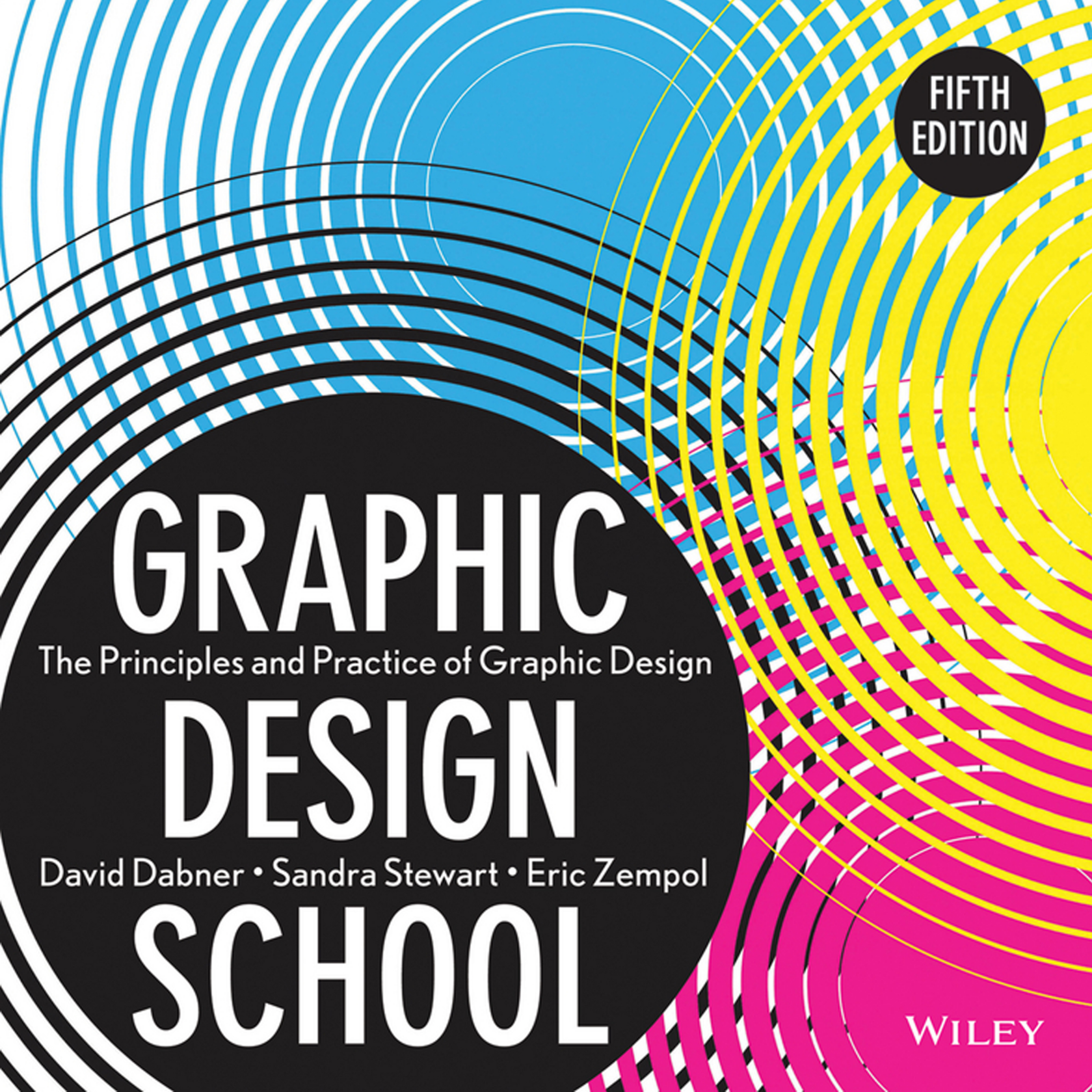
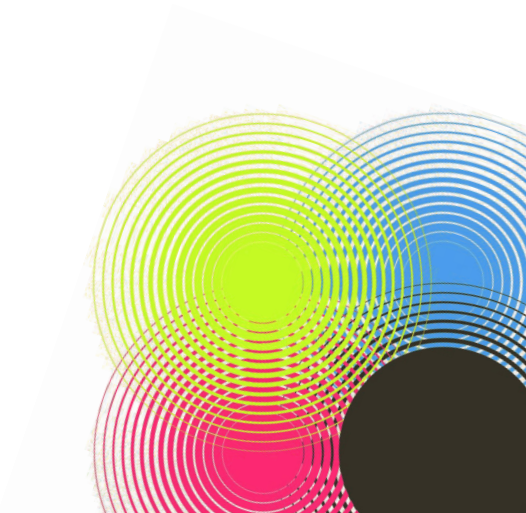
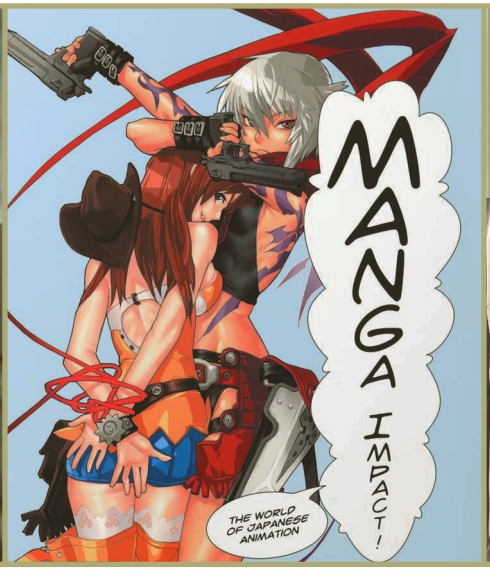

FIFTH EDITION
GRAPHIC DESIGN SCHOOL
The Principles and Practice of Graphic Design
David Dabner • Sandra Stewart • Eric Zempol
WILEY

