

Type and Typography

7

CHAPTER OBJECTIVES

AFTER READING THIS CHAPTER, YOU SHOULD BE ABLE TO:

- Explain how meaning can be conveyed through typefaces.
- Summarize the history of type and typefaces.
- Describe the classifications of type.
- Analyze the components of type anatomy.
- Differentiate between typefaces and fonts.
- Discuss the formal issues of analytic typography.
- Discuss the elements that affect the readability of type.
- Explain how type used with metaphor enriches meaning.
- Discuss vernacular typography's effect on design.
- Apply older typefaces in new contexts.
- Manipulate type in the third dimension to expand meaning.

Exercises and Projects

Typeset your name; research typefaces; typeset a page layout; visually express a quote; use type as narrative; create type compositions; use extreme typography; emphasize type for a flier and coffee-table book.

Graphic designers communicate using many tools, for example, elements such as line, shape, and texture. Computers and software applications have liberated the process of visual creation, and “mindware tools” such as visual metaphors and montage can amplify meaning. But perhaps the most powerful tool is type—typefaces and their typographic arrangement. Type not only can complete a message but also can function as the image.



If you work on a nice scratchy paper you can get an antique look. The sound made is a clue to how you're actually making things so you should listen to it.
—Paul Shaw

 Watch the Video on myartslab.com

Opposite page: CHASE HILL. Typographic promotion (detail) documenting the designer's transplantation from his home to his school (full image, see Figure 7.24).

Designers use type in almost all of their work. They might use large amounts of type, flowing it across multiple pages, as in a book, newsletter, or website; they might use small amounts of type in harmonious integration with imagery, for example, as part of a brochure cover or logotype. The designer's job in using type effectively is to make the most of its dual purposes—to read as legible text and to convey meaning.

Speaking with Type

If you say the word *rose* very softly, it implies something delicate. Shouting the same word gives it a whole different meaning, adding an unexpected harshness and thorniness. Designers can convey similar nuances of meaning through type, using elements of type to express mood and suggest tones of voice.

Any **typeface**—a single design of type comprising the full alphabet and all corresponding **fonts** (variations such as regular, italic, bold,

7.1 A particular typeface can extend the perception of a word and its meaning.

Rose
Rose
ROSE
Rose

7.2 Typography involves use of compositional principles in the arrangement of letters.

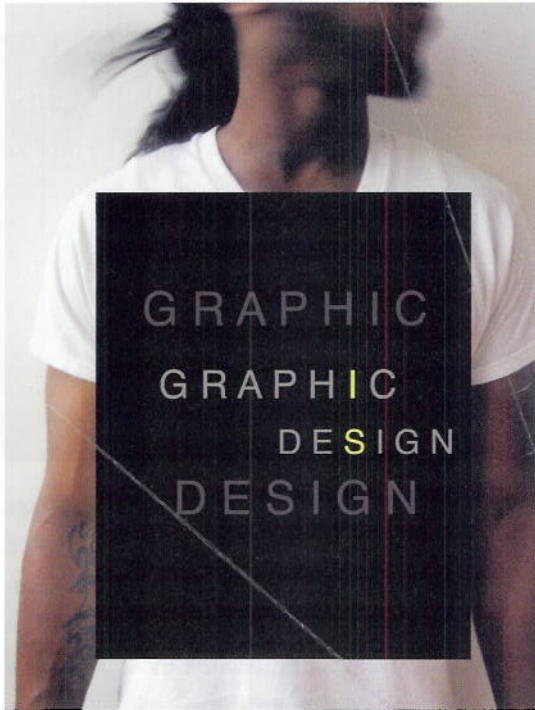
R o s e

and bold italic)—suggests these nuanced meanings. A light **serif** typeface (its main strokes finished off with shorter perpendicular ones) has a classical connotation, and a bold **sans serif** typeface (without any finishing strokes) conveys a more industrial feeling. Each adds meaning to the word it creates, just as adjectives add meaning to nouns. In the example shown in Figure 7.1, the serif typeface Garamond helps express the idea of a *delicate* rose; the sans serif Trade Gothic, a *machined* rose; the serif Minion in all caps, an *authoritative* rose; and the sans serif extremely bold Champion, a *tough* rose. The arrangement of letterforms, the **typography**, adds a compositional aspect to letters and words. Principles such as contrast, unity, and rhythm should all be considered when designing with type (Figure 7.2).

The history of a typeface, why and by whom it was drawn as well as how it has been used by other graphic designers, is valuable information that can strengthen how you make decisions in choosing typefaces. This knowledge helps you make thoughtful choices, not random selections based only on what you think looks nice. Although aesthetics are important, type and typography involve much, much more.

For a design to consider the question of whether the established visual language of graphic design quashes the chance for other visual languages to exist, Designer Yannique Hall chose the typeface Helvetica (considered by many to be *the* most widespread and neutral of typefaces) (Figure 7.3). “GRAPHIC DESIGN IS ... IS GRAPHIC DESIGN” becomes part of the placard covering the portion of a T-shirt often used for political statements or expressions. The typeface and its typographic play, or wordplay, make a statement that “graphic design is” but also imply a question—“is graphic design.”

The animal shelter logo by Yevgeniya Falkova uses type in another way, its letters blending into an illustration of creatures, creating a friendly feel for the organization (Figure 7.4). Whereas the “GRAPHIC DESIGN IS” placard appeals in a conceptual way, the animal shelter logo appeals to our emotions. The animal faces stare out at us, and chances are, we smile back with empathy.



7.3 YANNIQUE HALL. Design solution in response to a project that asked students to define graphic design as if it were a slogan on a T-shirt.

7.4 YEVGENIYA FALKOVA. Proposed logo for a local animal shelter.



“” *Typographical design should perform optically what the speaker creates through voice and gesture of his thoughts.* —El Lissitzky

Historical Type

Since Johannes Gutenberg (c.1398–1468) first set type for a Bible in 1454, standards concerning type legibility have remained fairly consistent (Figure 7.5). The proper spacing of letters or the handling of column widths and paragraph breaks all continue, learned by each new generation. What has changed most is the technology of type.

Hot lead casts of individually carved letters (**hot type**) and later type produced by photocomposition devices of the 1950s (**cold type**) were made by mechanical means. It wasn't until the early 1980s that digital bits replaced the type previously made with wood and metal or with camera lenses and exposed film. Digital technology has put type much more directly into the hands of graphic designers, who can now manipulate type with a freedom and accessibility never before available.

The professional typesetter's stand and a hand-assembled set of letters are now historic icons (Figures 7.6 and 7.7). To us today, the mechanical processes seem as though they would have been too bulky to have produced sensitive letterforms and compositions, and yet the typefaces and arrangements by many early designers, including Americans such as Frederic Goudy (1865–1947) and Bruce Rogers (1870–1957), were amazingly graceful and functional. The type specimen book designed by Rogers for Goudy's typeface Italian Old Style is a beautiful example (Figure 7.8). Although nearly 100 years old, the piece still looks fresh and inventive. The appeal of the design endures to this day, just as many typefaces themselves have endured. See the Worklist "Typefaces from the Eighteenth, Nineteenth, and Early Twentieth Centuries"—all of which are still in use today because each of the letters possesses careful, intelligent, and lasting form. Type has this potential for enduring quality and appeal.



7.5 Page from Gutenberg's Bible, 1454.



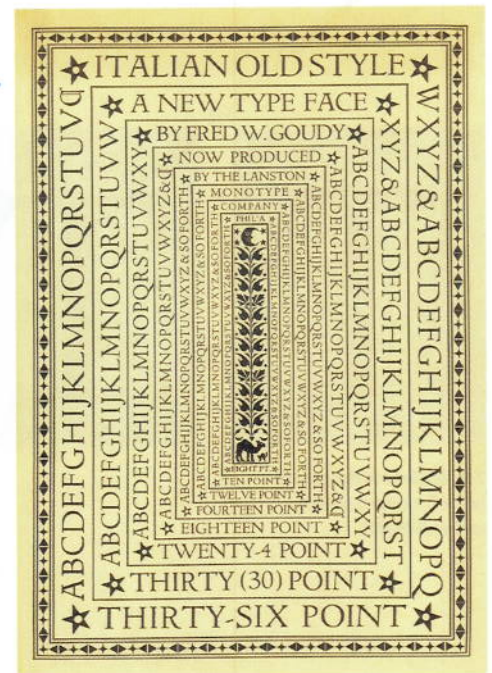
7.6 Typesetter at his composing stand of upper and lower case cast-metal letters.

7.7 Composing stick and metal letters in a type case. Small sections of text were set by placing individual letters in the stick and then transferring them to larger sections of type to create a page.



Photo courtesy Otis Lab Press

7.8 BRUCE ROGERS. Type specimen book designed for Frederic Goudy's typeface Italian Old Style, 1924.



Typefaces from the Eighteenth, Nineteenth, and Early Twentieth Centuries

Caslon | William Caslon (1724)

Baskerville | John Baskerville (1757)

Didot | Francois Ambrose Didot (1784)

Bodoni | Giambattista Bodoni (1791)

FAT FACE | Robert Thorne (1803)

Egyptian | Robert Thorne (1821)

Clarendon | William Thorowgood (1845)

Century | Morris Fuller Benton (1894)

Cheltenham | Bertram Goodhue (1896)

Akzidenz Grotesk | Hermann Berthold (1898)

COPPERPLATE | Frederic Goudy (1901)

Korinna | Hermann Berthold (1904)

Franklin Gothic | Morris Fuller Benton (1905)

Kennerly | Frederic Goudy (1911)

Souvenir | Morris Fuller Benton (1914)

Cooper Black | Oswald Cooper (1920)

Perpetua | Stanley Morison (1925)

Futura | Paul Renner (1927)

Type Classifications

In the early nineteenth century, typeface was classified in an attempt to simplify it. The three main movements—Old Style, Transitional, and Modern—are effective groupings because they correlate so well with printing techniques of their time.

The first classification is for type of the fifteenth and sixteenth centuries. Referred to as **Old Style typefaces**, these early printing types had yet to be inspired by mechanical printing. Instead, they mimicked pen-based letterforms, using strokes with a right-leaning inclination.

By the mid-eighteenth century, typefaces were moving away from their calligraphic past and toward designs that embraced printing technology. These typefaces, called **Transitional typefaces**, were less concerned with mimicking the pen stroke. Instead, Transitional typefaces were drawn with structured and consistent strokes in mind. They bridged the gap between the past and the next generation of more refined, stylized, and modern letterforms.

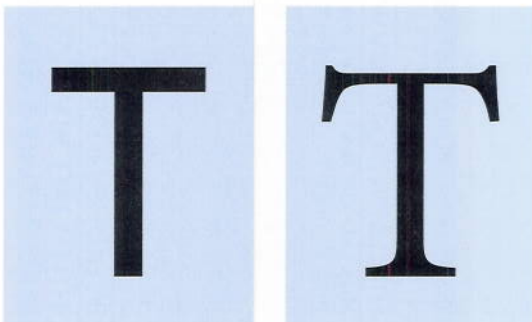
The **Modern typefaces** of the late eighteenth century aren't the same as what we think of as twentieth-century modern. These typefaces made a complete break from the calligraphic past. Their classification is such because of the high contrast between strokes, a uniform and mechanically balanced shape, and horizontal serifs. Modern typefaces opened the door for the relatively abstract “slab” and “grotesque” typefaces that were to come a few decades later.

The first letterforms created by the early Greeks are described today as sans serif (the French word sans meaning “without” and serif from the Dutch schreef meaning “line”). Letterforms were refined by the Romans who found that their chiseled application onto stone monuments was made easier by finishing the coarse ends of each stroke with a smaller, perpendicular stroke. Serifs gave letters visual feet to stand on. They also provided a horizontal alignment of those feet—or **baseline**—for words to run along (Figure 7.9).

Sans serif typefaces were reintroduced by the British as a letterform style in 1816, but were considered grotesque (Italian for “from the cave”) because they lacked the refined serifs. It wasn't until Bauhaus embraced sans serifs for their boldness and simplicity of design that they gained their popularity.

Slab serifs (often called **Egyptian serifs**) are typefaces that have thick rectangular finishes to their vertical strokes. They were created in the mid-1840s when the industrial revolution was in full swing, especially in Great Britain. Mass production increased the need for more advertising, which in turn created the need for bold headline displays using slab serifs that stood out on the page (see Chapter 2).

There has been a strong revival of slab-serif typefaces in the past half century. Slab-serif typefaces generally have thick, block-like serifs that are



7.9 Versions of the capital letter T is sans serif (left) and serif (right).



7.10 A summary of typeface classifications.

► **In Practice:** Old Style and Transitional typefaces tend to work well set as body text because they were designed for legibility and flow. Modern typefaces tend to be used for display purposes, their serifs being too thin for small text sizes.



