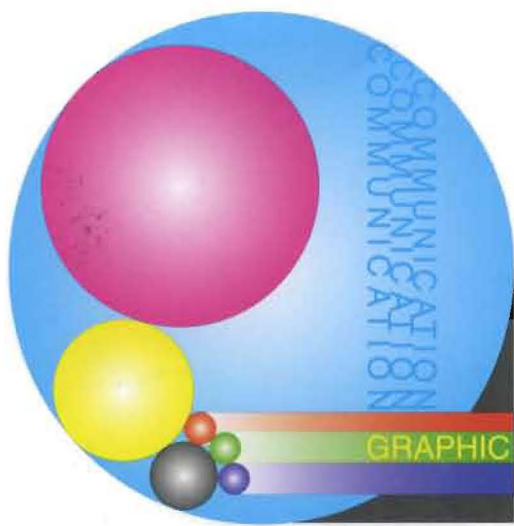




Graphic Communications

The Printed Image

Z.A. "Zeke" Prust

Publisher

The Goodheart-Willcox Company, Inc
Tinley Park, Illinois

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Library of Congress Card Catalog Number 2002072710

International Standard Book Number 1-56637-984-9

2 3 4 5 6 7 8 9 0—03—07 06 05 04 03

56004071

Library of Congress Cataloging in Publication Data

Prust, Z.A.

Graphic communications: the printed image /
by Z.A. "Zeke" Prust

p. cm.

Includes index.

ISBN 1-56637-984-9

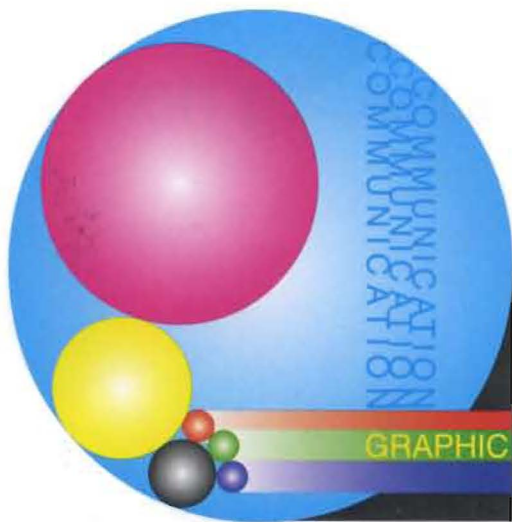
1. Printing, Practical — United States. I. Title.

Z244.P958 2003

686.2 '0973—dc21

2002072710

CIP



Introduction

The graphic communications field (sometimes called graphic arts or simply, *printing*) has undergone sweeping changes in recent years with the introduction of computers and digital technology in virtually every aspect of the industry. Digital image capture and manipulation, electronic prepress operations, computer-based systems for managing most aspects of a business, computer-to-plate technology, electronic control systems on presses and bindery equipment, and many other advances have changed the fundamental ways that most printing and related operations are performed. It is probably safe to say that the industry has seen more extensive changes in the 15 years than have taken place in the five centuries since Johannes Gutenberg began printing from movable type in the mid-1400s.

Graphic Communications reflects these changes in the industry, with chapters devoted to in-depth coverage of color science, electronic prepress and digital printing, digital image capture, color management, and flexography. Other chapters provide important information on design and layout, text composition, page composition, stripping and imposition, contacting, the business aspects of printing, and careers in graphic communications have been extensively revised. Strong emphasis has been placed on safety and workplace health matters and on environmental considerations.

Information on new methods and equipment has been incorporated throughout the book, while information on processes that have become obsolete

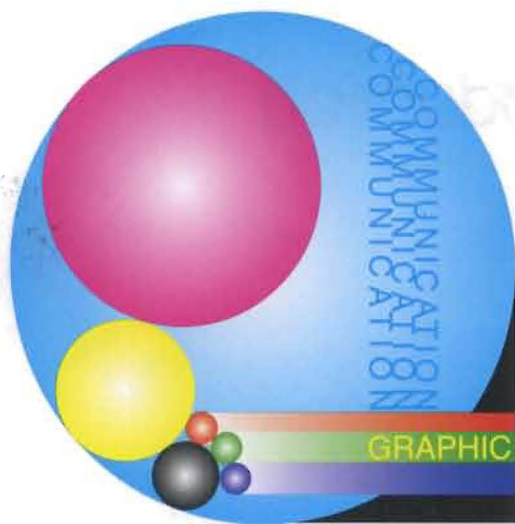
has been condensed and treated in a historical context. An extensive *Glossary of Technical Terms* defines and illustrates the many new words that have become part of the vocabulary of graphic communications workers in recent years. The aim is to better prepare today's graphic communication student for a career in this rapidly evolving field.