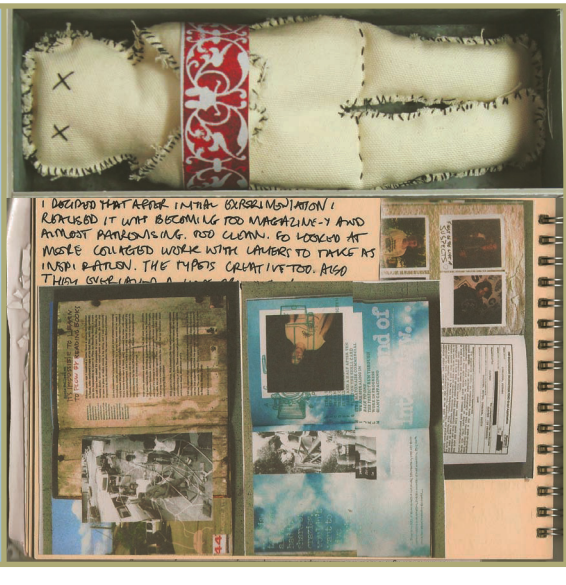
Graphic Design School

The Principles and Practice of Graphic Design




LOVE

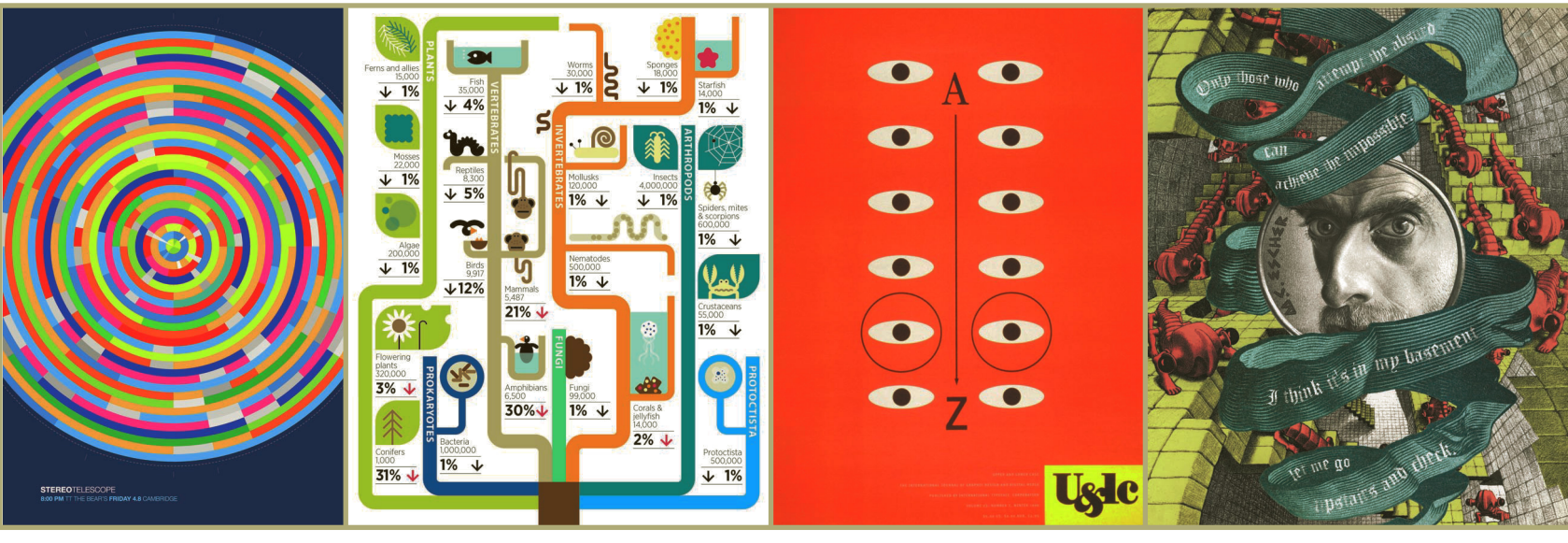

MANGA IMPACT!
THE WORLD OF JAPANESE ANIMATION


I DECIDED THAT AFTER INITIAL EXPERIMENTATION I REFUSED IT WAS BECOMING TOO MAGAZINE-Y AND ALMOST PARRONISING. TOO CLOWN. SO LOOKED AT MORE COLLATED WORK WITH LAYERS TO TAKE AS INSPIRATION. THE TYPES CREATIVE TOO. ALSO

WILEY

Graphic Design School

The Principles and Practice of Graphic Design



David Dabner • Sandra Stewart • Eric Zempol

A QUARTO BOOK

Published by John Wiley & Sons Inc., Hoboken, New Jersey
Published simultaneously in Canada

Library of Congress Cataloging-in-Publication Data
Dabner, David.
The new graphic design : a foundation course in principles and practice / David Dabner. -- 5th edition.
pages cm
Originally published: Graphic design school. 1991.
"A quarto book."
Includes index.
ISBN 978-1-118-13441-2 (pbk.)
1. Graphic arts. 2. Commercial art. I. Swann, Alan, 1946- Graphic design school. II. Title.
NC845.D33 2013
741.6--dc23
2013018920

ISBN: 978-1-118-13441-2
10 9 8 7 6 5 4 3 2 1

QUAR.GRS5

Conceived, designed, and produced by
Quarto Publishing plc.
The Old Brewery
6 Blundell Street
London N7 9BH

Senior editor: Katie Crous
Co-editor: Ruth Patrick
Copy editor: Claire Waite Brown
Art editor and designer: Jacqueline Palmer
Art director: Caroline Guest
Picture researcher: Sarah Bell
Proofreader: Sarah Hoggett
Indexer: Helen Snaith
Cover Design: Michael Rutkowski
Cover Art: © Bogusław Mazur/Alamy

Creative director: Moira Clinch
Publisher: Paul Carslake

Color separation in China by Modern Age Pte Ltd
Printed in China by 1010 Printing International Ltd

Contents

Introduction

This book is written with the intent of providing an introduction to the underlying principles of good graphic design, whether it is print-based, web and interactive, or environmental. The content has been constructed to mirror, in part, how the subject is taught in college design programs, and the illustrations, which are a mixture of student projects and professional design work, have been carefully chosen to illuminate specific teaching points. Many of the sections contain step-by-step exercises and assignments, offer practical advice, and point toward further resources.