7.11 Examples of slab serif typefaces: Clarendon Bold, by Freeman Crow for American type foundry; Serifa Black, by Adrian Frutiger; Lubalin Graph Demi, by Herb Lubalin for ITC; and American Typewriter, by Joel Kaden and Tony Stan for ITC.

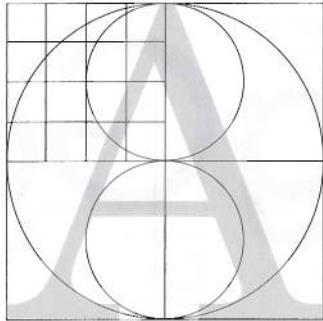
either blunted or angular. They work well for display type, but tend to look awkward as body text. Figure 7.10 summarizes and describes the various typeface categories and provides examples of typefaces that fit into them.

In the 1950s, especially with the reworking of Clarendon Bold by type designer Freeman Crow for the American type foundry, slab serifs were used extensively on Blue Note Records album covers. In the 1960s, Adrian Frutiger's *Serifa* was extremely popular for its challenge to the predominance of sans serifs. Designs made for the International Typeface Corporation (ITC) in the 1970s included two important typefaces that are still popular today. Lubalin Graph, designed by Herb Lubalin, has a clean geometric form that redefined slab serifs. *American Typewriter*, designed by Joel Kaden and Tony Stan, parodies the letterforms and the mechanical process of the typical typewriter (Figure 7.11).

Attempts to classify typefaces and trends that favor some groups over others have continued through the decades. Technology has an impact, but so does pop culture—think psychedelic- or grunge-inspired designs. Typefaces reflect our own faces.



7.12 The capital letter A in Adobe typefaces Stencil and Industria.



7.13 An example of the geometry system that might be used to create a letterform.

Typeface Anatomy

Letters have a basic structure that you rely on to identify or read them. A capital A has a crossbar and a top connection; a capital Z has a diagonal that connects the parallel top and bottom strokes. Within these structures is some flexibility for creative play; for example, a capital A can have a squared-off or curved top. But generally, every letter, both upper- and lowercased, has a basic shape (Figure 7.12).

When you overlay a grid onto a capital (or uppercase) letter A, you can see more clearly the degree of angles, curves, height, and stroke weight (Figure 7.13). Typefaces develop and mimic these details. The goal is to achieve a consistent shape and feel throughout all the letters of a particular typeface. The typeface should look unified, so none of the letters stand out from the others. However, a typeface should be distinct from other typefaces, displaying its own look and personality. Otherwise, it has no reason to exist as an independent form.

Components

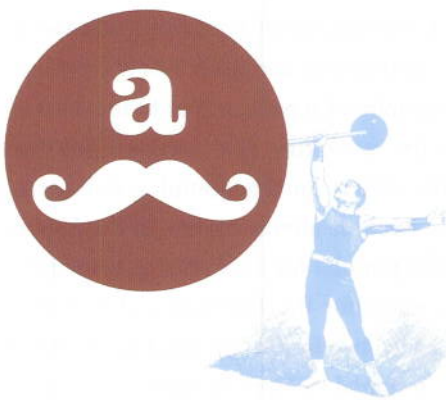
In addition to a typeface's proportions, specific features help letters maintain a consistency with one another (Figure 7.14). These components can be as subtle as a spur (the stroke extending as it finishes) or as blatant as the extended tail of a capital Q. They also designate negative areas, or counters, as seen in the bowl of a lowercase d, or in a growth-like shape, or "ear," in a lowercase letter g. These components help create the overall look of a typeface. A counter or spur might carry through onto other letters, numbers, and even punctuation. For example, the counter in an n will be similar to the counters of the h, m, and u. Particular components are emphasized throughout the typeface, giving it personality and consistency.

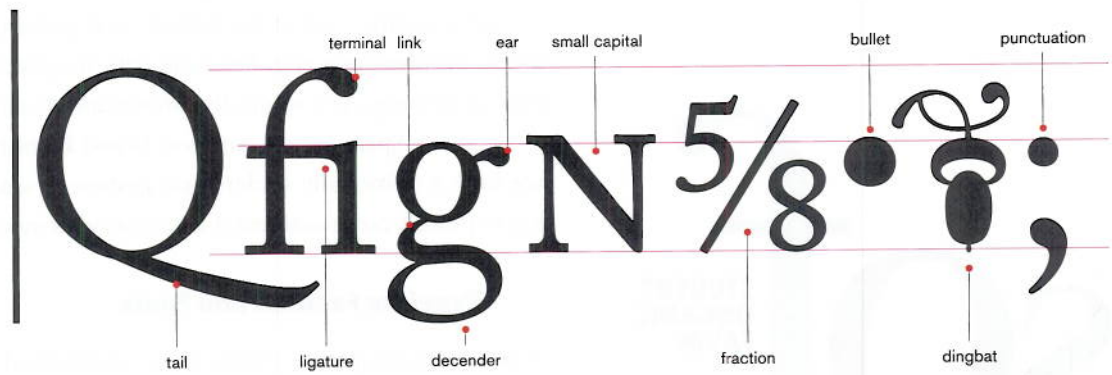
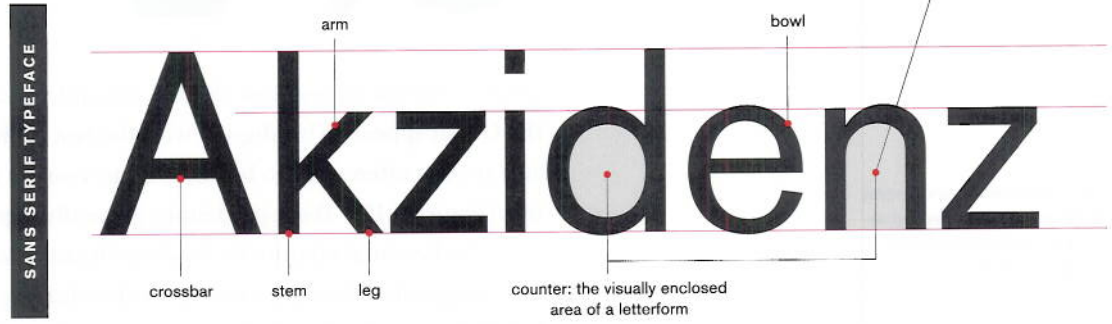
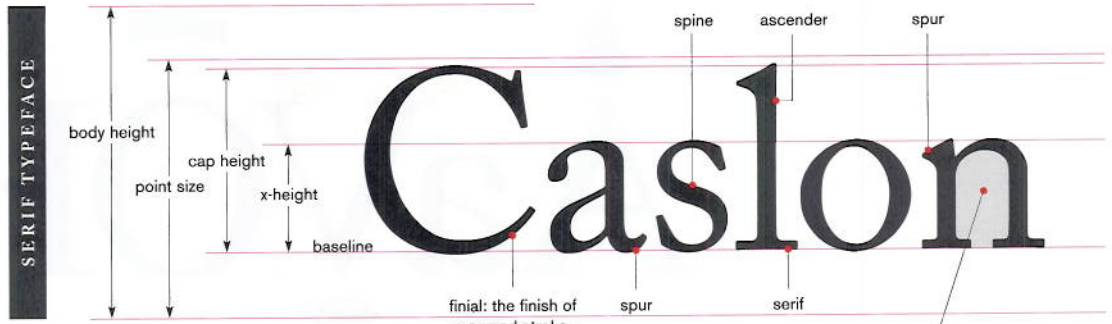
Stress

Letters drawn with a brush or quill exhibit stress angles. As the brush stroke changes direction, the thickness of the stroke changes. The resulting tension between thick and thin is called stress. A calligraphic pen nib exaggerates the effect even further (Figure 7.15). A straight pull downward creates a thick stroke because it uses the square end of the pen or the broadest part of the brush. On the curve, a thinner stroke results because the angle of the nib or brush changes. Part of the fine art of calligraphy is in the control and rhythm of these strokes.

Digitally created typefaces are far removed from the pen nib, but the idea of building in stress remains an important design consideration. Stress helps a typeface achieve personality by making a direct reference to the past, as in a revival typeface. It can also create a vertical, horizontal, or oblique balance as in a condensed, expanded, or italic font (Figure 7.16).

► **In Practice:** *Mid-to-late nineteenth century typefaces had spurs finishing the strokes that mimicked the Victorian era's accentuated styling, for example, in the curl at the end of men's mustaches and the puffy bustles in women's fashion. When designing a typeface, it's a good idea to consider contemporary styles and how your typeface will reflect them.*

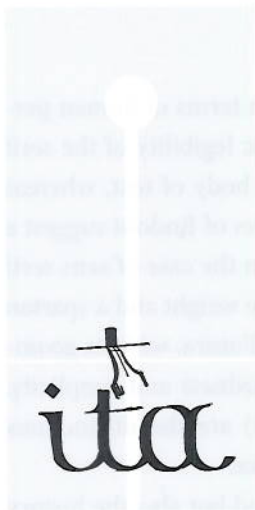




7.14 Components of letterforms that influence a typeface design.

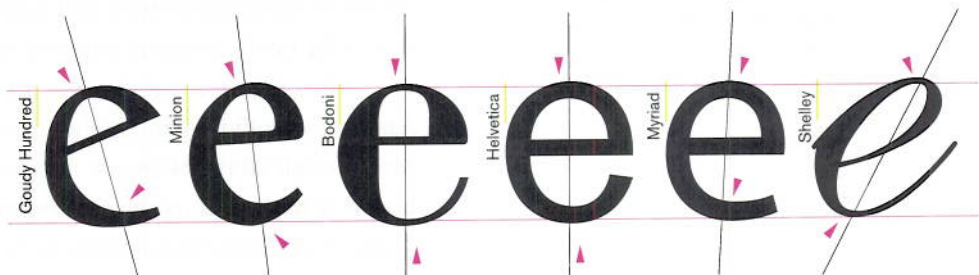
Optical Considerations

At first look, a line of letters seems to be generated mechanically, with letters running along their established baseline. But on closer examination, you can see subtle fixes, which adjust things that might otherwise look awkward. For example, the crossbar in the capital letter H should be positioned slightly above center to look balanced. Similarly, the topmost tip of the capital A should sit slightly above the upper line of letters, as is true for the letters with curves. For example, the top and bottom curves of the



7.15 The pen creates thick and thin strokes depending on the tip's direction.

7.16 Stress angles created by the thick and thin segments of the strokes.





7.17 Enlargements show some of the adjustments needed to visually correct a typeface's curves and strokes.

letter O should extend just slightly beyond the upper and lower lines so the O will appear to be aligned with the rest of the letters. Curves, points, and strokes often need to be adjusted to visually match the rest of the letters (Figure 7.17). These guidelines generally apply to all fonts.

In the visual identity for Student Organic Farm, Kevin James Medlyn has exaggerated the optics to convey the idea of growth (Figure 7.18). The **logotype**, an identity created predominantly with type, appears to sit on a single baseline—cut at the bottom as if growing out of the ground. The letters progressively rise, finishing with the green color that suggests the idea of farming. As a result, the organization's name is more memorable.

In the Speakout on Amazon Brand Identity (Figure 7.19), you can see how a universally understood gesture (a smile) can be brought to a logotype and can transform it into a very memorable logo.



7.18 KEVIN JAMES MEDLYN. Logotype conveying the idea of growth.

Typeface Families and Fonts

Typefaces have qualities that can be understood in terms of human personality. For example, the sure footing and historic legibility of the serif typeface Caslon expresses sturdy practicality in a body of text, whereas the high contrast between the thick and thin strokes of Bodoni suggest a delicate and stylized attitude wherever it is used. In the case of sans serif typefaces, Akzidenz Grotesk has a consistent stroke weight and a spartan aesthetic that reads as bold and efficient, whereas Futura, with its geometry of perfect circles and squares, suggests forwardness and simplicity. These differentiations (both of form and history) are the distinctions designers have to consider when choosing a typeface.

A typeface will not only reflect its time period but also the history that came before it. As you buy, use, and even design a typeface of your own, you will become more and more familiar with these differentiations that make up the amazing and multifaceted world of type.

The collective variations of a typeface make up a **typeface family**. And just as with human families, there are distinctive characteristics that run through all the elements. It's possible that the connection to human bodies is the reason typeface components are called "legs" or "ears" (see Figure 7.14). Such relationships to bodies make typefaces memorable.

► **In Practice:** Whenever using text in your work, keep in mind how very easy it is to make spelling errors or typos that will ruin your project. Double-check all names and dates, and always ask someone else to proofread your work just to ensure that your text is correct. Almost every designer has horror stories of getting something back from the printer and discovering an error in the text. A simple extra proofreading step can prevent many mistakes.



