ROM also includes four sets of alphabets with upper- and lowercase letters for a total of 550 letters in

Find

Found

Search In Catalog

Keyword List

Clear Selected To Custom All To Custom Cancel Find

Complete
 Custom

Keywords

Use ● Or ○ And

A-H

1-Q

Alph

R-Z

















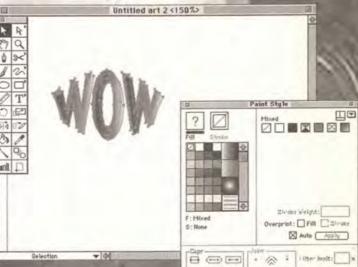


Envelopes

both high- and low-resolution formats. The program also includes a thumbnail browser and a keyword search engine.

ITC PaperPlates[™] is a versatile new collection of over 70 software templates in Macintosh format for use with Adobe PageMaker. PaperPlates provides pre-formatted layouts and designs for letterheads, business cards, pamphlets, brochures, fliers, newsletters, report covers, news releases, invitations and more. Designed to create striking results quickly and easily, PaperPlates coordinates with Letraset Paperazzi* premium papers as well as with papers from other sources. Each PaperPlates template provides detailed layouts that include type specifications for text and headline copy, column width, line spacing and artwork placement. Users have complete control over all design elements and can alter any of the settings to suit their needs. More than 60 Paperazzi paper designs have been scanned as TIFF files and come with the PaperPlates templates so that users can see on screen exactly what their designs would look like on particular Paperazzi papers. Also included are 25 Fontek® display typefaces, 50 illustrations from various DesignFont* collections, 5 images from ITC's Textures & Tones™ and 40 additional screen fonts.





149

Typefaces

ITC Bailey Sans"	26-31
ITC Beesknees*	26, 28, 30
ITC Charter®	
ITC Fontoon™	6-9, 44-45
ITC Giovanni*	35-37
ITC Humana™	
ITC Kabel*	
ITC Legacy Sans®	2, 32-34
ITC Legacy Serif®	
ITC Lubalin Graph®	46-47
ITC Mendoza Roman*	6-9
ITC Modern No. 216	49, 54
ITC Officina Sans®	
ITC Pacella®	
ITC Quay Sans	
ITC Serengetti*	Cover, 10-11, 13, 14, 17, 18, 21, 22, 25
ITC Slimbach*	
ITC Spirit™	
ITC Tiepolo®	
ITC Usherwood®	Cover, 3, 14-17, 38-43



Fax to 212.752.4752 or mail to U&Ic PO Box 129, Plainview, NY 11803-0129

Beyond Quark & Illustrator

A RESOURCE GUIDE TO TECHNICAL TRAINING

The following groups, associations and organizations can help you develop computer skills or direct you to programs in your area. For more information on various training methods, read "The Learning Curve: Proceed with Caution," on pages 32-34.

The GRAPHIC ARTS TECHNICAL FOUNDATION (GATF) in Pittsburgh, PA publishes a list of post-secondary printing and graphic arts programs offered at U.S. institutions. GATF can be reached at (412) 621-6941 or (800) 214-1120.

Other associations that offer specific training and referrals are the INTERNATIONAL PREPRESS ASSOCIATION in Edina, Minnesota (612) 896-1908, and the Association for Graphic Arts Training in Nashville, Tennessee (615) 386-6124.

In New York City, UNITED DIGITAL ARTISTS (UDA) offers a wide variety of excellent imaging and multimedia courses, including many Internet-related topics. UDA courses take place at the Apple Market Center on the 29th floor of the Citibank building in a state-of-the-art network facility. UDA also offers custom private training for groups and corporations. Call (212) 777-7200 for a schedule, or visit UDA's Web site at http://www.uda.com.

COLOREXPERT INC. of Toronto puts out a well-respected series of CD-ROM training programs covering color imaging topics, photography and illustration. The CDs are sold by a number of resellers, including The Image Club (800) 387-9193 or call ColorExpert directly at (416) 504-3894. Other CD-ROM training programs are available from CASEYS' PAGE MILL (800) 544-5620.

A series of videotapes on halftones, color trapping and other topics is available from DYNAMIC SOLUTIONS of Lawrenceville, Georgia (404) 979-5242 or (800) 400-2556. Application-specific videotape training for a number of popular graphic arts programs is offered by VIAGRAFIX (800) 842-4723; MACACADEMY (800) 527-1914; and LEARNKEY INC. (801) 674-9733.