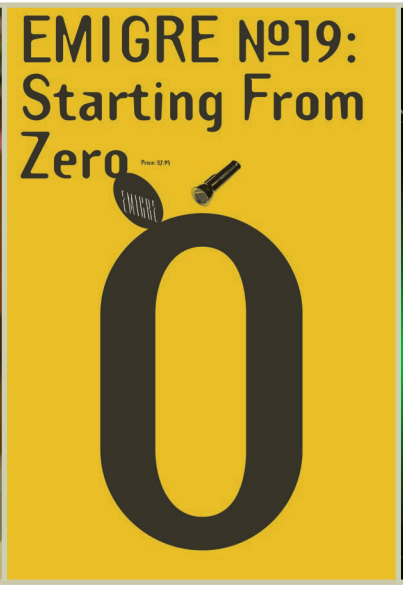
The first part of the book, Principles, supports the idea that a thorough understanding of design principles should support the process of creating design works in response to specific briefs and problems, while allowing room for self-authored experimentation and visual freedom. As you are introduced to the basics of research, typography, color, photography, and composition, you will learn to become visually aware and able to articulate these design principles into your future works. You will also gain some understanding that these principles cross disciplines and are the vocabulary of visual literacy.

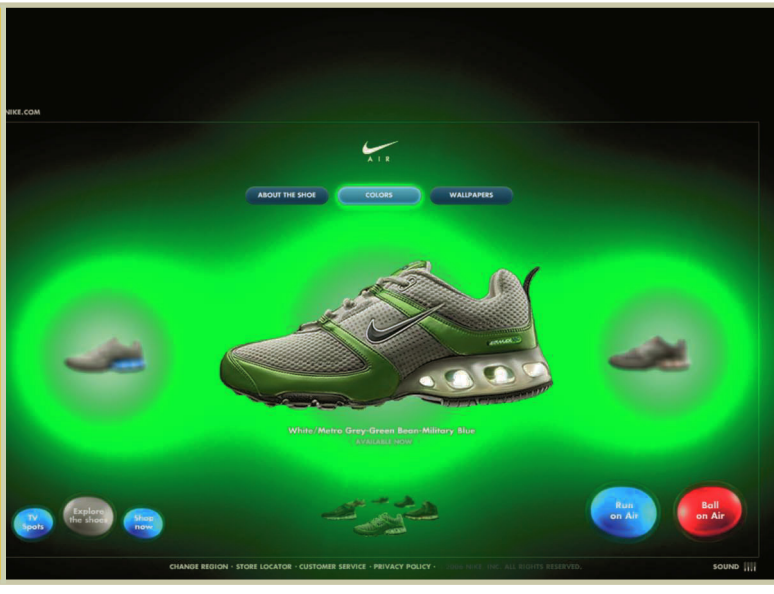
In the second part of the book, Practice, you will be introduced to invaluable practical skills that are important support systems to the skills sets in research and creative process you have read about in Part One. They do not replace them, but serve as methods and practices for developing critical problem-solving skills, and learning to manage complex projects. Designers need the whole range of skills to

be truly successful, and expertise will come with continued study and practice in both areas. Unless you learn the practical skills and technology of design production, including how to manage images, create digital files for specific media, and build and structure a website, you will be unable to bring your brilliant concepts to life.

None of these visual skills can be viewed in isolation from the context in which design happens and its larger role in society and the world. Designers are visual communicators, often giving visual voice to new and provocative ideas. They create images that can inform, persuade, and entertain millions of people. This comes with great responsibility, and it is crucial to be aware of the role of design in shaping the world we live in, and changes in the discipline that transcend trends or the latest software. While any kind of comprehensive account of these topics stands outside the scope of this book, becoming visually literate and technically skilled should go hand in hand with an understanding of such issues as communication theories, global audiences, systems theory, sustainable issues in design, and the changing role of technology.

Finally, design education is a lifelong experience that can bring great personal satisfaction and reward. With this book as a gateway, a new way of seeing the world may lead you to a career path that will be a constant source of surprise and delight.