The text is divided into 28 chapters. Each chapter begins with a set of *Learning Objectives* and a list of ten *Important Terms*. Those terms, and many others, are highlighted in boldface italic type as they occur. In addition to being explained in the chapter, the terms are also defined in the *Glossary*. At the end of each chapter, *Review Questions* are presented to help assess comprehension of the material presented.

Since "a picture is worth a thousand words," **Graphic Communications** is highly illustrated. To clarify the complex processes of the industry, literally hundreds of full-color illustrations are used. Color is also used to enhance the educational value of many of the line art illustrations and to stress safety rules given throughout the text.

Graphic Communications is a valuable source of information for anyone entering any area of the printing industry today. This text will help you become well-versed in most aspects of printing technology.

Z. A. Prust, Ed.D.



Acknowledgments

A special thanks is extended to the many students, colleagues, and industry personnel who have given assistance, in some way, during the completion and revision of this text. Some of the individuals are: John Adler, Alfred (Bud) R. Anderson, Bob Baranowsky, Pat Beausoleil, Dick Benjamin, Bruce Binder, C. Ray Bradley, Blair Brouhle, Pam Carritt, Wesley Carter, Robert D. Cavin, Scott Cazel, Larry Charles, Mike Chircuzio, Joleen Crimmins, Warren Daum, Andy Delph, Thomas Detrie, Bryce W. Drenhan, Bill Dunn, John Earle, Jon Engfer, Don Epley, Cheryl Ferrin, Michael Friel, Jim Gale, Karen Gallik, Chris Gannon, Don Gasser, D. W. Gillmore, Joseph J. Gocłowski, Mark Goddard, Lynn Glasenap, Willis Hawrylkiw, Joe Hayes, R. Cameron Hitchcock, Don Hoffman, Ed Holmberg, Robert Hughes, John Jacobs, George Jensen, Nicole H. Johnson, William Kaverman, Edward Kelly, Julian (Red) Koren, Larry Kroll, William Lamparter, John Latsko, Kathryn Lauerman, Jessica Lipe, Peter Lovegrove, Tony Mancuso, Donald Marsden, William F. Martin, James McClintick, John Morton, Laura Nelson, Karen O'Brien, Stephanie Palmer, Kim Pardini, Hans Peetz-Larsen, C. Phillips, J. J. Plank, John Pollicino, Ken Robbins, Frank Roys, Pat Shudak, Jack Simich, Tony Simuel, Brent Smith, Terry Stengel, Brian P. Stephens, Kent Stumpe, John Sweeney, Daryl VanderHaar, Paul Volpe, John Walker, Robert Walker, Paul Wasserman, Art Webb, Gordon Woodard, Frank Woods, Tim Young, and Richard Zazueta.

Appreciation is extended to Sue Fogler for typing the original manuscript, to Martha Beakley Heier and Sergio Capon for artwork. Appreciation is also extended to Dr. Walter C. Brown, retired Professor, College of Technology and Applied Sciences, Arizona State University, and Professor Scott Williams, College of Science and Technology, Georgia Southern University, for their assistance. Thanks to Dr. Thomas Schildgren, College of Technology and Applied Sciences, Arizona State University, for writing the chapters relating to color theory and reproduction and gravure printing and to Dr. Ron Dahl, IKON Color Group, and Professor Thomas Detrie, College of Architecture and Environmental Design, Arizona State University, for writing the chapters relating to color science, vision and space, electronic production, and digital documents and digital printing. Thanks is also extended to Dr. Richard F. Hannemann, Professor, University of California, Chico, for writing the screen process chapter, to David L. Milburn, for writing the digital photography chapter and to Charles Weigand, retired Professor, Rochester Institute of Technology, for writing the flexography chapter. Thanks is extended to Dr. Thomas E. Gray, Retired Professor, Murray State University, Murray, Kentucky, for revising the Gravure Printing Chapter.

To my wife, Mary Ann, a sincere thanks for her patience and encouragement. Thanks to our sons, Donald L. Prust, printer, and Randall S. Prust, M.D.