Many companies offer regional training, including ACQUIRED KNOWLEDGE of San Diego, California, which is Adobe Systems' exclusive authorized PostScript training company in North America. Call them at (619) 587-4668. THE GRAPHIC ARTS INSTITUTE has courses in Milwaukee, Wisconsin (414) 443-6424; St. Louis, Missouri (314) 644-1107; and San Francisco, California (415) 543-9211. A good place for training referral is always at your local service bureau or quality printer—many offer their own courses.

BY GENE GABLE

Besktop

How do you protect your computer against viruses, or from someone snooping into your e-mail? Two new books discuss privacy and protection.

Reviews by Rusty Weston

It's no wonder that most of us take computer security for granted. At best, it's a chore. Internet sites are vulnerable to hacker attacks and project files are vulnerable to viruses. Still, most of us do little to protect our business computers against these threats.

Rather than install a costly security system that's only going to complicate life, most of us would prefer to spend the time actually doing our work. Security is one of the things most of us never get around to, or if we do, we don't maintain the system we install. We'll buy a virus scanner for our computer, for example, and then not update it regularly enough to catch the latest strains.

Security experts concede that most companies or individuals can't predict whether they are likely to be afflicted, or when. Yet there is one new statistic that does raise eyebrows: companies that give their employees access to the Internet are eight times more likely to be targeted than companies that don't. It's hard to find a company these days that isn't seriously considering creating a home page on the World Wide Web, and those sites are remarkably easy to sabotage. *Playboy* magazine, for example, saw some of its digital photographs pilfered last year despite its best efforts.

What does it say about us if we become obsessed with security? Are we being paranoid if we install password protection for Quark? If we encrypt our electronic mail does that mean we believe a competitor is trying to pry into our work?

When it comes to protecting your information assets—your creativity—a little paranoia is healthy. Once you begin to delve into security issues, you realize that there *are* a few people out to get you—the ones who are trying to sell you something. Financial institutions, retailers and even some magazines are trading personal information about you and your company for profit, from your credit history and spending habits to your medical records. Privacy experts contend that if somebody has put information about you on a computer, you might as well assume that your competitors,

your clients or your suppliers can also have access to it.

Are there steps you can take to stop this kind of thing from happening, or at least minimize the possible damage? Yes, argue André Bacard and Frederick B. Cohen, who contend in their new security books The Computer Privacy Handbook and Protection and Security on the Information Superhighway that while information about you or your company is easily obtainable, there are worthwhile countermeasures, such as data encryptionwhich encodes your computer files and supposedly deters unauthorized data access. Bacard classifies data peddling-selling information about you to somebody else who wants to target you with a sales pitch-as "the world's second oldest profession."

Protection and Security on the Information Superhighway

(John Wiley & Sons, 1995; 301 pages) by Frederick B. Cohen, PhD.

Dr. Cohen is a computer security consultant who claims to have coined the term computer virus in 1984. He has conducted information security research on behalf of the Department of Defense and numerous corporations. In short, he has serious credentials.

Cohen's book is based on a hawkish premise: there is an American information infrastructure that needs to be defended from barbarians at the gate. To be more precise, there is the Internet, some large information service networks and thousands of bulletin boards and corporate e-mail systems, which together we loosely call the information highway. The so-called Information Superhighway, based on the Clinton Administration's proposed National Information Infrastructure (NII) doesn't exist yet, in any commercial sense.

Nevertheless, Cohen argues: "Our national dependency on the National Information Infrastructure is so extreme that our nation and our way of life literally could not continue without this infrastructure operating properly."

Contrary to Cohen's absurdly low and inaccurate estimate of 2 million Internet computers, there are more than 30 million people worldwide who rely upon the Net for services such as e-mail, newsgroups, and browsing the World Wide Web. There are more than 8 million home computer users just from CompuServe, America Online and Prodigy with access to the Web and Internet newsgroups.

Continued on page 54

Now Available in 12", 24" & 36"

At Last... A Fast, Clean, Permanent Mounting System



Mount your work easily with this cold, low cost system.

Rollataq[®] is the revolutionary permanent adhesive system that's taking toxic sprays and expensive dry mounts out of the picture forever! It creates a strong, permanent bond with no heat, no fumes...in practically no time! Automatic desktop (12", 24" and 36") and hand-held models can accommodate just about everything. It's non-toxic and acid-free.



It's so easy to use. Simply press the motor switch, feed material into the turning rollers and a clear adhesive coating is instantly applied. Material remains positionable for up to 5 minutes.



The hand applicator rolls on a 21/2 inch wide strip of adhesive. No electricity needed and just pour in the liquid adhesive to refill.



Refilling is safe and easy. Just pour the liquid adhesive into the applicator and you're ready. No mess, no odors...and at just pennies per application, no wasted money!