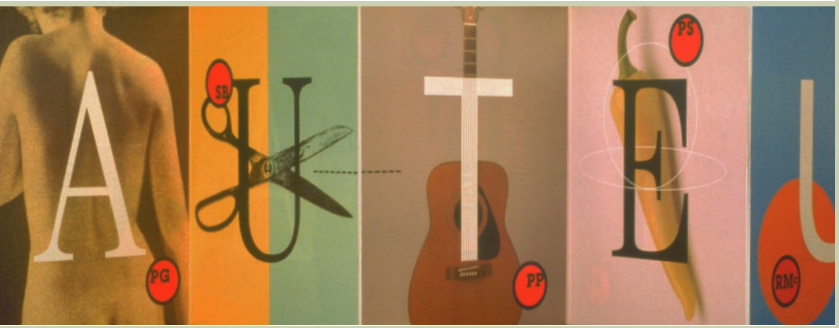




Principles

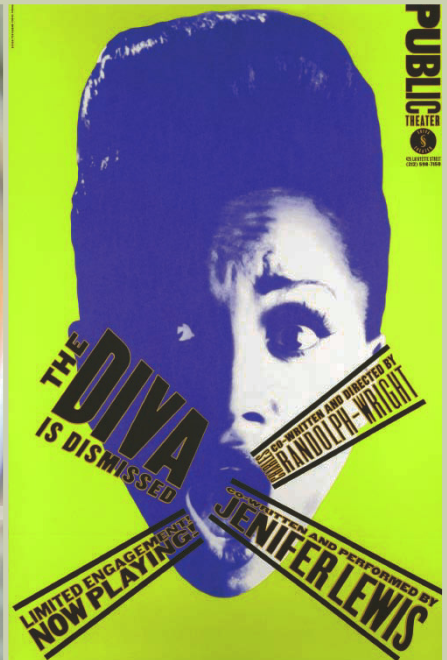
The first part of this book is concerned with design principles, the building blocks that connect the basics of all good design. Every discipline has its own sets of rules, methods, specialized technologies, and technical requirements. Each one is rooted in the interactions of its history, theory, and practice, but unlike learning law or biology, the language of design is visual. It involves the need for a highly developed awareness of visual relationships, proportion, the perceptions of visual principles, and of the modern world and its complex events and practices. A good designer can filter this information and create relevant, engaging, visually eloquent design that responds to multiple problems, needs, and contexts. While a design student needs to develop the research, concept-development, compositional, and organizational skills associated with design, he or she also needs to be engaged with the world, and interested, aware, and sensitive to the changing contexts in which design plays a part.

Unit 1 introduces the primary and secondary research skills needed by designers, followed by an introduction to theories of image, the importance of audience, and of organizing your work and time. In Unit 2, the idea of form is spotlighted. Form involves composition of the fundamentals of design (text, image, proportion, space, color, scale) and requires an understanding of the visual dynamics created by combining them with intent. Understanding form comes from the ability to see intrinsic and subtle qualities in the various design elements, and the observation of, and sensitivity to, the changing relationships between



them. Unit 3 introduces typography, a core skill for all designers that is layered with complexity, and cannot be understated for its beauty, history, versatility, and ability to influence an audience. Developing a deep understanding of typography is of critical importance. Unit 4 introduces color as one of the primary tools in the language of design, including theory, terminology, associations, issues of legibility, and emotional response. Managing color and its ability to communicate is a skill that also evolves with greater understanding of its influences. Whatever design discipline you ultimately pursue, from editorial art direction to web and motion graphics, these basic principles will give you a solid foundation and serve as the groundwork for further exploration and understanding of design and the role of the designer.

PART 1



1 RESEARCH AND CONCEPTS

The first step toward becoming interesting is to be interested. The best artists of all kinds—painters, designers, writers, sculptors, musicians, playwrights—make the world their inspiration, and draw ideas and content from both experience and research. They make it a priority to stay aware of what is happening, not only within the world of design, but in the world in general, and this level of engagement enriches their work.

> **"What you see and hear depends a good deal on where you are standing; it also depends on what kind of a person you are"**
> *C. S. Lewis*

Observe and collect
Research should be specific to each project, but the process of observation and recording your impressions should be ongoing, and should become a part of your daily routine. When something catches your eye, document it; capture an image and put it into your notebook/sketchbook/device for reference later. Everything you come in contact with can inform your work, so make sure you have a great collection of objects and impressions for inspiration.

PART 1 | PRINCIPLES
UNIT 1 | RESEARCH AND CONCEPTS
MODULE 1 | **Basics of research**

Modern media demands an increasing amount of visual information to illustrate its content in print, packaging, and motion graphics, in the built environment or online. Graphic designers are the conduits for all types of communications from multiple sources to specific audiences, and to be successful they must be well-informed, accomplished researchers with inquisitive natures.

Broaden your outlook
Designers who seek information from the greatest range of references are those who successfully communicate with people of all ages, professions, and lifestyles, and who properly contextualize their design work.

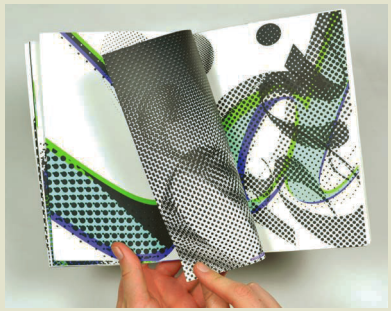
- Read about events from multiple sources. Change your sources daily, or read from several sources and compare stories, noting how information about the same events changes, how the language is used to target various audiences, and what type of imagery is used to support the text. Never rely solely on editable web postings for accuracy if you are reading facts. Check your sources!
- You can never read enough books, but don't limit

yourself to the kind you usually read. Reading only about graphic design can be particularly dangerous: although extremely useful for information and guidance, this may turn you into an armchair expert; you want to be an original practitioner. Expand your reading to include novels and plays, and books on sculpture, architecture, art history, cooking, sports, archeology, travel, and math—it really doesn't matter, as long as they provide you with a broad spectrum of knowledge.

- Be open to new experiences. Visit, galleries, clubs, retail environments, and museums you've never been to, listen to music you've not heard before, and eat food you've never tried before. Travel whenever you can, and learn about global issues and cultural treasures.
- Share ideas and listen to people. Whatever language they use, there is always a way to establish communication, if you try. Pay attention to what inspires them, and learn from others while also sharing your insights.
- Be responsible. Remember that the beauty of the world is the inspiration that touches the artist's soul, and it belongs to all of us.

Experimentation reveals possibilities The journey from a posted process board to a final design is always different, but the process itself is the teaching tool of design. In these images, you can follow the evolution of the designer's process and see how variation leads to discovery.

Look closely at details Through the simplification of the forms, the enlargement of the dot screen pattern, and the placement of layers, the enlarged and cropped letterforms become fluid, artistic subjects that are vibrant with color.