The following companies have assisted greatly by providing information and pictorial material used in the textbook:

A. B. Dick Company; Adobe Acrobat; Accurate Steel Rule Die Mfg., Inc.; ACTI Products, Inc.; Advance Graphics Equipment; Advance Process Supply; Agfa; American Color Corp.; American Roller Company; American Screen Printing Equipment Co.; American Wholesale Thermographers; Apple Computer, Inc.; Arizona Printing Equipment Co., Inc.; ATF; Autotype U.S.A.; AZTECH Reproductions, Inc.; Baker

Perkins Limited; Baumfolder Corp.; BEI Sportswear, Inc.; Bobst Group, Inc.; Bowling Green State University, Visual Communication Technology Program; Brookfield Engineering Laboratories, Inc.; Brown Camera Co.; ByChrome Co.; Cameron-Somerset Technologies; Camex, Inc.; Caprock Development Inc.; Carpenter-Offutt Paper Co.; Central Bindery; Center for Metric Education, Western Michigan University; Center for Vocational Education, Columbus, Ohio; Central Missouri State University; Consolidated Papers, Inc.; Courier Graphics Corp.; Challenge Machinery Co.; Color Masters, Inc.; Compugraphic; Compuscan Inc.; Comsource Public Relations; Cordata; Covalent Systems; Max Daetwyler Corporation; Diagraph; Davidson International; Didde Web Press Corporation; Dienes; DK&A, Inc.; Doboy Packaging Machinery; Domino Amjet, Inc.; Donihe Graphics Co.; DuPont; Earmark, Inc.; Eastman Kodak Company; Edwards Brothers; Essex Products Group; Flexographic Technical Association, Inc.; Formatt Graphic Products, Inc.; Foster Manufacturing Company; Fuji Graphic Systems; Fuji Hunt Photographic Chemicals, Inc.; Fuji Photo Film U.S.A., Inc.; Gans Ink and Supply Co.; General Binding Corp.; Gerber Systems Corporation; Graphic Arts Technical Foundation; Gravure Association of America; GretagMacbeth; Greystone Peripherals, Inc.; GSMA; Hagen Systems, Inc.; Hantscho; Heidelberg Harris; Heidelberg Pacific, Inc.; Heidelberg West; Heidelberg USA; Heritage Graphics; High Technology Solutions; High Water Designs Limited; Hunterlab; ICG North America; Ilford; Illinois Environmental Protection Agency, Office of Pollution Prevention; Imacon; Imation; Information International Inc.; Inter-City Paper Co.; Interlake Packaging Corp.; International Paper Co.; Interthor, Inc.; Iris Graphics, Inc.; Ironwood Lithographers, Inc.; Justrite Manufacturing Company; Kenro; Kimberly-Clark Paper Co.; King Press Corporation; Koh-I-Noor Rapidograph, Inc.; Krause; KURTA; Lab Safety Supply, Inc.; Lehigh Press; Linotype-Hell; MAN Roland; Mark Andy, Inc.; Matthias Bauerle GmbH; McCain Manufacturing Corp.; Mead Publishing Papers Division; Mee Industries, Inc.; MegaVision; Miller; Minolta Corporation; Mix & Match Corp.; Muller-Martini Corp.; Multi-graphics; Murray Printing Co.; NAPL; National Association of Printing Ink Manufacturers; NAQP; National Soy Ink Information Center; Nekoosa Papers, Inc.; Nelson/Keystone; nuArc Company, Inc.; Orbotech, Inc.; Oliver; Pantone, Inc.; Paper Converting Machine Company; The Peerless Group of Graphic Services; J. J. Plank Corp.; Polychrome Corporation; Printing Industries of America, Inc.; Printing Industries Association, Inc. of Arizona; Ponte Engraving Co.; Prisma Graphics; Quantel; RAID, Inc.; Rapiline; Rob Macintosh Communications, Inc.; Rollem; Ronar; RPS; Salco, Inc.; S. D. Warren Co.; Scitex America Corp.; Screaming Color-Chapter One; Screen Printing Association International; Screen-USA; Sequel; Shanebrook Graphics; Software Publishing Corp.; Sonoco Products Co.; Southern Forest Products Assn.; Strachan Henshaw Machinery, Inc.; Supratech Systems, Inc.; Synergo; SWOP, Inc.; Teaneck Graphics; TEC Systems; Tekra; Tensor Group, Inc.; Tetko, Inc.; 3M Company; Tobias Associates, Inc.; Typography Unlimited; Ulano; Unisource Corporation; U.S. Bureau of Engraving and Printing; USA Today; Van Son Holland Ink Corporation; Variquick; Visual Graphics Corporation; Western Gear Corp.; Western Lithographic; Westvaco Corporation; Woods Lithographics; Xerox; Xitron; X-Rite, Inc.; Xyneticx-Clectrogas; Xyvision, Inc.