Join the movement to Rollataq. Because you don't have to be stuck with old-fashioned mounting methods anymore! For more information please call:





Circle 1 on Reader Service Card



Spring 1996

The typefaces shown on these pages represent the complete collection of ITC typefaces as of March 1, 1996

International Typeface Corporation operates under this name domestically and in foreign countries and is known as "ITC." ITC and its typeface names are registered trademarks of International Typeface Corporation in certain countries. In addition. ITC typefaces are protected by design legislation and copyrights in certain countries. (See ITC specimen booklets.)

 Protected by United States patent Des.
 317,621, 324,535,
 323,849, 322,985,
 325,042, 325,219.

ITC Airstream"

ITC American Typewriter[®] Light Light Italic

Medium Medium Italic **Bold**

Bold Italic Light Condensed Medium Condensed Bold Condensed Bold Oruthims

ITC ANNA®

ITC Avant Garde Gothic" Extra Light Extra Light Oblique Book Book Oblique Medium

Medium Oblique Demi Demi Oblique

Bold Bold Oblique Book Condensed Medium Condensed Demi Condensed

Bold Condensed

ITC Backyard Beasties"

ITC Bailey[™] Sans Book Book Italic Bold Bold Italic

ITC Bailey" Quad Bold ITC Barcelona" Book Book Italic Medium Medium Italic Bold Bold Italic Heavy Heavy Italic ITC New Baskerville" Roman

Italic Semi Bold Semi Bold Italic Bold Italic Black Black Italic ITC Bouhous[®] Light Medium Demibold

Bold Heavy Heavy Outline

ITE BEE/KNEE!"

ITC Bengulat[®] Book

Book Italic Medium Medium Italic Bold

Bold Italic Book Condensed Book Condensed Italic Medium Condensed Medium Condensed Italic Bold Condensed Bold Condensed Italic

ITC Benguiat Gothic[®] Book Book Italic Medium Medium Italic Bold Bold Italic Heavy Heavy Italic

ITC Berkeley Oldstyle[®] Book Book Italic Medium Medium Italic Bold Bold Italic Black Black Italic

ITC Bernase Roman*

ITC Blackadder" ITC Blaze"

ITC Bodoni Brush"

ITC BODONI ORNAMENTS[™] ∋葉**果**蕊☆◆X常型\$*◎* ☞[†]*◎*②本型1⊗◎業少!

ITC Bodoni^{**} Seventy-Two Book Book Italic Book Italic Swash Bold Bold Italic Bold Italic

ITC Bodoni[™] Twelve Book Book Italic Bold

Bold Italic ITC Bodoni[®] Six Book Book Italic Bold Bold Italic

ITC Bolt Bold

ITC/LSC Book^{*} Regular Roman *Regular Italic* Bold Roman Bold Italic **X-Bold Roman X-Bold Italic**

ITC Bookman Light Light Italic Medium Medium Italic Demi Demi Italic Bold Bold Italic Outiline W/Swash Contour ITC Bradley Hand^{**}

ITC Bradley Hand Bold"

ITC BUSORAMA" LIGHT MEDIUM BOLD

ITC Caslon Headline®

ITC Caslon No. 224[®] Book Book Italic Medium Medium Italic Bold Bold Italic Black Black Italic

ITC/LSC Caslon No. 223[®] Light Light Italic Regular Regular Italic Bold Bold Italic X-Bold X-Bold Italic

ITC Century Light Light Italic Book Book Italic Bold **Bold Italic** Ultra Ultra Italic Light Condensed Light Condensed Italic **Book Condensed** Book Condensed Italic **Bold Condensed Bold Condensed Italic Ultra** Condensed

Ultra Condensed Italic Handtooled Handtooled Italic ITC Cerigo^{**}

Book with Swash Book Italic with Swash Medium Medium Italic Bold Bold Italic

ITC Charter™ Regular Regular Italic Bold Bold Italic Black Black Italic

ITC Cheltenham^{*} Light Light Italic Book Book Italic Bold **Bold Italic** Ultra **Ultra Italic** Light Condensed Light Condensed Italic Book Condensed Book Condensed Italic **Bold Condensed Bold Condensed Italic Ultra Condensed** Ultra Condensed Italic

Outline Shadow Contour Handtooled Handtooled Italic ITC Clearface" Regular Regular Italic Bold Bold Italic Heavy Heavy Italic Black Black Italic

Outline Shadow Contour

ITC/LSC Condensed° Roman *Italic*

ITC Cushing[®] Book Book Italic Medium Medium Italic Bold Bold Italic Heavy Heavy Italic

ITC Dave's Raves" One A A A A A Two D A A A A A Two D A A A A A Three A A A A A A ITC Didi" D D D D D D A D WO O D C D D S T D D E N B L A C K T T C D I N I T I A S S T

ITC Edwardian Øcript^{~~}

Regular Bold

ITC Elan[®] Book Italic Medium Medium Italic Bold Bold Italic Black Black Italic

ITC Eras[®] Light Book Medium Demi Bold Ultra Outfilme Contour

ITC Esprit[®] Book Book Italic Medium Medium Italic Bold Bold Italic Black Black Italic

ITC Farmhaus"

ITC Fenice" Light Light Italic Regular Regular Italic Bold Bold Italic Ultra Ultra Italic

ITC Firenze®

Medium Bold ITC Fontoon^{**}

ITC Fontoonies"

ilder In.