RESEARCH TECHNIQUES

Primary sources/ Factual research	**Secondary sources/ Factual research**
• Previous knowledge/opinion/ memory • Observation • Conversation • Analysis • Role-play • Interviews: in person or by email, online chat, or phone • Questionnaires • Focus groups • Commissioned video/written diaries (first hand) • Ethnographic research ("deep hanging out")	• Museums, archives, collections • Newspapers, magazines, journal articles • Published interviews • Films, TV broadcasts, theater • Transcripts/recordings of film, TV, radio • Books • Music • Internet: blogs, websites, forums, magazines • Surveys • Statistics • Organizations, agencies, gatekeepers • Lectures, public debates, conferences
Primary sources/ Visual research	**Secondary sources/ Visual research**
• Photography • Drawing/sketching • Media experimentation: 2D and 3D • Rubbings/casts • Typographic experimentation • Compositional experimentation • Image manipulation • Photocopying • Video recording • Audio recording • Writing	• Exhibitions • Images/photographs from magazines, books, leaflets, Internet, billboards • Work by other designers/artists • Printed maps/diagrams • Ephemera (e.g. tickets, receipts, packaging) • Found or bought photographs, postcards, posters, drawings • Imagery taken from films, video, performances • Architecture

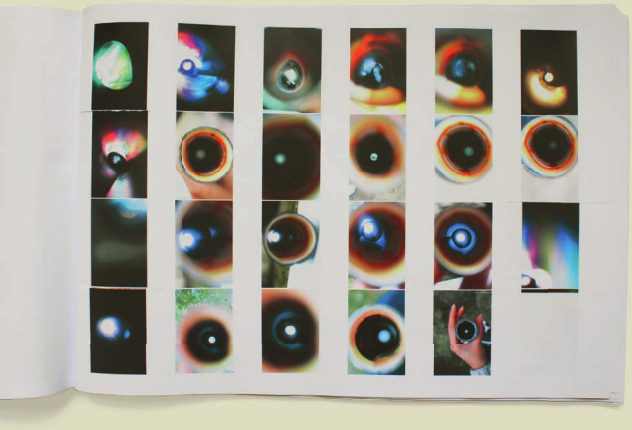
Other general work practices/approaches
- Put your own point of view into the subject
- Work in groups and respond to feedback from others
- Develop ideas by generating a number of visuals in response to one idea
- Explore the full capacity of your visual language

Record it all

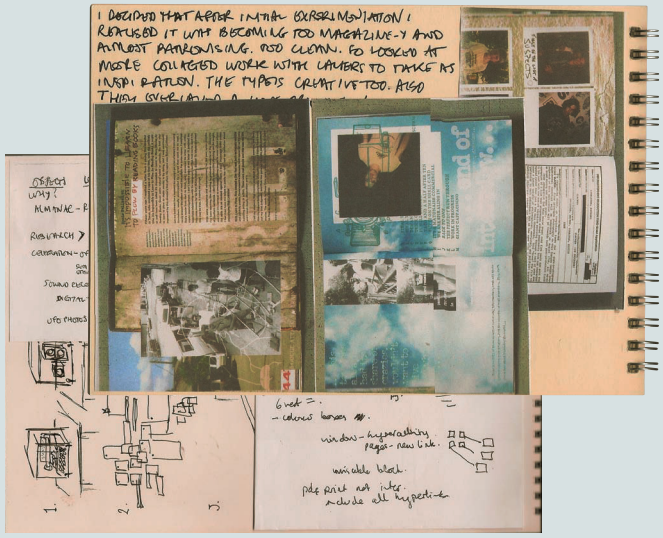
Constant, direct observation is one of the most important tools a designer uses, and learning to look at anything as a designer requires attention to minute detail, and the inclusion of all things that surround the object of your focus. Consider your way of seeing as a kind of inner zoom lens that draws you in and away from a point of observation. As you learn to see with a designer's eye, ordinary things you may have seen before can become amazing sources of inspiration. It can be as simple as a pattern of lace juxtaposed against flat, wide stripes, or as unexpected as the geometry revealed by light and shadow in an architectural setting. Textures, patterns, colors, and visual relationships will begin to have a profound effect on the way you think about your design process.

With this in mind, every practicing designer should carry some form of recording device, such as a sketchbook, camera, smartphone, video camera, or whatever works best for you. Make time for observation and research, taking it seriously as an integral part of your work. Designers, artists, writers, and illustrators all frequently keep scrapbooks/sketchbooks/collections of material that interests them. These bits of inspiration need not have a clear purpose when collected, but the material will become an archive of ideas and inspiration from which to draw on at a later date.

If something commands your attention, sketch it, write about it, photograph it, upload it, or file it away immediately. Collect ideas and build upon initial thoughts by writing, drawing, or sketching. Not only will your drawing and research skills improve by doing this consistently, but over time you will have built yourself a "catalog of inspiration" that can be drawn upon at any point in your career, and will become especially useful when you are short of ideas. This kind of practiced research helps you to begin defining your own outlook, and to develop a distinctive visual voice.



Multiply the possibilities Collect multiple images of every subject, and vary your techniques as you photograph. Each of these pictures captures a slightly different sensibility in light, color, shadow, and composition. When they are combined with deconstructed typography that echoes the abstract forms revealed in the photos, the results are striking.



Ideas are organic They can grow from a single phrase, the sum of a series of images, or a combination of both. Record the evolution of your thinking process in whatever manner is meaningful for you. When you reference the sequence of your observations, they can become visualized as layers in a composition or simply lead you to the most relevant point in image or text.

GLOSSARY

Contextualization: The process of placing something within the interrelated systems of meaning that make up the world.

Primary research: Gathering material that does not preexist, such as photographing, drawing, making prototypes, interviewing people.

Secondary research: Gathering material that already exists, such as design work, color samples, written texts, newspaper/ magazine articles, archive images (e.g. historical samples of advertising).

PART 1 | PRINCIPLES

UNIT 1 | RESEARCH AND CONCEPTS

MODULE 2 | # Linear reasoning/lateral thinking

In the initial stages of concept development, the two main ways to approach a design brief are to use linear reasoning and lateral thinking. These are virtually opposites—the first focused and methodical, the second diffuse and expansive—but both are equally useful as research and development tools.

Linear reasoning implies a strategic thought process, using step-by-step logic, and follows a specific trajectory. This kind of reasoning frequently involves a predetermined idea or concept that is then worked toward in stages. Generally, this will involve splitting the idea up into manageable components, considering color, type, composition, and scale, and working each through to finalize the form to fit the concept.