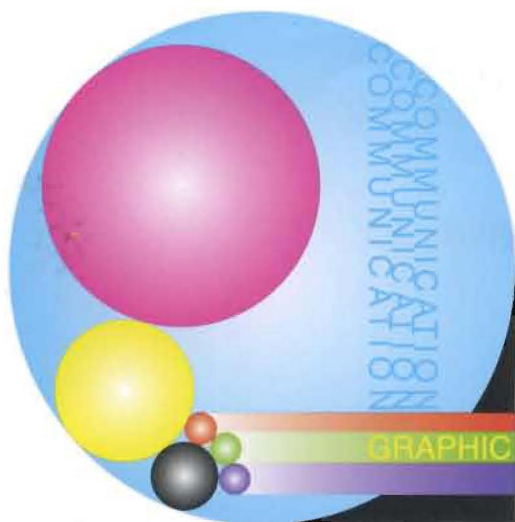


Table of Contents



Chapter 1 Overview of Graphic Communications 13

- Why Is Communication Important? 14
- Producing Visual Images 14
- Printing Processes 21
- Binding and Finishing 24
- Segments of the Industry 26



Chapter 2 Safety and Health 29

- Safety and Health Program 29
- Mechanical Hazards 30
- Chemical Hazards 35
- Fire Prevention 40
- Noise 41
- Light Hazards 41
- Ergonomic Hazards 41
- Environmental Compliance 44
- Safety Audit 48



Chapter 3 Measurement 51

- Measurement Principles 51
- Metric System 52
- Type Measurement 53
- Measuring Paper Sizes 56
- Paper Weight 58
- Image Measurement 59
- Photoconversion Measurement 60



Chapter 4 Typography 65

- Typefaces 65
- Type Style Development 67
- Typeface Classifications 70
- Typeface Families, Series, and Fonts 73

Type and Typesetting Measurements	76
Legibility Factors	79
Typefaces for Display	81



Chapter 5 Design and Layout 83

The Graphic Designer	83
Elements of Design	84
Principles of Design	88
Layout Elements	91
Developing a Layout	94
Layout Methods	95
Specifications	96
Copyfitting	98
Processing Illustrations	100
Layout Materials	104



Chapter 6 Text Composition 107

Relief Composition	107
"Cold Type" Composition	112
Electronic Composition	116
Proofreading	125



Chapter 7 Page Composition 131

Traditional Paste-up	132
Paste-up Tools and Equipment	133
Paste-up Materials	138
Assembling the Mechanical	142
Electronic Page Composition	145



Chapter 8 Color Science, Vision, and Space 151

Color Science	151
The Human Visual System	154
Color Space	156
Printed Color	164
Color Viewing Variables	168
Color Measurement	169



Chapter 9 Electronic Prepress and Digital Printing 173

Computer Platforms	173
Content Creation	174
Manipulating Images	177
File Formats	183
Internal and External Storage Devices	185
Page Composition Programs	188
Preflighting	189
Font Formats and Management	189
Turnaround Time and Proofing	195
Digital Printing Technology	196



Chapter 10 Digital Image Capture 203

Analog and Digital Image Forms 203
CCD Array Configurations 204
CMOS APS Sensors 207
Photomultiplier Tubes (PMTs) 207
Image File Size and Resolution 207
Image Manipulation 208
Scanners 213
Digital Cameras and Camera Backs 218
Image File Storage and Transfer 223
Future Trends 224



Chapter 11 Color Management 227

Standards, Regulations, and Color Models 227
Color Management Systems (CMS) 233
Characterization 233
Calibration 234
Color Conversion 238
Color Separation and Color Correction 239
Trapping 241
Screening 244
Preflighting 246
Proofing 247
Ink Colors 252



Chapter 12 Line Photography, Process Cameras 255

Light 256
Graphic Arts Cameras 258
Film Structure 262
Film Density 263
Color Sensitivity 264
Film Types 265
Filters 266
Camera Operating Procedures 266
Camera-Processor 272
Diffusion Transfer 273
Silverless Light-Sensitive Materials 275



Chapter 13 Halftone and Special Effects Processes 277

Camera Copy 278
Evaluating Continuous Tone Originals 280
Densitometry 283
Halftone 285
Halftone Screen Process 286
Halftone Exposures and Screen Ranges 288
Production of a Halftone 291
Processing Film 293
Evaluating Halftone Negatives 293
Prescreened Diffusion Transfer Halftones 294

Halftones Using Rapid Access Process 295
Color Separations 295
Special Effects 298



Chapter 14 Processing Photographic Material 309

Darkroom 309
Processing Chemicals 312
Manual Film Processing 314
Automatic Film Processing 317
Contact Printing 318