SPEAKOUT: Amazon Brand Identity by Turner Duckworth

A logotype is, as the name describes, an identity made of type, and the amazon.com logo is a great example. Designed by Turner Duckworth, it is a widely recognized visual identity. Two considerations were involved in its redesign. The first was for the redesign not to stray too far from the original so as not to alarm Wall Street or confuse customers. This was solved by simply flipping the underscoring arc into a smile-like arc (Figure 7.19).

The second consideration was to convey the idea that the site had everything anyone would want to buy. Here's where the alphabet came into play. The smile emphasized an idea inherent in the name—the letters *a* and *z*, as in “a–z,” signifying a full array of items. The arc actually points from “a” to “z” and the “z” has an added curve on its baseline to give it a bit of zip (Figure 7.20). The typographic elements all add up to a smart and successful branding concept, from the Amazon.com website to the boxes the items ship in (Figure 7.21). Jeff Bezos, CEO of Amazon.com, is quoted as saying, “Anyone who doesn't like this logo doesn't like puppies.”



7.19 TURNER DUCKWORTH, LONDON + SAN FRANCISCO. The Amazon.com logo before its redesign (top) and after (bottom).



7.20 An arrow points from a to z, representing the range of items for sale on the website.



7.21 TURNER DUCKWORTH, LONDON + SAN FRANCISCO. Logo application to a shipping box. The smile shape is used as a graphic element to extend the identity.



Photo by Catherine Rebets

Philippe Apeloig studied at École Supérieure des Arts Appliqués and the École Nationale Supérieure des Arts Décoratifs in Paris from 1982 to 1985. Apeloig worked as a designer at the Musée d'Orsay in Paris from 1985 to 1987 and as design consultant and art director at the Louvre since 2007. In 1989, Apeloig established his own design studio in Paris. His projects include posters, logos, typefaces, and communication materials for cultural events, publishers, and institutions. Apeloig has produced award-winning poster designs for museums and for cultural events, such as Chicago for the first exhibition at the Musée d'Orsay (1987), Bateaux sur l'eau, an exhibition of ancient models of boats and barges in Rouen (2003), and the recent exhibition Bewegte Schrift at the Museum für Gestaltung in Zurich. He has designed experimental typefaces and has also designed logos for the Museum of Jewish Art and History in Paris (1998), the IUAV (Istituto Universitario di Architettura di Venezia) (2002), the "musées de France" (2005), and "Châtelet," the musical theater of the city of Paris (2006). Apeloig taught typography and graphic design at the École Nationale Supérieure des Arts Décoratifs in Paris from 1992 to 1999 and at the Cooper Union School of Art in New York City from 1999 to 2002. He is a member of the Alliance Graphique Internationale, and his work is in the collections of the Bibliothèque nationale de France in Paris and the Museum of Modern Art in New York.

► **What kind of training in typography did you have?**

I learned calligraphy before I touched upon typography. My teacher in Paris at the École Supérieure des Arts Appliqués introduced us step by step to designing letters by hand. With each shape, we observed their counter-shape—the white spaces inside and between the letters. These silent, negative spaces opened a whole new world of typography for me.

My school's curriculum brought me from the basics to more complex ideas. Now, when I design with or manipulate letters, I consider the type's technical, historical, stylistic, and semantic dimensions. My exploration is really a discovery that has developed in many ways—through travel and meeting other designers, and through the computer. The extraordinary digital speed and versatility has made everything possible and has brought a sense of freshness and freedom. But even with the computer, the most important aspect of typographic design is simplicity.

Why is typography such a profound component of your work?

Typography is a perfect balance between shapes, images, and significations. I am fascinated by the way in which letters can work in unlimited combinations to create form

and meaning. The playfulness and power of designing with letters, to give the reader an unexpected and conceptual approach to what he or she reads, is very important to me.

There is a bridge between typography and fine art because of the complex subtleties they share. I still remember the very first time I saw the *Black Square* (1915) by Kazimir Malevich of the Suprematist Movement and Piet Mondrian's paintings from the De Stijl period. They were great moments of enlightenment for me—I was touched by the materiality of the paintings. The simple shapes organized with a mastery of light and geometric dynamism was something that I had never felt before. Typography shares this straightforward, conceptual, and appealing quality in its strict, geometric vocabulary.

Modern typography opened up a whole world full of aesthetic and intellectual meanings. The idea, the method, and the honesty of expression must be central to any designer who works with type. By following these principles and realizing the goal of communication, typographic design can go beyond pure function and become something fresh and liberating.

How does typography specifically influence your poster designs?

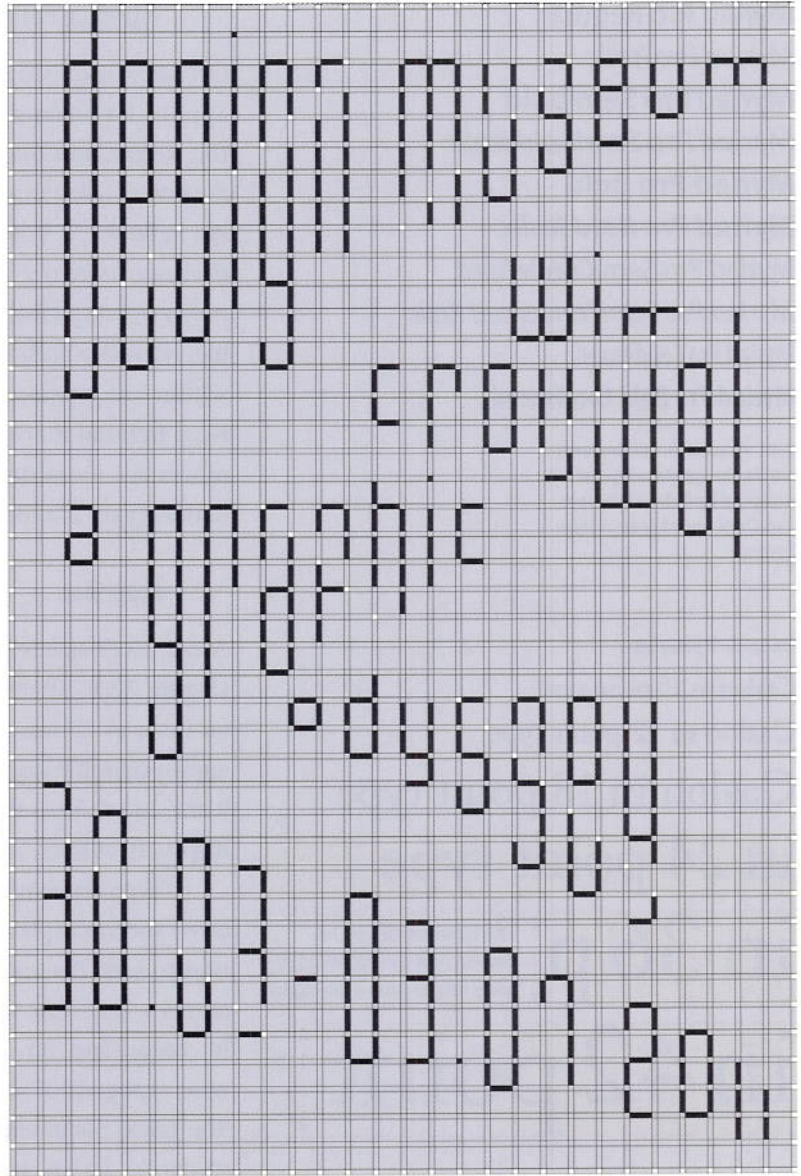
Usually posters are first seen from afar—the experience being more communal rather than

AFRIQUE CONTEMPORAIN- PORAINNE

Vignette 7.1 Logo for Contemporary Africa.

personal (the way books are). They speak and interact with their audience to both attract and communicate. Therefore, a poster's typography is central to its design. It must be lively, readable, expressive, visually arresting, bold, and striking—never neutral or merely decorative.

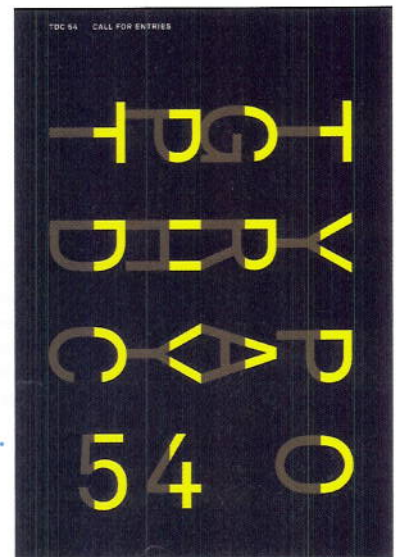
Vignette 7.2 Poster; Wim Crouwel—*A graphic odyssey.*



Vignette 7.3 Poster; *October Makes the Season Dance.*

Vignette 7.4 Poster; *Boats On the Water, Rivers and Canals*, exhibition.

Vignette 7.5 Poster; Type Directors Club (TDC). *Typography 54* call for entries.



Myriad Pro Regular
 Myriad Pro Italic
 Myriad Pro Semibold
 Myriad Pro Semibold Italic
 Myriad Pro Bold
 Myriad Pro Bold Italic
 Myriad Pro SemiCondensed
 Myriad Pro SemiCondensed Italic
 Myriad Pro Condensed
 Myriad Pro Bold Condensed

7.22 A partial list of the fonts within the typeface Myriad Pro, designed by Robert Slimbach and Carol Twombly for Adobe Systems.

Caslon in 7 point type

Caslon in 10 point type

Caslon in 12 point type

Caslon in 18 point type

in 24 point type

in 36 p The typesize (36 pt.) is determined by a letter's full body height plus a smidgen.

in 42 point

7.23 Point size is based on the overall height of a letter's body plus a slight amount of clearance above and below.

Typeface Fonts

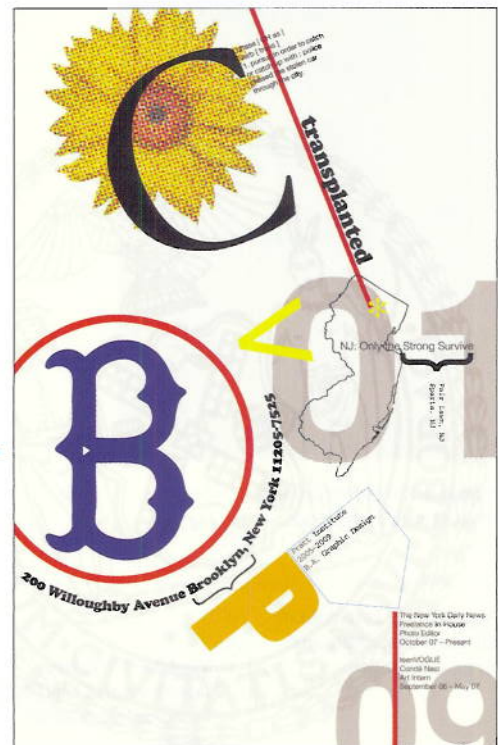
Certain sets of variations within a typeface family are referred to as fonts. Specific font names such as Helvetica Bold Condensed describe the type, the weight, and the stress, in this case bold and vertically oriented, with the letters taller than they are wide. There are similar descriptors for regular, light, italic, bold, black, and expanded. All these variations give the designer more options when using type to express an idea. Within most projects, you probably won't need to use multiple type families, for example, Helvetica with Akzidenz Grotesk and Caslon. The benefit of working within one typeface family is the consistent look it brings (Figure 7.22). Keep in mind that although some typeface families have many variations, others are more limited. You will need to see what options exist when making your choice of typeface.

Type Size

A typeface's size is based on a measurement system of **points** and **picas** (Figure 7.23). There are 12 points in a pica and approximately 6 picas in an inch, or 25 mm. Small point sizes, between 6- and 8-point type, are appropriate for captions and footnotes. For reading text, a size between 9 and 14 points is the standard. For subheads it's 14 to 24 points, and for display headlines, 24 points or greater is practical.

Type size can become the tool for directing the eye around the page, as we see in the playful student piece by Chase Hill (Figure 7.24). In addition to size, the angle, geometry, color and variation in typeface design create a liveliness that energizes the composition. The few images help in decorating an otherwise typographic design. The piece documents the student's design training in a way that a simple typed résumé of information could never match.

7.24 CHASE HILL. Typographic promotion documenting the designer's transplantation from his home in New Jersey to his school's campus in Brooklyn.