ITC Franklin Gothic[®] Book Book Italic Medium Medium Italic Demi **Demi Italic** Heavy **Heavy Italic** Book Condensed Book Condensed Italic Medium Condensed Medium Condensed Italic **Demi Condensed Demi Condensed Italic Book Compressed** Book Compressed Italic **Demi Compressed Demi Compressed Italic Book X-Compressed** Demi X-Compressed

Outline Shadow Contour

Friz Quadrata Regular Italic Bold Bold Italic

ITC Galliard[®] Roman Italic Bold Bold Italic Black Black Italic Ultra

Ultra Italic ITC Gamma^{*} Book Book Italic Medium Medium Italic Bold Bold Italic Black Black Italic

ITC Garamond® Light Light Italic Book Book Italic Bold **Bold Italic** Ultra Ultra Italic Light Narrow Light Narrow Italic Book Narrow Book Narrow Italic **Bold Narrow Bold Narrow Italic** Light Condensed Light Condensed Italic **Book Condensed** Book Condensed Italic **Bold Condensed Bold Condensed Italic Ultra Condensed Ultra Condensed Italic** Handtooled Handtooled Italic



ITC Giovanni® Book Book Italic Bold **Bold** Italic Black **Black Italic** ITC Golden Type" Original Bold Black ITC Goudy Sans® Book Book Italic Medium Medium Italic Bold **Bold Italic** Black **Black Italic** ITC Gorilla®

ITC Grizzly* ITC Grimshaw Hand"

ITC Grouch[®] ITC Highlander[™] Book Book Italic Medium Medium Italic Bold Bold Italic

ITC Honda[®]

ITC Humana" Light Light Italic Script Light Medium Medium Italic Script Medium Bold Bold Italic Script Bold

ITC Humana Sans" Light Light Italic Medium Medium Italic Bold **Bold Italic** ITC Isadora Regular Bold ITC Isbell® Book **Book Italic** Medium Medium Italic Bold **Bold Italic** Heavy **Heavy Italic**

Italia Book Medium Bold

ITC Jamille[®] Book Book Italic Bold Bold Italic Black Black Italic

ITC Juice"

ITC Kabel* Book Medium Demi Bold Ultra Outling Contour

ITC kick

ITC Korinna[®] Regular Kursiv Regular Bold Kursiv Bold Extra Bold Kursiv Extra Bold Heavy Kursiv Heavy Bold Outline

ITC Kristen Normal" ITC Kristen Not So Normal"

ITC Leawood[®] Book Book Italic Medium Medium Italic Bold Bold Italic Black Black Italic

ITC Legacy[®] Sans Book Book Italic Medium Medium Italic Bold Bold Italic Ultra ITC Legacy^{*} Serif Book Book Italic Medium Medium Italic Bold Bold Italic Ultra

ITC Lubalin Graph® Extra Light Extra Light Oblique Book Book Oblique Medium Medium Oblique Demi Demi Oblique Bold **Bold Oblique** Book Condensed Book Condensed Oblique Medium Condensed Medium Condensed Oblique **Demi Condensed Demi Condensed Oblique Bold Condensed Bold Condensed Oblique**

ITC MACHINE" ITC MACHINE BOLD"

ITC Malstock"

HC/ISC Manhattan^{*}

IT (MATISSE"

ITC Mendoza Roman[®] Book Book Italic Medium Medium Italic Bold Bold Italic

ITC Milano[®]

It'C MINSKA" Light Mediom Bold

ITC Mithras"

ITC Mixage[®] Book Book Italic Medium Medium Italic Bold Bold Italic Black Black Italic

ITC Modern No. 216^{*} Light Light Italic Medium Medium Italic Bold Bold Italic Heavy Heavy Italic

ITC Mona Lisa® Recut ITC Mona Lisa® Solid

ITC Motter Corpus"

ITC Motter Corpus Condensed

ITC NEON"

ITC Newtext*

Light Light Italic Book Book Italic Regular Regular Italic Demi Demi Italic

ITC Novarese* Book Book Italic Medium Medium Italic Bold Bold Italic Ultra

ITC Odyssée"