Chapter 15 Stripping and Imposition 321

Mechanics of Layout 322
Types of Imposition 323
Stripping Equipment and Tools 325
Stripping Procedures 329
Electronic Imposition and Stripping 337



Chapter 16 Contact Printing 341

Contact Printing 341
Contact Printing Equipment 342
Contact Printing Considerations 344
Exposures for Contact Printing 345
Contact Image Orientation 346
Contact Masking Materials 348
Spreads and Chokes 348
Contact Frame Screening 348



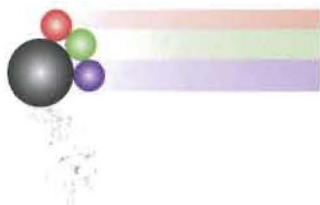
Chapter 17 Lithographic Platemaking 351

Lithography 351
Platemaking Equipment 353
Lithographic Plates 354
Platemaking 357
Platemaking Systems 358
Platemaking Variables 362



Chapter 18 Lithographic Press Systems 365

Lithographic Presses 365
Lithographic Press Systems 367
Feeding Systems 367
Printing Systems 372
Dampening Systems 376
Waterless Presses 378
Inking Systems 378
Delivery Systems 379



Chapter 19 Lithographic Press Operation and Troubleshooting 383

- Offset Presses 383
- Feeding System Operation 385
- Printing System Operation 388
- Dampening System Operation 392
- Inking System Operation 395
- Delivery System Operation 398
- Offset Press Troubleshooting 400



Chapter 20 Relief Printing 405

- Principles of Relief Printing 406
- Relief Plates 408
- Relief Presses 410



Chapter 21 Flexographic Printing 415

- Overview of Flexography 415
- Press Developments 416
- Flexographic Press Types 417
- Flexographic Plates 419
- Plate Stretch 422
- Plate Mounting 423
- Anilox Rolls 423
- Print Cylinders 425
- Press Makeready 425
- Flexographic Inks 425
- Strengths and Weaknesses 426



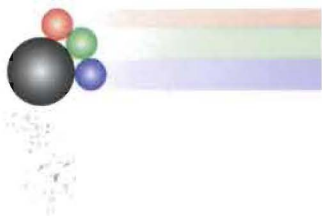
Chapter 22 Gravure Printing 429

- Development of Gravure 429
- The Gravure Process 429
- Gravure Prepress Considerations 431
- Gravure Cylinder Engraving 432
- Chemical Engraving 435
- Gravure Printing Press 436



Chapter 23 Screen Printing 441

- History of Screen Printing 441
- Screen Printing Applications 442
- Screen Printing Process 442
- Screen Frames 445
- Screen Fabrics 446
- Types of Fabric 448
- Fabric Attaching and Tensioning 448
- Stencils 451
- Fabric and Stencil Compatibility 456
- Printing Halftone and Process Color 457
- Screen Printing Presses 457



Chapter 24 Substrates 459

Papermaking History 459
Making Paper 460
Paper Types 463
Paper Applications 467
Paper Characteristics 468
Qualities of Paper 473
Envelopes 473
Other Substrates 474



Chapter 25 Ink 477

Ink Ingredients 477
Ink Properties 478
Ink Formulation 481
Specialized Inks 483
Mixing, Matching, and Proofing 485
Ink-Related Challenges 487
Process Ink Analysis 488



Chapter 26 Finishing and Binding 493

Cutting 493
Folding Operations 496
Other Finishing Operations 498
Binding 504
Packaging 511



Chapter 27 The Business of Printing 513

Business Basics 513
Planning for Growth and Success 522
E-Commerce 522
Trade Customs 522
Standards and Specifications 524
SIC Replacement 525
Copyright Laws 525



Chapter 28 Graphic Communications Careers 527

Choosing a Career	527
Preparing for a Career	527
Skilled Technical Positions	529
Creative Positions	532
Management Positions	533
Support Personnel	535
Engineers and Scientists	536
Education	537
Entrepreneurship	537
Positions with Service Operations	538
Technological Growth	540



Appendix 1 Specifications for Web Offset Publications 543



Appendix 2 Hand-Binding a Book 553



Glossary of Technical Terms 559



Index 591

Important Safety Notice

The theory, procedures, and safety rules given in this book are typical of the industry. However, they are general and do not apply to all situations. For this reason, it is very important that you refer to the manufacturer's instructions when using any product or machine. These factory directions will give the details needed to work safely while producing quality printed products.



Graphic communications, in a relatively short period, has undergone a digital revolution. The computer and specialized software have become central to virtually every stage of the creative and production processes, from copy and image creation through prepress and press operations to bindery and finishing. (Heidelberg Prepress)