Analytic Typography

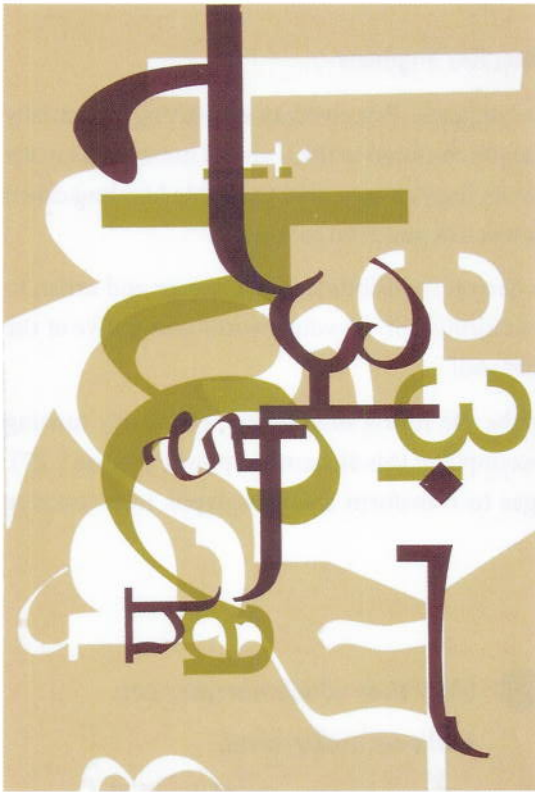
Alphabets are some of the world's greatest inventions. The most complex thoughts can be conveyed by an alphabet's individual letters, combined into words and sentences. Typography can be used to augment this system. Its vibrant form creates additional meaning. But what sort of meaning?

You learned about two kinds of meaning—analytic and metaphoric—in Chapter 3, *Graphic Design Concepts*. Typographic solutions can be thought of in the same way. There are analytic and metaphoric uses of type, and these type-based approaches also overlap each other.

Analytic typography involves arranging text methodically, without the use of direct metaphors. Formal issues such as shape, density, order, and spacing weigh heavily in solving the problem. If there is an interpretation of the subject, it will lean toward the abstraction of the type as a visual image. For example, one can convey an idea through distressed or particularly curvilinear letterforms. This analytic treatment of type should meet standard expectations for readability and legibility—just as metaphoric treatments should, especially in terms of the images they bring to mind.

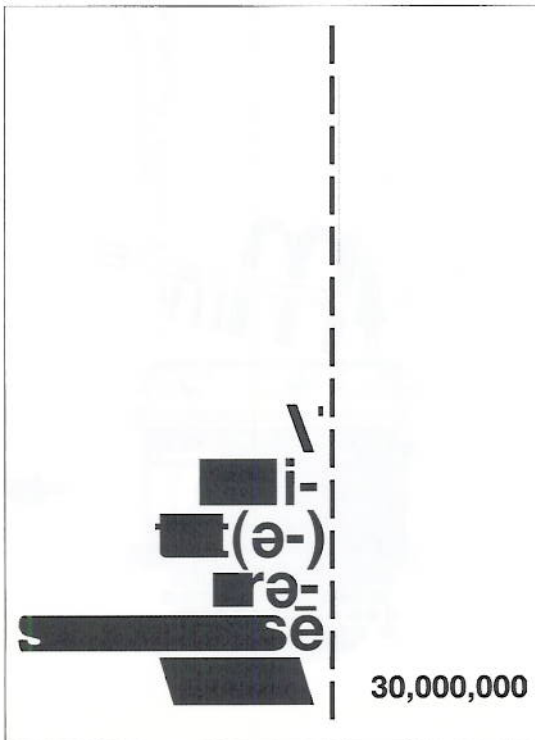
In her typographic exploration, Ambica Prakash fuses roman-style letters with the Devanagari script of the Hindi language, creating a synthesis of the Hindi and English—what the designer refers to as Hinglish (Figure 7.25). Although the idea of overlap and convergence could be explained by composing a lengthy text description, the all-type composition conveys a deeper visual meaning that is understood in a more holistic way using only type to symbolize and inform. This piece is a clear example of analytic type; it uses position, structure, depth, and color without the use of metaphoric interpretation. See the *Speakout* on *Typographic Narrative* as an example of how the treatment of type can be handled in a way to mimic sounds, shapes, and processes.

In another example, a poster by Louis Lim uses the idea of comparison to visualize the issue of literacy in America (Figure 7.26). On the left side sits the word literacy, presented as a coded message. The letters are hidden, canceled, and denied. On the right side is the number 30,000,000—the statistic cited by the National Assessment of Adult Literacy in 2003 for the number of Americans who performed below the basic literacy level for such things as signing a form or adding the numbers on a bank deposit slip. In between is the statement (at a very small font size): “Literacy is the ability to use printed and written information to function in society...” The analytic concept here surmises that literacy has more to do with penetrating a communication system than with simply reading. The single-color, sans serif type, and dashed line all help convey the division between those who can and those who can't.



7.25 AMBICA PRAKASH. Typographic exploration that synthesizes Hindi with English; Indic scripts with Western letterforms.

7.26 LOUIS LIM. Literacy poster that makes an analogy between a coded word (literacy) and the 30,000,000 Americans who can't read it.



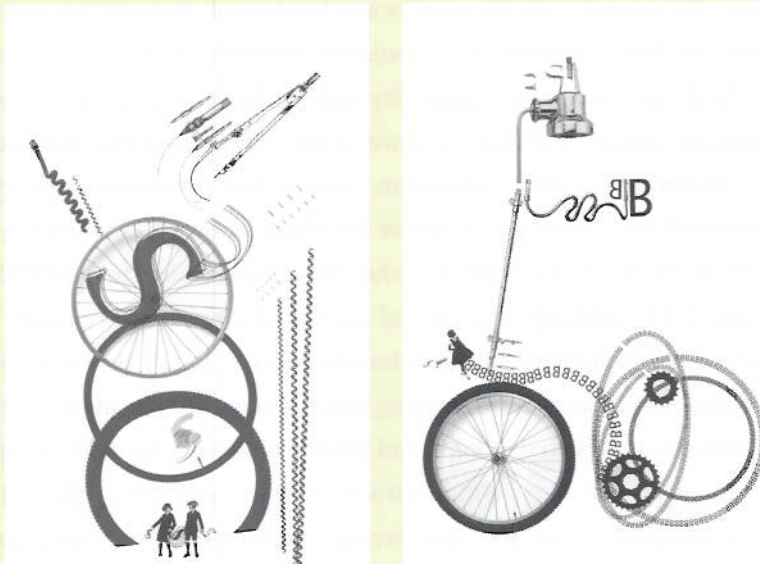


SPEAKOUT: **Typographic Narrative** by Joshua Ray Stephens

Many ancients were intuitively skeptical of written language. Perceived as something potentially dangerous for individuals to possess, writing was initially confined to the realm of mercantilism, for keeping records such as stored and traded foods. But its implicit potential to enable handing down ideas and stories from generation to generation was just too powerful to resist.

I suppose I have a bit of the ancients in me. I feel a deep responsibility, as a designer and artist, to treat the written language with piety, but also as a wondrous gift. So when words come alive at the hands of a gifted design student, it truly electrifies my soul.

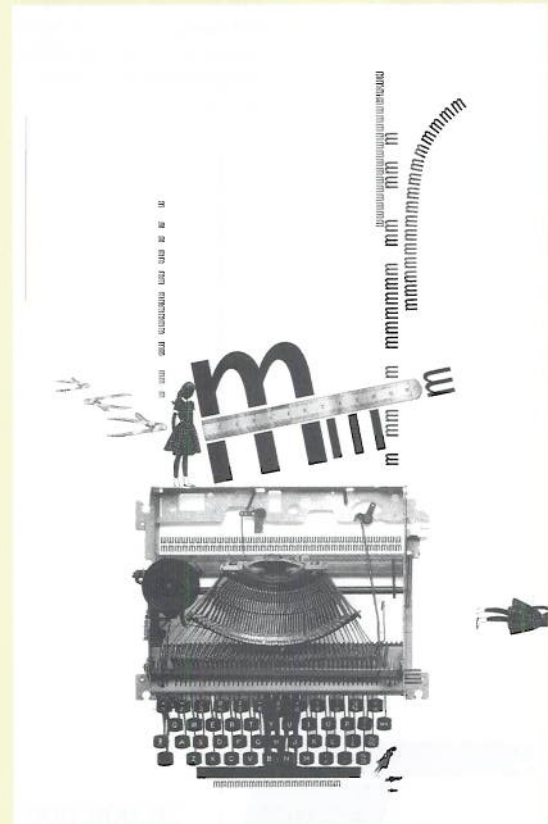
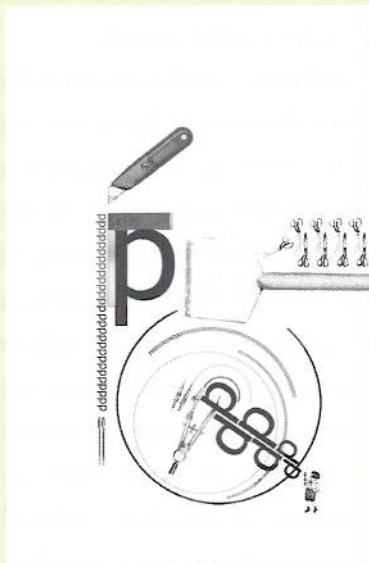
Typography is an alchemical paradox that can breathe life into a single letter, effectively turning thought into gold. Wonji Park's student work is an example of this alchemical power (Figure 7.27). Her playful creations use letters, images, and shapes to transform abstract glyphs into concrete expressions of fearless spirit.



“” *Only that which narrates can make us understand.*

—Susan Sontag, *On Photography*
(New York: Farrar, Straus and Giroux, 1977)

7.27 WONJI PARK.
Typographic experiments
that use single letters to
initiate narratives.

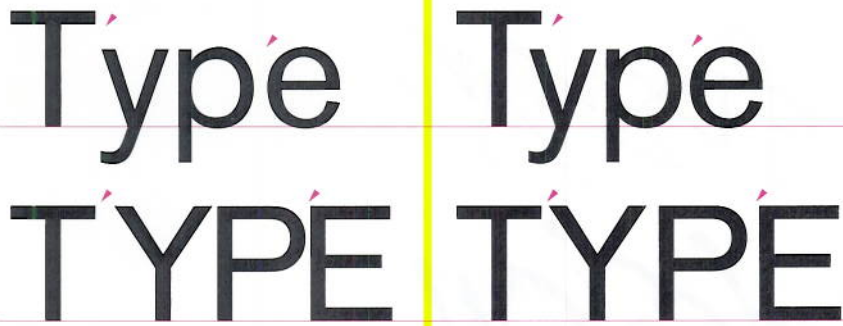


Readable Texture

Notice the block of text you are reading right now. Just look at its form instead of reading it. Is there a tactile quality on the page? The gray value of the block of text against the white background should suddenly become more noticeable. Look at it in relation to the other elements on the page—the figures, the page numbers, the footer, the margins, and so forth. Do all the parts work together harmoniously to deliver a clear message?

Drawing the reader in with aesthetics is integral to readability. Every individual letter, the space between letters—microcosms within the larger formation of type—combine in ways that give a visual weight to areas of text. The typeface Garamond is different from Times, which is different from Futura, which is different from Helvetica. Each will create a different sense of weight and texture that will emphasize its particular typeface “personality.” Letter spacing, leading, and alignment are specific elements of readable texture that influence how any particular typeface will read.

► *In Practice:* Be careful to use regular apostrophes (') and quotation marks (" ") where appropriate. Often, software will transpose these marks in to vertical marks that are really symbols to show measurements for inches (") and feet (').



Type Type
TYPE TYPE

7.28 Creating an even and consistent visual rhythm within a word is based on the counters between letters.

7.29 There is a distinction made between hyphens and dashes based on how they are used.

- Hyphen: joins words and separates syllables in a word
- En dash: the width of a font’s capital N (represents the concept of “to,” as in 19–20)
- Em dash: the width of a font’s capital M (used to separate thoughts within a sentence—you see what I mean?)

Letter Spacing

Adjusting the space between letters and words is done through a process called **Kerning**. The more space there is between the elements, the lighter the feel; the less space, the heavier the feel. A typeface designer predetermines this space, but a graphic designer can make further adjustments to the individual pairs of letters, fine tuning the spacing between them to

work perfectly within the set space of the page. A process called **tracking** is used to create consistent spacing within a group of letters. Generally, kerning and tracking adjustments are made to display-sized headline settings, especially in the case of capital letters, where inconsistencies are more apparent. In Figure 7.28, the kerning issues between the letters t and y are quite clear. Inconsistent kerning and tracking can make a design look amateur or clumsy.

In addition, type uses two units of measure within its point system called **em** spacing and **en** spacing. Em spacing is proportioned to the width of a capital M and en spacing (generally proportioned to the width of an N) equals one-half of an em space. The em is further divided into units used to calculate precise adjustments. Kerning and tracking changes are measured in thousandths of an em space. The em and en spacing is also used to create two kinds of dashes that are commonly used in text (Figure 7.29).