Light Light Italia Medium Medium Italia Bold Bold Italia Ultra

ITC Officina Sans^{*} Book Book Italic Bold Bold Italic ITC Officina Serif^{*} Book Book Italic Bold Bold Italic ITC Orbon^{**} Light Regular

Bold

Black

ITC Ozwald

ITC Pacella® Book Book Italic Medium Medium Italic Bold **Bold Italic** Black **Black Italic ITC Panache**[®] Book Book Italic Bold **Bold Italic** Black **Black Italic**

ove dieneer"

ITC Quay Sans® Book Book Italic Medium Medium Italic Black Black Italic

ITC Quorum* Light Book Medium Bold Black ITC Ronda[®] Light Regular **Bold**

ITC SERENGETTI"

ITC Serif Gothic[®] Light Regular Bold Extra Bold Heavy Black Bold Outling

ITC Skylark"

ITC Slimbach[®] Book Book Italic Medium Medium Italic Bold Bold Italic Black Black Italic

ITC Snap"

ITC Souvenir* Light Light Italic Medium Medium Italic Demi Demi Italic Bold Bold Italic

ITC SPIRIT"

ITC Stone Informal^{®®} Medium *Medium Italic* Semi Bold Semi Bold Italic Bold Bold Italic

ITC Stone[®] Phonetic Sans [aɪ tiː siː stəʊn fəu'nɛtik sænz]

ITC Stone[®] Phonetic Serif [aɪ tiː siː stəʊn fəu'nɛtik 'sɛrɪf]

ITC Stone Sans** Medium Medium Italic Semi Bold Semi Bold Italic Bold Bold Italic

ITC Stone Serif^{**} Medium *Medium Italic* Semi Bold Semi Bold Italic Bold

Bold Italic 970 Studio Script[®]

ITC Stylus" ITC Stylus Bold"

ITC/L&C Stymie Hairline®

ITC Symbol[®] Book Book Italic Medium Medium Italic Bold Bold Italic Black Black Italic

ITC Syndor^{*} Book Book Italic

Medium Medium Italic **Bold** Bold Italic

ITC Tempus™ ITC Tempus Italic™

ITC Tempus Sans" ITC Tempus Sans Italic"

ITC Tiepolo[®] Book Book Italic Bold Bold Italic Black Black Italic

ITC Tiffany Light Light Italic Medium Medium Italic Demi Demi Italic **Heavy**

Heavy Italic

ITC Tom's Roman[®] ITC True Grit[™]

ITC Upright Neon*

ITC Uptight Regular*

ITC Usherwood^{*} Book Book Italic Medium Medium Italic Bold Bold Italic Black Black Italic

ITC Veljovic* Book Book Italic Medium Medium Italic Bold Bold Italic Black Black Italic

ITC Viner Hand" ITC Vinyl Black

ITC Vinyl Oufline"

ITC NON-LATIN

ITC Vinyl Sawfooth Black

ITC Vinyl Sewfooth Outline"

ITC Weidemann[®] Book Book Italic Medium Medium Italic Bold Bold Italic Black Black Italic

ITC Wisteria"

ITC Zapf Book" Light Light Italic Medium Medium Italic Demi Demi Italic Heavy Heavy Italic

ITC Zapf Chancery* Light Light Italic Medium Medium Italic Demi Bold

ITC Zapf Dingbats"

够⋇□∻⋙⇔⋺б♠≻ ٭♫∞メ७●∞☞⋛⑧

ITC Zapf International[®] Light Light Italic Medium Medium Italic Demi Demi Italic Heavy Heavy Italic تلك المصلحة المسلحية
ITC Boutros Kufic"

بطريس كوفي أبيض ^{Ught} بطريس كوفي أبيض مائل ^{Ught} italic بطريس كوفي متوسط مائل Medium Italic Medium Italic Pold

بطرس كوفي أسوط مائل Bold Italic

الت Boutros Modern Kufic بطرس کوفي حدیث أبیض نوبل پطرس کوفي حدیث أبیض مائل لیوار **کوفي حدیث متوسط** Medium بطرس کوفي حدیث متوسط مائل سطرس کوفي حدیث أسود مرم

بطرس كوفي حديث أسود مائل

"ITC Boutros Rokaa بطرس رقعة متوسط Medium

ITC Boutros Setting"

بطرس صحفى أبيض Light بطرس صحقي أبيض مائل Light Italic **بطرس صحفي متوسط مائل بطرس صحفي متوسط مائل**

Medium Italic بطرس صحفي أسود

بطرس صحفي أسود مائل

"ITC Latif لطيف أبيض ^{Ught} لطيف أييض مائل ^{Ught Italic} Medium **لطيف متوسط مائل**