Lateral thinking involves indirect exploration, generating ideas less readily available by linear reasoning (or hidden by the linear process, so that less obvious associations aren't readily seen or generated). The emphasis is on indirect, creative forms of research. Edward de Bono coined the term in 1967.

Brainstorming, or sketching in a non-linear diagrammatic way, approaches problems by exploring each component in as much depth and breadth as possible, finding connections and associations that work to strengthen the concept. This process aims to push achievable boundaries. Think of it as if it were a walk through a city. You may set out knowing exactly where you are going, focused on the end goal: reaching your destination. Alternatively, you could just stroll along the streets without any predetermined destination in mind. Each will provide very different experiences; in the non-predetermined form, you may notice things along the way that are not obvious if your sights are set only on reaching your destination.

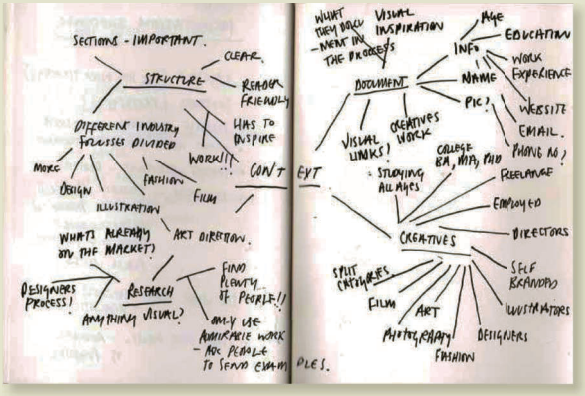
You might consider beginning with a lateral thinking session—where you brainstorm as many ideas as possible—in order to generate your initial ideas, then move to a more linear process at a later stage. The two are not necessarily mutually exclusive, but often complementary ways of researching a design problem.

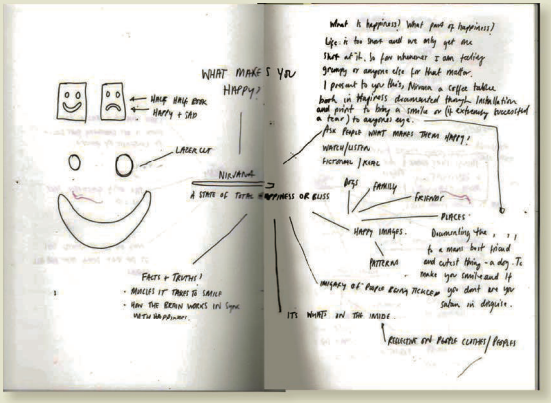
GLOSSARY

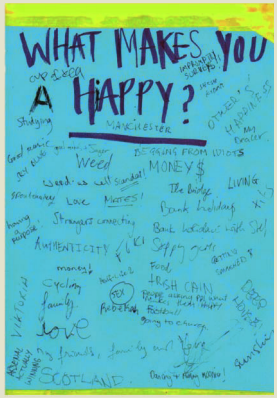
Lateral thinking: A form of research where the emphasis is on indirect, creative forms of inquiry and thinking.

Linear reasoning: A form of thinking that implies strategic thought process, one in which step-by-step logic is employed.

SEE ALSO: BASICS OF RESEARCH, P10







EXAMPLE—GETTING STARTED

Your first brainstorming sessions can be intimidating, so it will help, initially, to work with familiar tools and to combine linear and lateral thinking. Until you are able to think in pictures, begin with words. Make a list of absolutely everything that comes to mind when you consider your brief. Then, make a secondary list of things associated with each item on your first list.

Brief
Design a logo for the Folklore Museum. It should be elegant, lighthearted, and whimsical enough to attract families, but sophisticated enough to appeal to researchers and scholars of folklore.

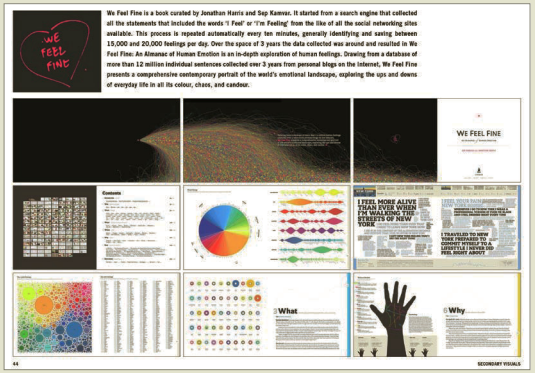
1 Once you have determined the usage of the logo and the type of audience the client would like to reach, you can begin your descriptive lists, drilling down to as many levels as you need to bring images to mind. Discard nothing at this stage; just allow your mind to make associations freely. There's no such thing as a bad idea in creative process, there are only some that are more appropriate than others.

2 When your lists are lengthy enough to allow you to visualize individual items from your columns, you can combine two or more thoughts from different columns into one image, and you are ready to begin sketching. One idea will always lead to another, so never settle for just one, and save all of your ideas as you work through the process. You may find the seed of something brilliant hidden in an idea you nearly discarded.

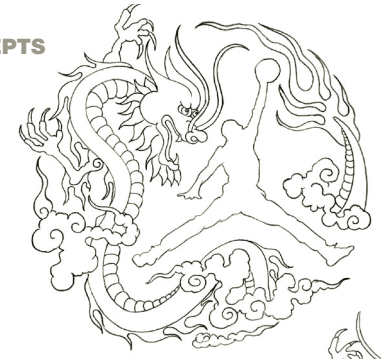
Folklore
magic → *wand, sorcerer*
prince/princess → *crown, castle*
good/evil → *light/dark*
homespun → *cottage*
nature →
animals → *frogs, goats, birds*
plants → *lilypads*

Museum
display → *exhibits signage*
Information sources → *books, objects, antiquities*
objects → *natural, invented*

↑ **Thematic variation** All three of these logos are drawn from the associations recorded first in words, and everything about the design work is influenced by those ideas, from the choice of image to the selection of the typeface.