Letter spacing also applies to hand-drawn letters. In the Speakout on Casual or Spontaneous Writing, Paul Shaw explains how letters created by hand can be refined by letter spacing.

~~Orange~~

Orange

Orange

7.30 PAUL SHAW. Calligraphic examples created on the same paper—Arches MBM. The ink used was Higgins Eternal. Individual letters were cut out and reassembled to produce a rendition that is rhythmic and lively.

Orange

EYE DROPPER 1

design

EYE DROPPER 2

design

COLA PEN 1

design

COLA PEN 2

design

OLD TOOTHBRUSH

design

NEW TOOTHBRUSH

design

DOT MARKER

design

Q-TIP

design

GRAPHITE STICK

design

FELT PEN

design

7.31 PAUL SHAW/LETTER DESIGN. Ten renditions of the word *design* created with ten different tools.



SPEAKOUT: Casual or Spontaneous Writing by Paul Shaw/Letter Design

Casual or spontaneous writing at its best is often neither casual nor spontaneous but laborious and carefully contrived. It is an illusion. It can be accomplished with mechanical tools (3M Magic tape, whiteout, razor blades, and felt-tip markers) or digital ones (scanners and illustration programs) or both. But it must start with the basics: writing tools, liquids, and papers. The first step is to write out the text over and over again. But do not expect to achieve a single perfect rendition. Instead, work on the overall rhythm and focus on difficult letter combinations. Then mark the portions of each version of the text that are the best. Next, cut out each one and reassemble the text, all the while maintaining a pleasing rhythm (Figure 7.30). Horizontal rhythm is the result of balancing the space inside the letters and between the letters. Do not expect a consistency of type. Sometimes the rhythm needs to be livelier than a two-step or a waltz; a Lindy Hop, Charleston, or something exotic such as a tango is more in order. Vertical rhythm is also important. It is achieved by adjusting the baseline as well as monitoring the length of ascenders and descenders. Do not leave letters as they emerge from your writing instrument. Be willing to lightly retouch them to delete an errant stroke, smooth out a curve, or balance negative space. The only thing that matters is that the final result looks spontaneous.

The writing tools available today include dip pens (with both broad and pointed nibs), brushes (pointed, flat, stencil), ballpoint pens, felt-tip pens, gel pens, China markers, oil crayons, pastels, charcoal, colored pencils, spray paints, and so on (Figure 7.31). There are also other tools and ordinary objects that can be used for writing: ruling pens, tongue depressors, Q-tips, eye droppers, toothbrushes, lipstick, fingers, and more—even credit cards!

Writing requires not only tools but also liquids and surfaces. A variety of inks and paints can be used with dip pens, brushes, and ruling pens. Each has different properties of flow, absorbency, and opacity. For all tools the writing surface is crucial. Papers can be smooth (even slick), rough, corrugated, or absorbent. Non-paper surfaces such as Styrofoam, cloth, plastic, and even glass can be used to write on. The different surfaces affect gestural movement and speed which in turn influences the rhythm of writing.

In the end, successful casual writing is the result of experience combined with a willingness to experiment.

Casual or spontaneous writing at its best is often neither casual nor spontaneous but laborious and carefully contrived.

Papers can be smooth (even slick), rough, corrugated, or absorbent. Non-paper surfaces such as Styrofoam, cloth, plastic, and even glass can be used to write on.

9/11 Myriad Pro Regular

At arcimpe lignis re, tem verchicia volupta tatur? Rate ilitaquat. Libeaquis debisquia plaut illibusdam, ut resersped et eat et quia dolum, cullabo rectempor sed et magnimil ilit volum solorep taectus moluptaquam est, si nobis quibea debis.

10/12 Myriad Pro Regular

At arcimpe lignis re, tem verchicia volupta tatur? Rate ilitaquat. Libeaquis debisquia plaut illibusdam, ut resersped et eat et quia dolum, cullabo rectempor sed et magnimil ilit volum solorep taectus moluptaquam est, si nobis quibea debis.

10/14 Myriad Pro Regular, tracking +50

At arcimpe lignis re, tem verchicia volupta tatur? Rate ilitaquat. Libeaquis debisquia plaut illibusdam, ut resersped et eat et quia dolum, cullabo rectempor sed et magnimil ilit volum solorep taectus moluptaquam est, si nobis quibea debis.

7.32 The setting of text blocks is optimized when the designer balances legibility with aesthetics. The words and leading in the 10/14 Myriad Pro Regular with +50 tracking is too loose a setting for reading comfort here.

At arcimpe lignis re, tem verchicia volupta tatur? Rate ilitaquat. Libeaquis debisquia plaut illibusdam, ut resersped et eat et quia.

24pt

12pt

Da porrorum quibus alit pero blam, accuptatum aut is enienmagnate mporpos qui con et rendantur si con ne volorep ernat.

18pt

6pt

Bus alibusd aeptatur, sae volorum rae praturepro ilibusci sint derrore pelenda enisi odipiet quis delecer chiligenda cus excestis aut quia.

Invereped est molore occum il ipid milibusam ea verorio est, volupta quibus simendandis voloreptatem quidel et duciliq.

Bereperunt. Rum volores eost, consequ odignimporae velluptia im eiumqui deniend ellest.

7.33 Paragraph spacing separating text blocks in three conventional ways: full line space (24 pt), half line space (18 pt), and indent space (18 pt).

Leading

The third variable of readability is distance from one baseline of text to the next. This spacing is called **leading** because, during the age of hot type, a strip of metal was actually inserted between lines of lead type to increase vertical spacing. Most computer layout applications automatically add a space between the lines, but designers can make their own decisions about the size of that space and can adjust it manually.

The same sizing system of points is used for leading. A few points of leading are added between the lines of body text. For example, 9 point or 10 point Myriad Pro type, with the addition of 2 points of leading—expressed as 9pt/11pt or 10pt/12pt—makes for a comfortable read. Adding more leading lightens the text block visually. Tracking will also lighten a text block, but when either leading or tracking are pushed too far, they begin to diffuse the type, causing legibility problems (Figure 7.32).

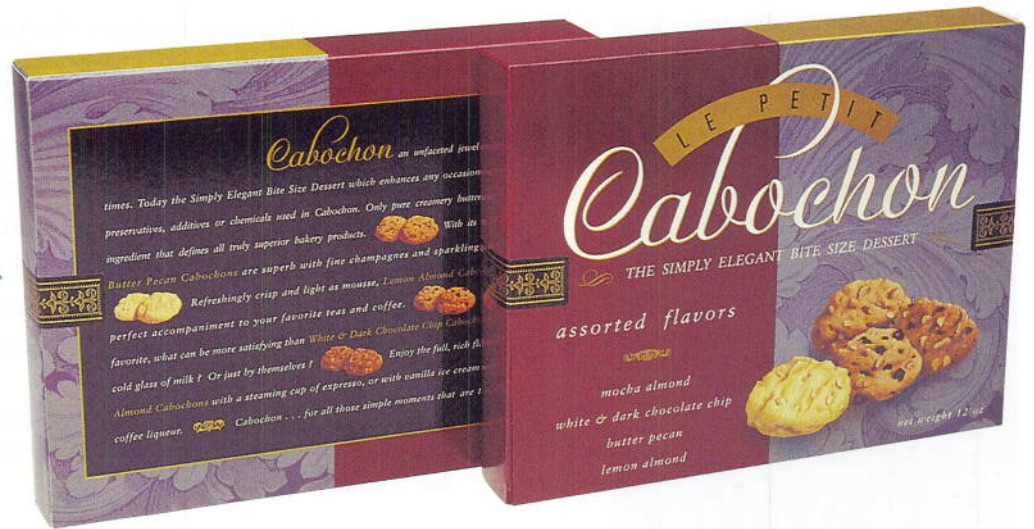
► *In Practice:* Running body text is usually set without adding extra tracking. A typeface already has kerning built into each pair of letters, but a graphic designer can make minor adjustments to spacing. An example is a word set in capital letters where a consistent rhythm is desired beyond the default of the typeface; for example, in the word SPACING, the +80 word tracking evens out the letter spaces.

Paragraph Spacing

There are many different ways to separate blocks of text into paragraphs. Traditional ways to break two paragraphs apart are to insert a full line break (a space equal to the height of a line of text); to insert a half line break, in which the space after a paragraph is half the leading (for 9/12, the half line break space would be 6 pt.); or to indent the first line of each paragraph (Figure 7.33). More unconventional ways include separation with rules, small graphics, or color. Each option has an impact on the overall look of the page and the sense of balance between the blocks of text.

In an example of cookie packaging, Chiu Li Design used type, leading, and paragraph spacing to bring hierarchy and order to the printed information in a way that is quite Baroque (Figure 7.34). The design choices also add to the overall message of the product—traditional, tasty baked goods. On the front of the package, what is normally an informational description of the contents shifts toward the promotional using a scripted logo, centered text, and colorful graphics. The same is true for the back, with heavily leaded text and cookie images inserted for paragraph breaks.

7.34 CHIU LI DESIGN. Package design in which the text about the product and product itself (cookies) intermingle.



9/11 Myriad Pro Regular, Justified Column

Itatis nullor alibusc iusapicae venes pratin con pa sum as eos int verum eostionsed qui atiat eaquid molores elisqui sant este porepra quam hari aturent as dolorum alitia ipsapienis autem ratem qui doluptibus, que vit alique voluptae volupit aquodis minti consed excesciet eicimet vellibeat qui vel ipsam quae con et, cum, unt et ut ipsum et

9/11 Myriad Pro Regular, Flush Left, Rag Right Column

Itatis nullor alibusc iusapicae venes pratin con pa sum as eos int verum eostionsed qui atiat eaquid molores elisqui sant este porepra quam hari aturent as dolorum alitia ipsapienis autem ratem qui doluptibus, que vit alique voluptae volupit aquodis minti consed excesciet eicimet vellibeat qui vel ipsam quae con et, cum, unt

9/11 Myriad Pro Regular, Flush Right, Rag Left Column

Itatis nullor alibusc iusapicae venes pratin con pa sum as eos int verum eostionsed qui atiat eaquid molores elisqui sant este porepra quam hari aturent as dolorum alitia ipsapienis autem ratem qui doluptibus, que vit alique voluptae volupit aquodis minti consed excesciet eicimet vellibeat qui vel ipsam quae con et, cum, unt

9/11 Myriad Pro Regular, Centered Column

Itatis nullor alibusc iusapicae venes pratin con pa sum as eos int verum eostionsed qui atiat eaquid molores elisqui sant este porepra quam hari aturent as dolorum alitia ipsapienis autem ratem qui doluptibus, que vit alique voluptae volupit aquodis minti consed excesciet eicimet vellibeat qui vel ipsam

7.35 Legibility is balanced with aesthetics when typesetting. Alignment possibilities (above) use 9/11 Myriad Pro Regular.

Text Alignment

Most readers don't realize the effect that text column alignments can have and may even assume they don't matter. Yet when alignment is combined appropriately with typeface choice, leading, and paragraph spacing, the result is text that is readable and has personality. Two basic aligning concepts apply: **flush** (aligned evenly with the margin) and **rag** (unaligned so words can flow more naturally).

The four examples in Figure 7.35 show how legibility can be balanced with aesthetics to create a tone. In the top example, the column is **justified** (flush with left and right margins). The feeling is clean and precise. The second example is a flush left, rag right text column. The rag on the right feels a bit freer and brings some airy white space to the page. It also has a built-in contrast—aligned versus unaligned.

The rag can also be switched to rag left, flush right, as in the third example, although a rag left alignment decreases legibility, making it difficult to find one's place when reading line to line. Yet being set rag left can work quite successfully if its usefulness in a layout supersedes legibility. It suggests a sense of rebellion against convention.

A similar legibility issue can be true for a centered column (fourth example). Ease of finding the next line in a sentence is somewhat compromised, but symmetry can add a poetic feeling, especially in short amounts of text such as a poem or announcement. In the left side of the fourth example, justified centered columns also present issues with the spacing between letters, especially if your text includes long words. Your computer will use programmed algorithms to determine spacing that keep the lines

...the worshipper of Nature's divine
 both of which placed him in a perpet
 state of sin against God. Moreover, t
 artist's eerie eccentricities projected
 mittedly demonic aura: DaVinci exh
 corpses to study human anatomy; he
 mysterious journals in illegible rever
 handwriting; he believed he possess
 alchemic power to turn lead into gold,
 even cheat God by creating an elixir
 postpone death; and his inventions in
 cluded horrific, never-before-imagin
 weapons of war and torture. Even D.
 Vinci's enormous output of breathta
 christian art by furthered the artist's
 ation Dan Brown hypocrisy. Accept
 hundreds of lucrative Vatican pro

7.36 ARMANDO DIAZ.
 Proposed book cover design
 for *The Da Vinci Code*.

justified on both sides, but those algorithms might leave uneven gaps in your text, as the red arrows in the figure indicate. You have to go back through the text and adjust spacing and line breaks to even out the white space. Centered columns, flush left, rag right (bottom right example) tend to produce more readable text with fewer spacing issues.