Medium Italic لطيف أسود

Bold لطيف أسود مائل Bold Italic

ITC ANNA[®] (VRILLIC ITC AHHA

ITC Avant Garde Gothic" Cyrillic ITC Авангард Готик Нормальный

Нормальный наклонный воок Oblique Полужирный

Полужирный наклонный Demi Oblique

ITC Bauhaus® Cyrillic ITC Баухауз Светлый

Средний

Полужирный Demibold Жирный

Bold Темный Heavy

ITC BEEKNEE!" CYRILLIC ITC 5M3HM3

ITC Benguiat Gothic® Cyrillic ITC Бенгет Готик Нормальный

Нормальный курсив

Жирный воіd Жирный курсив Boid Italic

ITC Bookman[®] Cyrillic ITC Букман Светлый

Светлый курсив

Полужирный Denti Полужирный курсив Dentillatic

ITC Fat Face[®] Cyrillic ITC Фэт Фэйс

ITC Flora® Cyrillic ITC Флора Средний

Жирный Bold

ITC Franklin Gothic[®] Cyrillic ITC Франклин Готик Нормальный

Нормальный курсив воок Italic Средний

мedium Средний курсив

Полужирный Demi

Полужирный курсив Demi Italic Темный Heavy

Темный курсив Heavy Italic

ITC Garamond[®] Cyrillic ITC Гарамон Светлый ивп Светлый курсив

Нормальный ^{Воок} *Нормальный курсив* ^{Воок} Italic Жирный вою Жирный курсив вом тайс Ультра Uttra

Ультра курсив Ultra Italic

ITC Garamond® Narrow Cyrillic ITC Гарамон Суженный Светлый

Светлый курсив ывн нанс Нормальный

Нормальный курсив Воок Italic Жирный

Воід Кирный курсив

ITC Kabel® Cyrillic ITC Кабель Нормальный

Средний Medium

Полужирный ^{Demi} Жирный

Bold YALTPA Ultra

ITC Korinna[®] Cyrillic ITC Коринна Нормальный

^{Regular} Нормальный курсив Regular Kursiv Жирный

Вона Кирный курсив

ITC MACHINE" CYRILLIC ITC МАШИН

ITC New Baskerville[®] Cyrillic ITC Нью Баскервиль Нормальный

Kypcus

Жирный

Жирный курсив Bold Italic

ITC Officina Sans® Cyrillic ITC Официна Санс Нормальный

Нормальный курсив ^{Воок Italic} Жирный

Воід * Жирный курсив Воід Italic

ITC Officina Serif® Cyrillic ITC Официна Сериф Нормальный

Нормальный курсив ^{Воок Italic} Жирный

Воід Жирный курсив Bold Italic

ITC Studio Script" Cyribbic ITC Cmyguo Ckpunm

ITC Zapf Chancery® Cyrillic ITC Цапф Чансери Средний курсив ^{Medium Italic}

DESIGNED BY SUMNER STONE NEW VERSIONS OF THE ITC STONE SERIF FAMILY ITC STONE SANS FAMILY ITC STONE INFORMAL FAMILY FEATURING 6 WEIGHTS MEDIUM, SEMIBOLD, BOLD & ITALICS SMALL CAPITALS MEDIUM & SEMIBOLD LOWER CASE FIGURES EACH WEIGHT EXTENSIVE KERNING 1200+ PAIRS/FONT



SPECIAL LIMITED TIME OFFER POSTSCRIPT TYPE 1 FONTS PLEASE SPECIFY MACINTOSH OR WINDOWS CALIFORNIA RESIDENTS ADD 7.75% SALES TAX VISA AND MASTERCARD ACCEPTED *ADD \$4 SHIPPING PER ORDER PHONE, FAX OR MAIL YOUR ORDER TO:

STONE TYPE FOUNDRY

626 MIDDLEFIELD ROAD PALO ALTO, CA 94301 PHONE: 415-324-1870 FAX: 415-324-1783

Circle 2 on Reader Service Card

Continued from page 49

That's not counting the millions more with access through Internet service providers, corporate networks and universities.

Cohen is at his best when he simplifies his theoretical discussion of protecting information assets. "It doesn't matter how good a roof I buy for my house, it's not going to protect my house forever. It's the same with information protection. You can't just buy it, you have to do it." And there's the rub. Most of us don't want to be troubled with backing up data stored on our hard drives, much less encrypting it so that our employees or clients or creditors can't gain unauthorized access to our secrets.

Instead of offering practical advice for PC consumers or even PC managers, Cohen sets his sights on long and drawn-out discussions about how the Information Superhighway is eventually going to operate. He details the various ways attackers can go after your computers, but offers very little in the way of useful defenses. Money and revenge are listed as the two most likely motives.