← **Lateral or linear?**
Whether your process unfolds in an orderly sequence or a random scatter of thoughts, the process of discovery and the sequential development of an idea are exciting parts of the design process. Relax, examine your recorded research, and let the ideas flow. The more experience you have using these methods, the faster you will generate ideas.



PART 1 | PRINCIPLES

UNIT 1 | RESEARCH AND CONCEPTS

MODULE 3 | **Exploratory drawing**

Exploratory drawing is a means of translating the outside world and of giving concrete form to abstract ideas. Sketching and drawing engage you in a constant process of observation, and help you understand the world around you. Whereas computer technology is another tool for the development of ideas, you should treat drawing as the basis of expression that underpins your design decisions.

Representational, or observational, drawing (drawing used to document) allows you to see the subject as a shape or a series of shapes, and color as tones and hues. It teaches you to understand and manipulate perspective, to understand how an object exists in space, and to create the illusion of space and depth, and shows you how to convey texture and density. Non-representational, or non-observational, drawing, where your expression is freed from the need to represent what is seen and the result is a gestural abstraction, can generate valuable expressive drawn responses, and is widely used.

In representational drawing, train your eye to see diverse subject matter in detail. Studies of still life and life drawing train your eye to observe static objects in detail from a series of points of view, and evaluate the relationship of the surrounding space to the objects of study. These alternate views and perspectives will stimulate a variety of moving and static subject matter, which in turn changes how you draw. You can work directly in a sketchbook, or photograph your subjects for reference for more finished drawings at a later date. It is important to familiarize yourself with as many diverse aspects of form as possible.

You can always develop your drawing, regardless of how good you feel you already are. Continual practice is the key, and drawing should be a lifelong activity. You should experiment beyond your comfort zone, grasping as many forms of image making as possible.

Understanding tools

Experiment with a variety of media, to determine and affect your created image. Whether charcoal or pencil, crayon or brush, each tool you use requires some understanding of its specific effects and mark-making qualities. For example, pencils allow tonal control, detailed modeling, and a strong line, whereas ink and brush will generate an entirely different mark. Try not to limit yourself to conventional media; other implements, such as a toothbrush for a spatter effect, a piece of string, or even a sewing machine, can create interesting images. The aim is not merely to interpret the objects pictorially (representing them as they look) but to interpret the image in your own way. All forms of drawing have their value and purpose, and should be treated as equally valid.

Understanding form

There are no lines around an object. It consists of its own solid form, defined by the light and shadow that illuminate and surround it. Creating black-and-white drawings, or studies, is the best way to begin to understand form. As you render your study from real life, you are translating the language of color into a tonal gray-

GLOSSARY

Abstraction: An aesthetic concept describing something that is drawn from the real, but has been "distilled" to its barest minimum form, color, or tone, often removed from its original context.

Documentation: The recording in written, visual, or aural form of what is of interest.

Representation: Something that looks like, resembles, or stands for something else. In drawing, this is also known as figurative, since it deliberately attempts to mimic the thing drawn.

Thinking in pictures Tight contour line drawings are used to explore the relationships between new and supplied elements in these studies for elaborate Nike packaging. Each study is carefully composed to fit within a particular space on the package and on the product before the color is assigned. See also the finished artwork on page 55.

scale, substituting monochromatic values for the spectrum in the existing object.

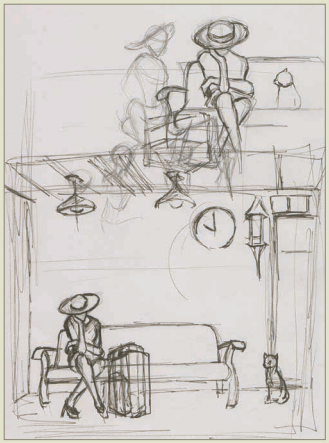
Be as direct and spontaneous as is possible. For immediacy, do several studies in a short space of time. Use materials to describe form and mass as areas of color, replacing a monochromatic scheme, while using an outline only as a guide to subsequent layers. Concentrate not on an end product, but on the process of a rich description of forms.

Figurative drawing from observation can produce beautiful studies, but it is also the tool that will sharpen your sketching abilities, and will eventually help generate ideas as you work through a design problem. As you draw, you will notice that what you choose to include and what you choose to exclude are equally important. As an object exists in space, so your drawing lives within the finite boundary of a page, and the relationship of the study to the page is part of the image.

When you complete a study, consider recreating the same subject with different media, eliminating all but the most necessary of descriptive marks. A gradual abstraction of the figurative image will help you discover more about structure, form, and spatial relationships as you work.

Options Multiple studies are roughed in and considered during the creative process. Promotional material for the band Runaway Dorothy is shown in stages of development. The position the display typography might occupy is considered as a shape in the composition before any style selections are made, and changes in perspective and scale are incorporated in the final illustration of the dog.

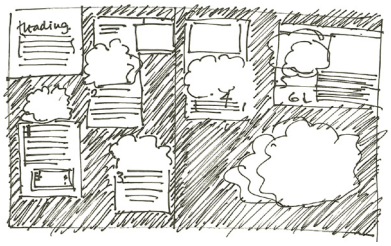
Early sketches for second study show the development of the concept and the changes in viewpoint that made it more moody in the final illustration.



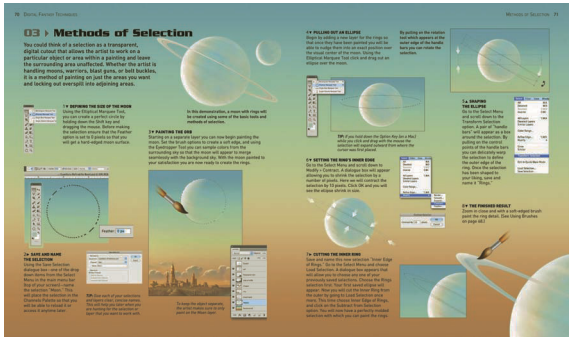
PART 1 | PRINCIPLES

UNIT 1 | RESEARCH AND CONCEPTS

MODULE 4 | **Visualizing ideas**



Visualize and organize
Your first sketches can be loose and expressive. Try variations, and do as many thumbnails as you can think of before you begin to finalize the idea.