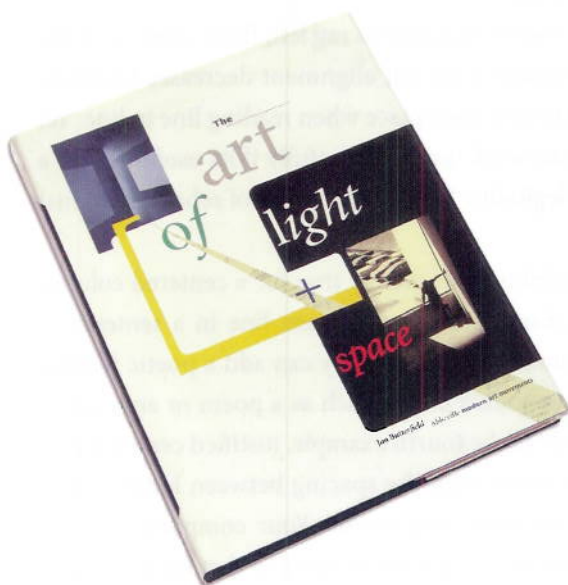
Every individual letter, every word, and every block of text has all the elements discussed in Chapter 6—line, shape, negative space, balance, rhythm, and direction. Designers must train their eyes to look at text not just as word information but also in terms of design elements.

► *In Practice:* Typically at least seven words per line are required for a justified column to avoid word spacing problems, or for a rag left or rag right column not to have too many hyphenations.

The proposed book cover design by Armando Diaz uses alignment as part of a typographic idea to communicate the book's premise (Figure 7.36). The reader must decode the words that are formed from highlighted text to understand the title and the idea simultaneously. The left and right alignments are the edges of the book, so the type bleeds (runs off the page), further engaging readers by forcing them to interact with it. Typography alone becomes the cover design, independent of images. Image-only designs are usually less successful because images usually need type to help convey the message.

For the book *The Art of Light and Space*, the subject of artists using light and space as media became the inspiration for the cover and the layout (Figure 7.37). The designers at Worksight used a single justified text column wrapped around photos and sidebars—the seeming randomness of the layout was a reflection of methods that the artists themselves used to create their art.

7.37 WORKSIGHT. Cover and
 book interior design for *The
 Art of Light and Space*.



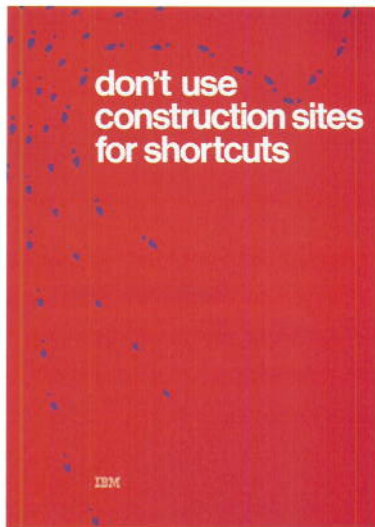


7.38 JOHN LEPAK. Proposed logo for Botanica florist shop.

For a florist shop called Botanica, John Lepak used a single letter b to identify the business (Figure 7.38). The monogram reverses to white from an overlay of abstract flower-like petals. The connection to a real flower is just enough to make it identifiable. The biomorphic shape is contemporary in its approach; it distances itself from traditional plant and flower shops that typically use script typefaces. In addition, it doesn't use the clichéd image of flower bouquets. The designer found a way to give a special identity to this particular shop, so customers perceive it as being a bit more contemporary in its aesthetics, with a bias toward science rather than romance.

Humor can also become a part of analytic concepts that include both text alignment and directional flow to convey an idea. Eli Kince's poster instructing pedestrians not to use construction sites as shortcuts runs a set of messy footprints around flush-left text to illustrate the problem (Figure 7.39). The poster is authoritative and succinct, but also funny.

► *In Practice:* Humor is a way to both engage the viewer and soften the imperative command.

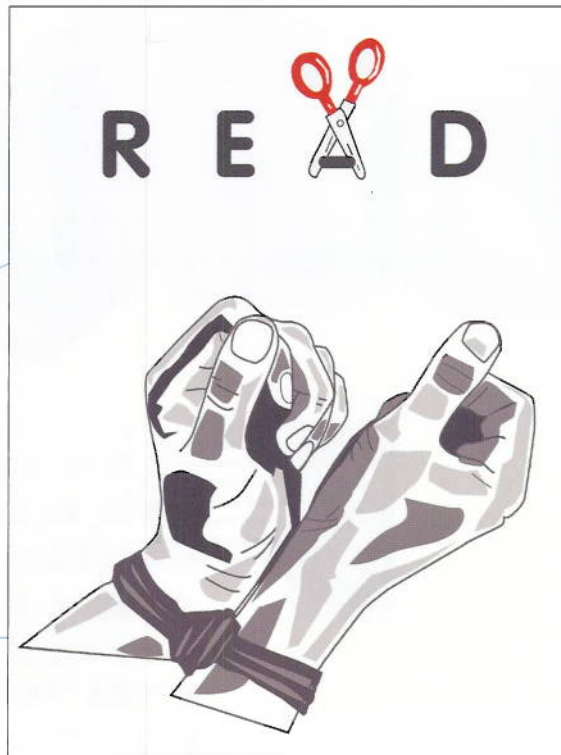


7.39 ELI KINCE. Poster that instructs the public not to use hazardous shortcuts.

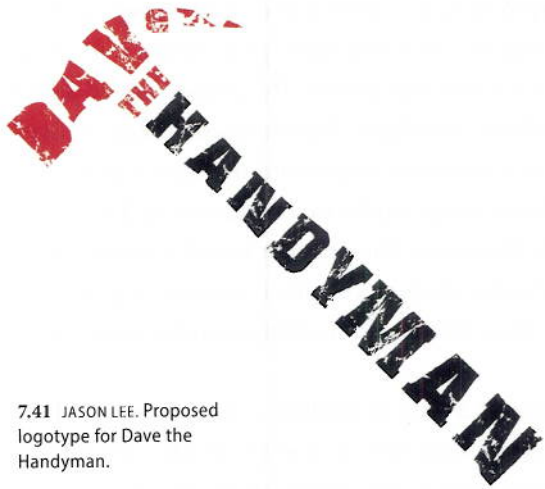
Metaphoric Typography

Metaphor and typography can combine into a singular force that speaks. The literacy poster by Mariana Silva is an example (Figure 7.40). A person's hands have been bound together, and above them the word READ is shown with scissors that replace the letter A. Together they suggest the means of escape from bondage. We immediately understand that reading

can free one to do more, but the designer has added some depth to the piece by making it apparent that it would take quite a bit of work with the scissors to cut the cord, suggesting that reading takes effort. The poster is loaded with elements used as meaningful symbols, begging for action.



7.40 MARIANA SILVA. Poster promoting literacy as a kind of personal freedom. The word READ is typographically montaged with a pair of scissors to solidify the idea.

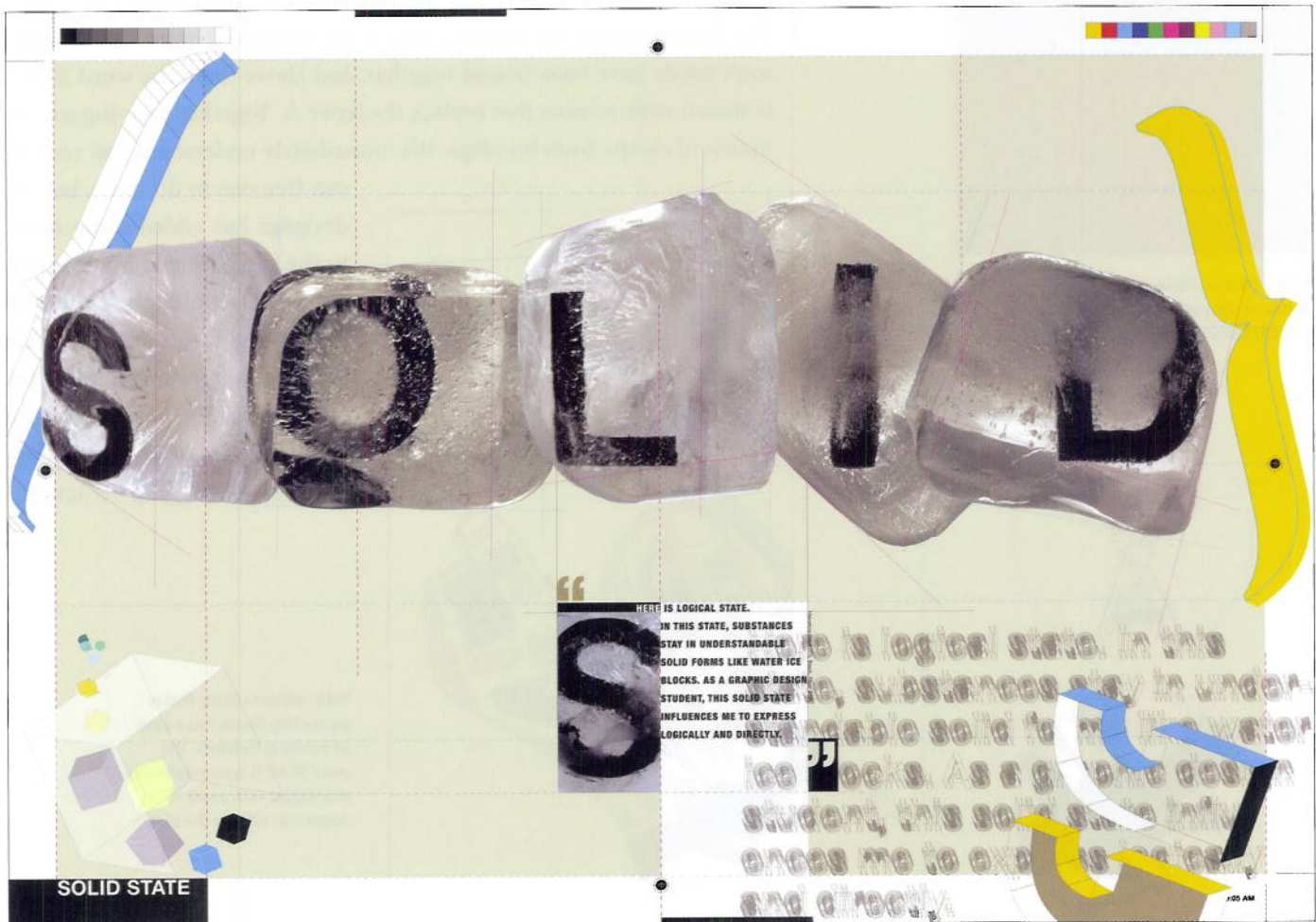


7.41 JASON LEE. Proposed logotype for Dave the Handyman.

The double-duty of reading and meaning becomes especially apparent with metaphoric typography. In the proposed logotype for a handyman, created by Jason Lee, the type morphs into a symbolic tool—a hammer as metaphor for the handyman business (Figure 7.41). Analytic hierarchy is created through position and color, the name Dave having first priority as a red hammer head, The Handyman having second priority as handle in sturdy black. Overall, the letters have the distressed look of a well-worn tool.

In another use of metaphoric typography, this time to interpret an abstract idea, design student Changsoo Choi conveys his approach to design. The construction of frozen letters symbolizes the goal of stabilizing the meaning in a communication (Figure 7.42). The design uses brackets, color bars, and register marks to emphasize the thought. Choi has taken liberties with a text column positioned below—the flush-left line sits tight against its edge, further suggesting his role as an experimenter.

7.42 CHANGSOO CHOI. Visual statement exploring the student's design process.



“” Often typography is the main or only graphic element in a design. This is a common solution when the subject matter is too broad or complex.... Letterforms are inherently more abstract than pictures, consequently more useful for this kind of problem.
—Milton Glaser



7.43 Black tape is used to create door numbers. This tape type, when seen as an experiment, triggers ideas for designers that break self-imposed constraints of proper typography.

Vernacular Inspiration

Imagine exploring your downtown neighborhood in a search for hand-drawn typography. What would you find? Most likely, you would see inventive uses of the available tools and materials—chalk, tape, plastic letters, spray paint. And the signs and banners would also reveal something else—the particular cultures of the people who made them. This unorthodox, local language is what designers refer to as the “vernacular.” They are seen as experiments that don’t fit the rules because, in fact, the people who make this vernacular typography haven’t been taught the rules (and probably don’t care about them either).