How can you prevent bribery? Try this lowtech method on for size: "Bribery is prevented by raising children with strong moral values, providing adequate compensation to employees, keeping them aware of the potential penalties for breaking the rules, keeping them aware of moral responsibilities, instilling a good sense of right and wrong, good background checks for financial difficulties, and other personnel techniques."

Clearly this is not a book for individuals or small businesses seeking practical advice such as which virus software to buy or which e-mail package is most secure. From a corporate perspective, Cohen correctly observes that the cost of adding security controls to a system after it is in place is far greater than building it in up front. And he recommends that corporations hire experienced consultants (such as himself) to perform "protection posture assessments" that evaluate a company's security situation.

Cohen's book is neither entertaining nor particularly valuable. Readers who are interested in learning about the Big Picture with regard to information security are advised to look elsewhere.

The Computer Privacy Handbook by André Bacard (Peachpit Press, 1995).

"Privacy is, first and foremost, about power,"

Bacard writes in his new book, which espouses the popular civil libertarian view that Big Brother is online and voraciously compiling a thick dossier on you. While Bacard may not frighten you into enlisting in the digital militia, he will raise your suspicions of how corporations and government agencies use your personal information to further their own agendas.

He claims that we live in a "Surveillance Age" in which the government has total access to information about you from prenatal records to your student essays—and everything you buy on credit. He is particularly alarmed by the onset of a cash-free society in which Americans would buy products with electronic debit cards, also called digital cash. His "cashfree benefits" include cleaner wallets, fewer cash robberies and curbs on drug dealing and counterfeiters. But his "cash-free nightmares" include a total loss of privacy to the extent that "every time we gave our children pizza money, the IRS would know." Guess which side Bacard comes down on?

In Bacard's view, your e-mail is about as safe from outside scrutiny as a billboard in the middle of Times Square. "It is reasonable to assume," writes Bacard, "that e-mail monitoring is widespread in corporations... on commercial information services and on Internet hookup providers." He accordingly devotes half of his book to being a good basic primer on encryption software, which scrambles computer text into indecipherable code. Bacard recommends we try the inexpensive and easily obtainable Pretty Good Privacy, or PGP, to protect our data files from unauthorized users. One serious drawback to working with PGP is that it works best with ASCII text (although technically, it can encrypt anything). This is an inconvenience for typesetters and graphic designers who wish to convey their work with attractive formatting in place.

Ultimately the real value of Bacard's book is not only to raise awareness of privacy issues, it's to give you a sense of which organizations are out there fighting to protect your rights. But you should take it with a small dose of salt—or even a lime. Aside from encryption, which is an important lesson, the book dwells too long on stale subjects like the Clipper Chip controversy, which became moot more than one year ago when the Clinton administration killed its ill-considered attempt to set an encryption standard.

Rusty Weston is a senior editor at PC Week magazine. He writes about cyberspace and pop culture, and lives in San Francisco. He can be reached at weston@well.com.

TECHNOLOGY UPDATE

Add a phone, fax or modem—anywhere you have an outlet!

Engineering advancement gives you unlimited phone extensionswithout wires or costly installation fees!



R(F/I



Use it in your:

- Living room
- Family room
- Kitchen
- Bedroom
- Bathroom
- Laundry room
- Garage
- Workshop
- Office
- Exercise room
- Basement

When I decided to put an office in my home, I called the phone company to find out how much it would cost to add extra phone jacks. Would

Just plug it in. A new and improved devicethe RCA Wireless Phone Jack-allows you to add a jack anywhere you have an electrical outlet. It converts your phone signal into an FM signal and then broadcasts it over your home's existing electrical wiring.

you believe it was \$158?

Almost everyone needs an extra phone jack around the home or office. Whether you want to add an extra jack in your teenager's room, add a fax machine to your home or office, or even a modem for your computer, there seems to always be a location that needs an extra phone jack. But it's always been so expensive to have one installed!

ROOM ONE

1. Plug base unit into any

outlet near an existing

phone jack and connect

phone jack with base unit

Simply plug the transmitter Easily relocatinto a phone jack and then ed-moves from into an electrical outlet. Now insert a receiver into any outlet in your home. You'll be able to move your phone out your home, into areas that have never even between had jacks before.

room to room 1000 foot range indoors and out Works throughfloors

Enhanced filtering. The RCA Wireless Phone Jack uses your home's existing electrical wiring to transmit signals. It even uses enhanced filtering for improved sound. Unwanted sounds and static will be removed, giving you crystal-clear reception that far exceeds that of cordless phones and other wireless phone jack devices. Your

> range extends as far as your electrical outlets: five feet, 500 feet or more. If you have an electrical outlet, you can turn it into a phone jack-no matter the distance.