All designers need to develop the skill of putting ideas down on paper. This involves preparing rough visuals/design sketches—thumbnails, scamps, or roughs. Students often tend to bypass this process and set about producing ideas directly on screen. This practice can inhibit the development of ideas, because you may restrict yourself to only those images you are capable of producing with the available technology. It's better to think freely at first, and to produce as many ideas as you can sketch.

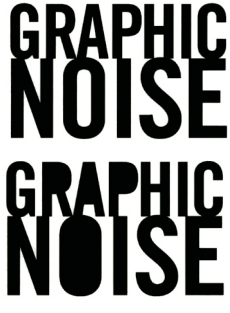
Initial ideas are generated more quickly and prolifically if you do a bit of brainstorming, recording your thoughts rapidly using various diagrammatic methods or other ways to structure information.

Start with your word lists, and as you begin to think in pictures, move on to sketching directly. In this process, coordination between brain, eye, and hand can be amazingly fast, and by working quickly you can generate many diverse (and sometimes unexpected) ideas, concepts, and associations. Your mind starts flowing and loosening up, and becomes open to the diverse aspects of the project, swiftly moving the thought process forward. Literal and non-literal, lateral and non-lateral forms of thinking are used to maximum effect in these early sketches.

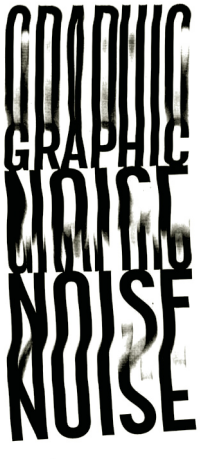
Roughs and thumbnails

There is no predetermined size for rough drawings. Thumbnails are, as the term suggests, small. Designers usually begin with thumbnails, a series of rapidly drawn,

Putting it all together Looking spontaneous takes time. Finished artwork may be the result of experiments in various media and techniques, and it may be the sum of many successful combinations. Once you have the concept and the general proportions in mind, consider the best way to execute the style you want to communicate. Then, determine the right tool for the right job, and use as many as you need to get the right visual language for your message. For this poster promoting an exhibition of rock 'n' roll music posters, the artist wanted an image that expressed the concept of "art at 1000 decibels," a part of the copy line on the poster.



First, a sans-serif typeface was selected and type treatments were designed on computer in several variations, then printed in black and white. The result felt too static.



The printed type was placed on a copy machine and the paper copy was moved during the copying process to blur the image. Several versions were scanned back into the computer, and the best were combined and cropped. The balloon form was added.

The bird was hand drawn with pen and ink, and the hands were drawn separately.

stamp-sized compositions that block out the general structure and content of a design. Thumbnails should be spontaneous and prolific; they are the recorded thought process of developing ideas and should move as rapidly as you can think. Obviously, this can leave no time for the inclusion of any detail or refinement. These will be considered in the final stages of design development. Thumbnails that have the most interesting potential are selected and a rough, larger, loose drawing with more detail but as yet still unfinished, is created that further develops the composition and placement on the page.

Drawing by hand

Although roughs require a certain degree of drawing skill, these will be learned easily for this kind of work, where the generation of ideas is the focus, not drawing as an end in itself. This is unlike observational drawing, or drawing as documentation, which needs to be precise. Hand-drawn ideas can be vague and leave a lot to the imagination, which can be a good thing. Excluding detail from the sketch will allow you to leave your options open for more deliberate decisions at a later point in concept development. Remember, the "big idea" is the most important part of the process at this stage.

Once you have a number of ideas sketched out, you can step back and make judgments regarding their value, and potential for development, without having committed to any design in detail. This allows maximum flexibility and fluidity in the design process.

An important advantage of developing the ability to produce quick, effective roughs is that when presenting ideas to clients, alternatives can be quickly sketched out, keeping your approach fresh and relatively unrestricted. This, in turn, gives clients confidence in your willingness to be flexible and open-minded, while showing your design abilities.

Computers and visualization

Roughs are usually generated on a sketchpad. When generated on a computer, roughs tend to look too fixed and polished, and students can be reluctant to change or refine them. Wait until you have a sketch that excites you, then scan it and look at it on screen.

Once you have chosen an idea or shortlist of ideas that you feel may have potential, computers come into their own, because they enable you to produce as many alternate versions of your ideas as you wish, changing colors, typefaces, line weights, and images. Typefaces and grid measurements become fluid decisions when you are working digitally, and you don't need to commit immediately. In fact, it may be better not to. It's fast and easy to change these on screen.

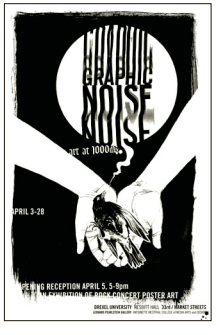
GLOSSARY

Brainstorming: A visual aid to thinking laterally and exploring a problem, usually by stating the problem in the center of a page and radiating outward spokes for components of the problem. Each component can then be considered separately with its own spokes, so that each point, thought, or comment is recorded.

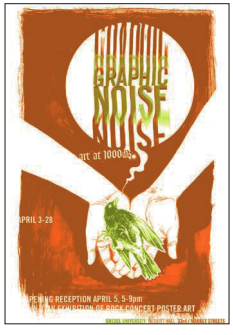
Roughs: Loosely drawn compositions from thumbnail drawings

Thumbnail: Small, rough visual representation of the bigger picture or final outcome of a design.

SEE ALSO: LINEAR REASONING/LATERAL THINKING, P14



The artist added a washy ink texture to the background, and added a bit more onto the top of the artwork by taping it to the top. All the elements were scanned into the computer and assembled electronically.



When all of the additional typography was complete, the artist explored several color variations (above) until they were pleased. Two different color versions were printed: the magenta one (right), and a predominantly cyan version (not pictured).