Yet the pieces are quite experimental and creative in their own way—for example, letters and numbers spray-painted, cut out of wood, or reconstituted from preexisting signs. The designs are based on the purely practical, the need to communicate some necessary information, and at the same time, they are filled with character. In the example in Figure 7.43, black tape was used to create a numbered street address. The solution is simple, the numbers are spontaneously constructed, and yet, this “tape type” maintains a consistency similar to that of a carefully designed typeface! The same is true for the template used to create the number 13 on the wall of the parking garage (Figure 7.44). Was it the result of a lack of white paint or mere indifference to the number covered over? In either case, the resulting typography varies substantially from what we might normally expect to see.



7.44 One number is canceled out by another painted over it. The cancellation is humorous because we see how the need for white paint was avoided.





7.45 BARRY DECK. A type sample sheet for the designer's typeface Template Gothic.

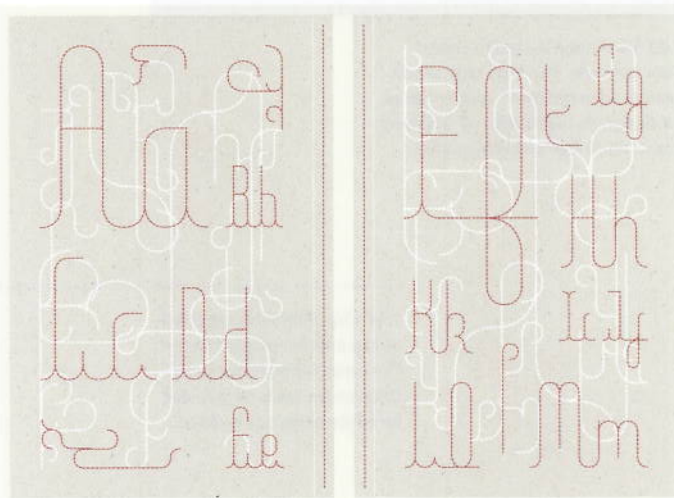
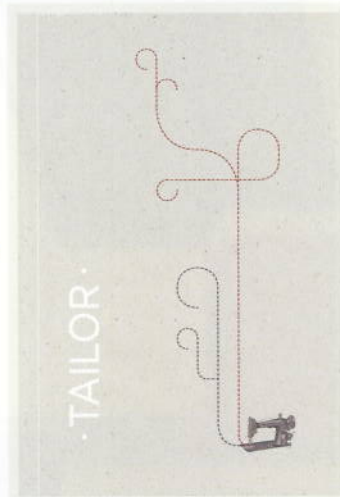
The vernacular is, in fact, an abundant well of experimentation seen in every city, neighborhood, and street, offering something unfamiliar or, perhaps, even peculiar. The typeface Template Gothic, designed by Barry Deck in 1990 after graduating from CalArts, was inspired by a stenciled Chinese Laundromat sign (Figure 7.45). Encouraged by his teacher, the well-known designer Ed Fella, Barry created an entirely new typeface by filling in the stencil spaces. In Barry's words, the typeface "reflects more truly the imperfect language of an imperfect world, inhabited by imperfect beings." In use, we see how Template Gothic, and other typefaces in this genre, offered designers like Rudy VanderLans an edgy alternative to conventional typefaces (Figure 7.46).

But the vernacular can also inspire processes not normally associated with design and letter making. The typeface Tailor, designed by Terrence McCarthy while a student at Pratt Institute, derived its form from sewing machine stitches (Figure 7.47). Interconnected and consistent, it's hard to believe that the letters weren't actually made with a sewing machine. But it was, in fact, the designer who found the way to make each form consistent and to make it all work cohesively as an evocative new typeface.



7.46 RUDY VANDERLANS. Emigre Recording Artists promotional poster for the band Every Good Boy, using Template Gothic typeface

7.47 TERRENCE MCCARTHY. The typeface Tailor that mimics a sewing machine's stitches.





7.48 CHANGSOO CHOI. Helvetica poster pairing hair with Helvetica to explore how a neutral typeface can be used expressively.

Recontextualizing Type

Recontextualization is an inherent process in graphic design through which elements, signs, and meaning are introduced into a new context. For example, a 300-year-old typeface originally created for use in books might now find itself as part of an advertisement or cell phone screen—a context never dreamt of by its original designer. Unexpected pairings work well in design solutions. The montage technique discussed in Chapter 3 (for example, the jellybean montaged with a jawbone) is just as useful in merging typefaces (for example, a serif with san serif). In two separate projects, type is montaged with an image into a somewhat surreal context. Both designs share the idea that the typeface Helvetica can be recontextualized from its neutral state into a more dreamlike one. The first experiment by Changsoo Choi pairs Helvetica with a strange bedfellow, human hair (Figure 7.48), drawing the viewer in through its intriguing contrast of straight-edge letters and curvilinear hair.

The same contrast occurs in the hand-drawn blend of biomorphic growth with Helvetica (Figure 7.49). Inva Cota created a dynamic fusion of plant and letter forms. Like a sturdy gate covered with ivy, this usually structural typeface has become more inviting and personal in a way we might not have imagined it could.

In the Speakout “Designing a Typeface,” Jonathan Hoefler explains type design as having its own montage in which the microscopic and macroscopic converge, the result of which is a distinctive but unified set of letters.

7.49 INVA COTA. Biomorphic growth covers Helvetica’s letterforms in this typographic exploration.





SPEAKOUT: **Designing a Typeface** by Jonathan Hoefler (Hoefler & Frere-Jones)

Robert Bringhurst famously observed that type design is an art in which the microscopic and macroscopic constantly converge. That's very true for the way in which typefaces are developed: at every stage, it's not merely letterforms that are being examined, but the ways in which they work together (Figures 7.50, 7.51, and 7.52).

We usually start a typeface by drawing a handful of characters that suggest the general direction that the design will follow. A capital H and O embody the basic distinction between flat and round letters, and the lowercase letters n o p h a will describe the overall dimensions of a font—its flat and round shapes, its width (and the degree to which its character widths will differ from one another), the height of its lowercase letters, and the lengths of its projecting strokes (for example, a descender in the p, and an ascender in the h). The lowercase a is often a telltale character since it can be constructed in any number of ways; most fundamentally, it can be a single-story “ball-and-stick” design or the more traditional two-story shape. The size of its enclosed aperture will inform the proportions of other characters such as e and g, and the way in which its topmost stroke terminates will become a theme for other related characters: a “ball terminal” [see Figure 7.14] here will recur in the letters fgry, and perhaps later in the numbers. Taken together, its topmost and bottommost strokes will suggest the kinds of gestures that the font will make—whether they're introverted or extroverted and how fussy their details will be. It often takes several more characters to establish concretely that the design is following the right path: some designs start out with a beautiful a, but can't seem to accommodate a sympathetic g.

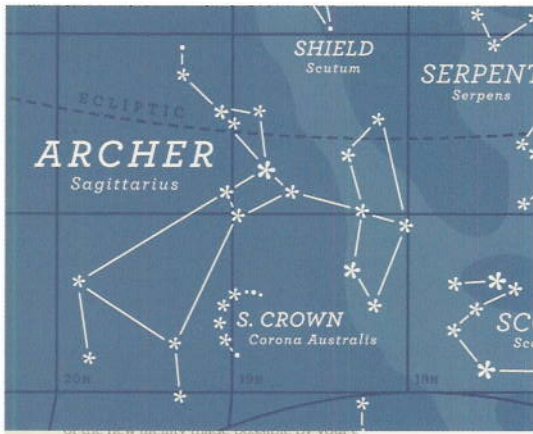
Once these characters are drawn, they're proofed on paper at a range of sizes and in every possible context. At this point we're trying to establish some generalities about the design, both visual and emotional: as important as its color and fit, we're curious about the sorts of feelings the font conveys. Also at this point, we'll be looking at every possible combination of characters, to spot inconsistencies in the design or problems that should be addressed at a more fundamental level.

Once we're happy with the result, the rest of the project is essentially a matter of continuing to expand the character set in small steps and repeating the process of reviewing the results to see how these new characters change the big picture. There are about 600 characters in the average font these days, so it's a series of slow and steady steps. It's not uncommon for a single character

to bring the whole underlying structure crashing down—think about the “8”-shaped grid on a digital watch, for example, and consider the difficulties with which it could display a letter M. Even in its most advanced stages, typeface design is always a matter of constantly brokering agreements between individual characters and the font as a whole, and it's not until the entire design is finished that you ever really know what it's going to look like.



7.50 Gotham Condensed designed by H&FJ; Typeface ©2000, artwork ©2002 Hoefler & Frere-Jones, Inc.



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Founders' Note

A NEW SEASON is always filled with promise and won't disappoint. But this year we've a special reflection on the contributions of one of our most prolific artists, whose forty-year career has inspired and new listeners. In place of a mere commemorative occasion of our 150th anniversary.

With so many of our participants enjoying an unprecedented exposure to the arts through various channels, this year will be the most exciting in the history of the art. This new work, which...

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12 STEEL PRODUCTS Net shipments, by market class.
In thousands of short tons (83,853 represents 83,853,000). Comprises carbon, alloy, and stainless steel.

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Net Shipments, total ^a	83,853	88,450	61,567	67,583	73,739	73,043	70,214
Steel service centers, distributors	12,124	13,154	9,268	12,320	12,882	12,950	11,881
Construction, incl. maintenance	16,172	17,637	13,067	16,710	18,364	18,439	17,471
Manufacturing and other	5,557	7,659	4,232	8,553	6,493	6,654	6,862

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- Allergo molto 8:46"

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PH PRIVATE ADMINISTRATIVE OFFICES

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4 BIRDS - RHINOCEROS HORNBILL - OSTRICHES - PENGUINS - CAROLINA

3 HUMANKIND - HUMAN EVOLUTION - THE BRONZE AGE - AGE CULTURES

2 THE ANCIENT SEA - TRILOBITES - MOLLUSKS - GASTROPODS - MOSOSAUR DIOIRA

M MEZZANINE RESTROOMS - GIFT SHOP

1 THE ANCIENT WORLD - DINOSAURS - FOSSILS - ICE AGE EXPERIENCE

Conte de Villandeva

terminal de Cruceros

castillo de la Real Fuerza

plaza de Armas

hotel Ambos Mundos

Catedral

7.51 Archer Typeface designed by H&FJ; Typeface ©2001, artwork ©2008 Hoefler & Frere-Jones, Inc.

7.52 Whitney typeface designed by H&FJ; typeface © 1999, artwork © 2004 Hoefler & Frere-Jones, Inc.

Even in its most advanced stages, typeface design is always a matter of constantly brokering agreements between individual characters and the font as a whole....





7.53 RANDALL HOYT AND MARK ZUROLO
(ASSOCIATE PROFESSORS OF COMMUNICATION
DESIGN, UNIVERSITY OF CONNECTICUT).
School insignia shown complete and
with twelve common letters called out.



© Woodruff/Brown Architectural Photography

7.54 Facade typography/relief
sculpture for the Neag School of
Education.

Type in the Third Dimension

We tend to think of type as being flat—as vinyl letters stuck onto a pane of glass or as a thin layer of ink offset-printed onto the surface of a sheet—glyphs without dimension. Yet this form isn't always the case. Even ancient letters had a sculptural aspect, chiseled into Roman columns and buildings.

Today, type can be cut, spliced, splattered, and animated easily with the help of computer software. Bringing a third dimension to the equation seems a bit more difficult to do, and yet, when we do it, type feels fresh, tangible, and new.

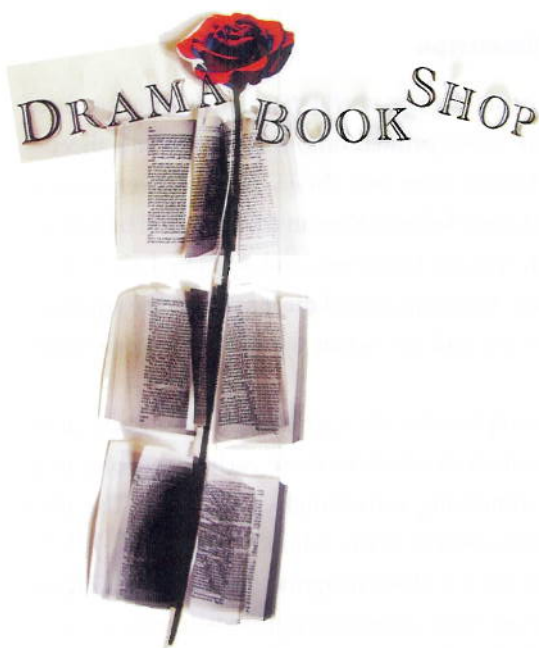
The design of a relief sculpture for the University of Connecticut by Randall Hoyt and Mark Zurolo looks back to these early forms of public typography. The result is something refreshingly surprising. The idea stems from the twelve common letters in the school's name “U-V-R-S-Y-O-F-C-N-E-I-T,” depicted in the UCONN insignia they designed (Figure 7.53). The twelve letterforms are then composed in three dimensions with human figures, which symbolize the intellectual journey students take (Figure 7.54). The design idea then extends to the inside of the building where the twelve letters are recombined into positive words such as curiosity, future, and strive.