Privacy. You can use the Wireless Phone Jack in any

electrical outlet around your homeeven if it is on a different circuit than the transmitter. And each Wireless Phone Jack unit uses one of 2,000 different security codes. So you can be assured that only your receiver will be able to pick up transmissions from your transmitter.

No monthly fee. Most phone lines can only handle five extensions with a regular jack. But with only one RCA Wireless Phone Jack transmitter, you can add as many receivers as you want. And you'll never have to pay a monthly charge to the phone company for having extra jacks in your home.

Works with any telephone device. The RCA Wireless Phone Jack fulfills all of your single-line phone needs. It has

terface for use with a fax machine, 14,400 baud modem, and to download information to your DSS satellite system. You can even use your answering machine by just plugging it into a Wireless Phone Jack receiver.

a special digital in-

Exclusive RCA 911 shut-off feature. This new feature allows you to cancel your downloading action when you download information from your DSS satellite system. The RCA Wireless Phone Jack will automatically override the DSS system and let you call an outside number, for any reason.

Works with:

- Corded phones
- · Cordless phones
- Fax machines
- Modems
- Digital satellite. systems
- Answering machines

Compatible with:

- Call Forwarding
- · Call Walting
- Three Way Calling
- Conference Calling
- Speed Calling



You can use up to a 14,400 baud modem with the RCA Wireless Phone Jack!

Try it risk-free. The RCA Wireless Phone Jack is backed by our exclusive 90-day risk-free home trial and a one-year manufacturer's limited warranty. If not completely satisfied, return it for a full "No Ouestions Asked" refund.

Special factory-direct offer. For a limited time, the transmitter is only \$49. Just one transmitter works with an unlimited number of receivers priced at just \$49 for the first one and \$39 for each additional one. And with any RCA Wireless Phone Jack purchase, we'll throw in a phone card with 30 minutes of long distance (a \$30 value) for only \$9.95!

\$10 manufacturer's rebate offer!	an nan
When you purchase the RCA Wireless Phone Jack transmitter, you will get a \$10 manufacturer's mail-in rebate addition to the Comtrad saving	
* Manufacturer's rebate good until	June 30, 1996
Wireless Phone Jack transmitter With \$10 mail-in rebate only	the second second
Wireless Phone Jack receiver	
30-minute long distance phone card. \$9.95 with RCA Wireless Phone Ja	
Please mention promotional code 8 For fastest service, call toll-free 24	

800-992-2966

To order by mail, send check or money order for the total amount including S&H (VA residents add 4.5% sales tax). To charge it to your credit card, enclose your account number and expiration date



RCA Wireless Phone Jack Features

POWER TRANSFORMER: isolates AC from telephone line

INTEGRATED SMART CHIPS: state-ofcircuitry

QUALITY FILTERS: topof-the-line filters allow for more efficient reception



POWER SUPPLY REGULATORS: allow for uninterrupted maintenance of voltage



to 6000v peak-to-peak

Circle 3 on Reader Service Card

An instant phone jack in any electrical outlet

ROOM TWO

2. Plug extension jack into

any outlet, connect phone

cord and add a phone!

pography

EVERYONE IS TALKING ABOUT

PHONE

WEB SITE

http://www.linotype.com

Helvetica^{*} • New Century Schoolbook[™] • Palatino^{*}

Times* • Courier • ITC Avant Garde Gothic*

We've got the Fonts

ITC Bookman* • ITC Zapf Chancery*

ITC Zapf Dingbats* ▲ 🗷 → 🏵 🔹 • Bottle Kaps™

34 OF THE MOST POPULAR TYPEFACES FROM THE LIBRARIES OF LINOTYPE-HELL AND ITC ARE NOW AVAILABLE FOR MACINTOSH IN THE QUICKDRAW GX-FORMAT



INSTANT VALUE:

For those of you who do not yet work with GX-savvy applications, additional fonts with SMALL CAPS, Old Style Figures and Expert Sets are included in the GX volumes on our new CD ROM Fonts Just In Time 6.0 to give you a taste of the great new typographic benefits that QuickDraw[™] GX has to offer. FAX

Yes	Please send me more information about GX-fonts from Linotype-Hell and ITC					I would like to get the new CD ROM Fonts Just In Time 6.0				
	F	A	x	c	0	U	P	0	N	U&Ic
NAME				*****	• • • •		• • • •			
Company										
STREET						is		****		
CITY, ZIP/I	Postal Cod	E		******				••••		
PHONE				******		FAX		••••		******
5A +1 516 434 +1 800 79	4 3616	UK		1242					EUR	+49 6196 982185 +49 6196 982731

Circle 4 on Reader Service Card