The third dimension can also include shredded typography. In the student newspaper design by Inva Cota and Monica Nelson, the broadsheet format unfolds to force an interaction with its student audience (Figure 7.55). As Nelson explained, “We wanted the initial issue to both make a statement and have an extended life as a poster. The idea was that students would hang it in their studios or dorm rooms.”

The poster side is one giant statement reading “The Prattler Loves You.” Although printed in two dimensions, its form appears to be three dimensional. Shredded letters create an emotional effect; they seem to ask for reaction and discourse from the students. Type has an uncanny ability to offer unusual solutions such as designs that read *and* mean—that go beyond the ordinary. For this reason, it is important to devote serious effort to developing a working knowledge of not only how to use type legibly but also how to take it to new heights.

7.55 INVA COTA AND MONICA NELSON.
Two sides of a student newspaper
as broadsheet.





7.56 JESSICA RIVERA. Proposed logo for the Drama Book Shop.

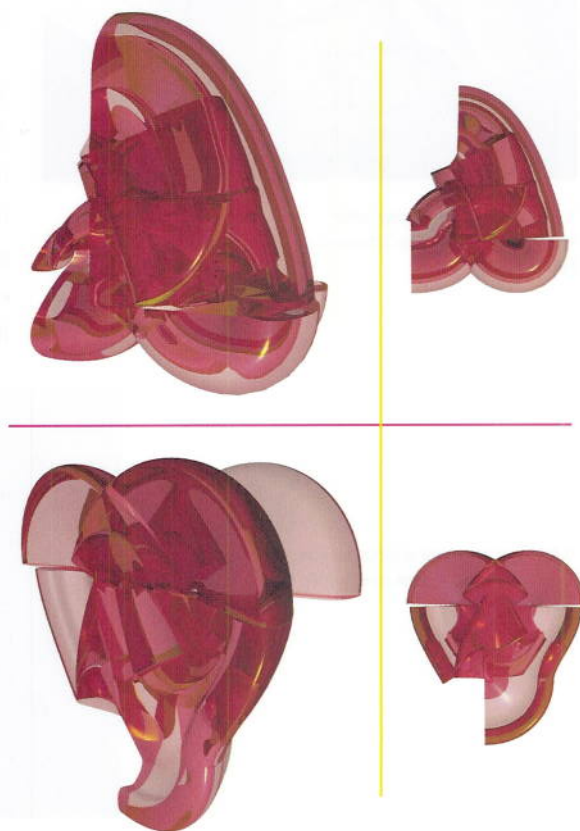
Jessica Rivera used scans of printed letters and book pages to create a design for the Drama Book Shop (Figure 7.56). She began the project with the idea of using pages as leaves on the stem of a rose (the rose suggesting both passion and drama). She could have gone in a number of different directions with the montage idea, but Rivera chose a three-dimensional approach that added a kinetic effect of movement to her solution.

Andrew DeRosa created words as sculpture, offering an unexpected dynamic with his letters (Figure 7.57). Viewed head on, the words line up evenly to create the proper letter forms, but as soon as the viewer moves to either side, thus viewing the letters at an angle, the dynamic letter forms are revealed, forms stretching into abstract and visually playful three-dimensional shapes.

Manipulating type can be a very hands-on, mechanical process, but in an experiment created by designer Geoff Kaplan, the virtual world can also be brought into typographic play (Figure 7.58). Driven by the computer's mathematical calculations, both the uppercase and lowercase of individual letters, as well as their supposed internal and external perspectives, are created according to the logic of perspective drawing. The logic of two-dimensional type is shredded as the uppercase and lowercase of each letter are blended. So are the relationships of internal shape. As the designer puts it, "The result is a new form—an object as much as a letter. It can exist on the screen with the perception of infinite perspective, or a flat and sobering form printed on the page—letters that are two-and-a-half dimensional."



7.57 ANDREW DEROSA. Typographic experiment on the perception of letters as flat forms that quickly change when seen from a three-quarter view.



7.58 GEOFF KAPLAN/GENERAL WORKING GROUP. The side and front views of the letters A and Y from the typeface Transgression.

Baseline (p. 184)
Bleed (p. 200)
Cold type (p. 183)
Egyptian serifs (p. 184)
Em (p. 195)
En (p. 195)
Flush (p. 199)
Font (p. 192)
Hot type (p. 183)
Justified (p. 199)
Kerning (p. 195)
Leading (p. 198)
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Modern typefaces (p. 184)
Old Style typefaces (p. 184)
Pica (p. 192)
Point (p. 192)
Rag (p. 199)
Recontextualization (p. 205)
Sans serif (p. 182)
Serif (p. 182)
Slab serif (p. 184)
Tracking (p. 195)
Transitional typefaces (p. 184)
Typeface (p. 181)
Typeface family (p. 188)
Typography (p. 182)
Vernacular (p. 203)

In Perspective

Page layout software makes it easy to set type. The kerning, tracking, and leading of a block of type have automatic settings assigned. Don't use them. The manual adjustments you make to the typeface, the size, and even the way a sentence breaks to the next line will all help create something more readable and engaging. The text will certainly flow better visually if you make the effort to adjust the type. Your eye and good judgment will render much more beautiful results than the software's mathematically generated algorithms can. Everything in this chapter stresses the need for designers to develop a sense for type and typography, which you can do only by grappling with it. Push it around and make mistakes with it until, like osmosis, it sinks in and starts to become natural to you.

You will know you are developing a feel for type when the excessive kerning in a sign (such as “ass ociates”) seems funny to you or when a movie scene using a 1950s typeface for a turn-of-the-century period scene is annoying. Just noticing these problems means that you're learning. We are all perpetual students of type and its use. As you will see in the next chapter, grids and alignments can further organize and enhance type and typography. Because of its technical nature, type can be quite challenging, but also the most rewarding. When it works well, when the typeface, the layout, and the imagery all function together in perfect harmony, you know you've created a successful design.



EXERCISES AND PROJECTS



Review additional Exercises and Projects on myartslab.com

Exercise 1 (Type Styles): Typeset your first and last name fifteen times, each in a different typeface, using roman fonts only (upright, not italic). Variations should include at least one serif, sans serif, Old Style, Transitional, and Modern. Notice the personality that each typeface carries. Be prepared to discuss your choices and why they do or don't make sense.

Exercise 2 (Typeface Research): Research an Old Style serif typeface and write 100 words about it. Include the designer, historical facts about its use, and any revivals of the typeface that have occurred. Next, find a sans serif typeface and do the same. For each typeface, print out the capital H and O, as well as the lowercase g and t at 72 pt. On a sketch pad, recreate the letterforms at 400% of the 72 pt size by first pencil-ruling parallel lines for baseline, cap height, and x-heights for each typeface (see Figure 7.14).

Project 1 (Typesetting) PART 1: Select a block of text containing at least 750 words and paste it into a page layout application (not a drawing or image manipulation program). Use the following specifications: page size: 8.5" × 11" with margins set at 4 picas top, 5 picas bottom, 6 picas left, 4 picas plus 2 pts right. Within the margins, set two text columns, each 20



picas wide, with 1 pica of gutter space between (the space between columns or the blocks of type). Type color should be black, and size with leading should be 10 pt/13 pt, flush left, rag right, with a half line space between paragraphs (6.5 pts). Choose a typeface and experiment with font variations, including roman (regular), italic, bold, condensed, all caps, caps with small caps. Reconsider bad rags (line breaks that split a word awkwardly). Adjust the height of your text columns from the bottom, and avoid orphans (the first line of a paragraph on the last line of a column) and widows (the last line of a paragraph on the first line of column).

PART 2: Using the same text, write and add at least eight subheads, and explore ways you might include them. Consider weight or case, font, color, tracking, indent or flush, spacing (before and after each paragraph), rules, graphics, and reversals (white type) to bring personality to the design.

Things to Consider: Be obsessive in following the instructions to get the typesetting exact.



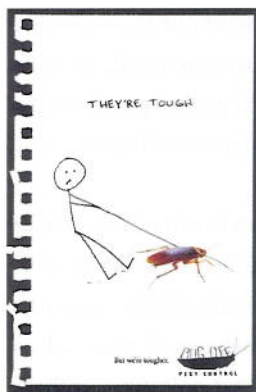
Project 2 (Mechanical and Hand-Drawn Expression): Visually illustrate a quotation using both a typeface (your choice) and your own hand-drawn forms. Both must be included. Make your point as expressive and clear as possible. Full color. Size: 10" × 10".

Things to Consider: Consider traditional mediums such as ink and brush, pencil, or charcoal as well as nontraditional ones, including crayons, sandpaper, steel wool, ketchup, and so on.

Project 3 (Visual Narration): Visually narrate the first few pages from a published children's book using only type. Retain the existing page proportions, but bring typography, color, and energized composition to create a fun and graphically dramatic design. Full color.

Things to Consider: When designing the typography of these pages, take into consideration the flow of the type. It will help create a stream of connections, which, in turn, will help the eye move from one focal point to the next.

Project 2 ANDY MATHURIN. A phrase turned into a logo for a pest control company. Logo design (above) drove the creation of the advertisement (below).




Project 4 (Type Treatment): Create ten visually compelling compositions, each of which uses only one different letterform from the Univers typeface family. For each, use a different mix of one design principle and one contrast set from the lists below. Strip away the literal meaning of each letter and focus on the form and structure. Avoid patterns, and work toward the goal of creating something dynamic. Your final set should be ten completely different compositions. Black and white only. Format: 7" × 7" (on an 8.5" × 11") vertical page. Design principles: balance, contrast, direction, dominance, proportion, rhythm, unity. Contrast sets


Project 4 RACHEL CAIRES. Two treatments using letterforms from the Univers family.

are as follows: figure/ground, large/small, texture/mass, stable/unstable, bold/light, thick/thin, static/moving, rectilinear/curvilinear, hard/soft.

—Provided by Paul Sahre, professor, School of Visual Arts

-  **Things to Consider:** Use design elements (texture, scale, repetition, etc.) as treatments to achieve your design principles (see Chapter 6). Be playful and experimental—take chances.

Project 5 (Type and Packaging): Typeset all the words from a food package and reapply them using more extreme typography that pushes the boundaries, yet still explains the product and its benefit. Bring something inspirational into the project: consider art movements (Futurism, Dada, Surrealism, Abstract Expressionism) or music categories (rock, punk, grunge). Full color.


-  **Things to Consider:** Consider how the design will help the package stand out from other products on the shelf (contrast, dominance, rhythm).




Project 6 MAY PARSEY.
A flier announcing a lost pet (top) and Parsey's redesign of the flier (bottom).

Project 6 (Typographic Flier): Find a flier (on the street or online) for a lost pet and redesign it. You can include an image of the missing pet, but place emphasis on the typography so the flier provides a colorful description and relays the information. Black and white only. Present the redesigned and original versions. Size: 8.5" × 11" vertical.

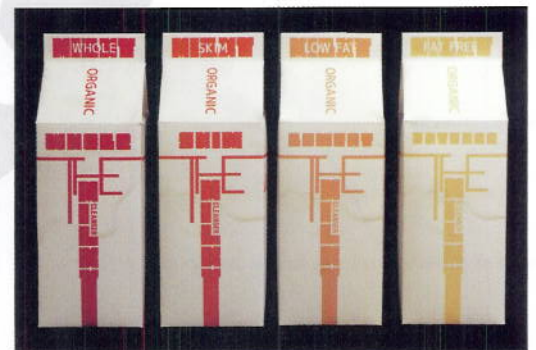


-  **Things to Consider:** It might be fun to include some of the vernacular elements of the existing flier in your design, but don't "stray" too far from a reductivist-oriented typographic language.

Project 7 (Book Typography): Redesign a chapter opener for a coffee-table style book of your choosing. Your design should include a full-bleed image on the left (verso) side of the introductory spread. On the right (recto) side, create your typographic redesign. Include the chapter title and chapter number, page number (folio), and three short paragraphs of text. Treat each element graphically to create compositional poetry and personality on the page. Follow up with an additional set of spreads (four pages) showing how other pages in the book fill out in terms of images and a full body of text. Full color and at least 9" in width and height.

-  **Things to Consider:** Consider the subject, the chapter's title, the image that sits opposite, how to begin the text, and the system you are inventing that will apply to the other chapters in the book.

Project 5 HYOCHIN KIM.
Typographic design for a milk carton using the De Stijl art movement founded in the Netherlands as an inspirational aesthetic.





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