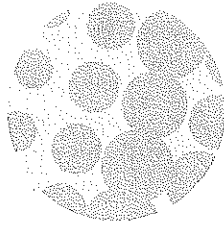
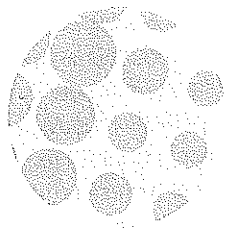


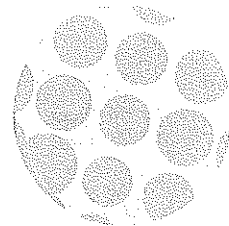
Fold.



## Chapter 6 ■ using text type



8



### THE DEVELOPMENT OF WRITTEN COMMUNICATION

Since the first person made a mark in the sand for another to find, we have been communicating with a visual language. The earliest forms of visual communication were pictorial drawings of everyday objects, such as weapons and animals. As the desire to communicate grew, these pictures were combined to convey thoughts and ideas.

With visual language, it became possible to conquer time. An individual's mark could be seen and understood after the maker had moved on or even died. *Civilization developed along with our visual record of the spoken language. So did the importance of the individual.*

#### Alphabets

The first systematized alphabet was created by the Egyptians. It was partly abstract symbols and partly pictures. The Phoenicians added consonants around 1600 B.C. A nation of merchants, they needed an efficient, condensed language for business transactions. This need led to a significant breakthrough: Symbols were used to represent not objects, but the sounds of speech. A different symbol stood for each recognizable spoken sound. It was a much shorter and more efficient system of written language.

The Greeks adapted the Phoenician system, and around 1000 B.C. the Romans

modified the Greek alphabet. Our alphabet is derived from the Roman version. The Romans devised a total of twenty-three letters. The letter *J* was added to our alphabet just over five hundred years ago (Figure 6-1).

As designers working with the letters of the alphabet, we have thousands of years of history behind us. The shape of letters has been largely determined by the tools used to create them. The Egyptians used reeds for writing on papyrus. This method created a pattern of thick and thin strokes. The Greeks used a stylus on tablets, whereas important Roman inscriptions were chiseled into stone. These forms developed with few curved lines, because curves were difficult to carve. The Greek and Egyptian alphabets had no serifs. They evolved with the Roman alphabet, perhaps to make inscriptions seem to sit better optically when chiseled in stone.

Medieval handwritten scrolls kept the alphabet alive during the Middle Ages. These scrolls gradually evolved into folded manuscript books, produced by religious orders.

Our most common typefaces are imitations of early handwriting or modifications of early typefaces modeled after the lettering in manuscript books. From the invention of the first printing press in 1440 until the 18th century, type designs were based on handwriting.

#### Influence of Technology

Innovation in printing technology during the Industrial Revolution contributed to the

6-1  
The Phoenician, Greek,  
and Roman alphabets.



1. Phoenician alphabet



2. Greek alphabet



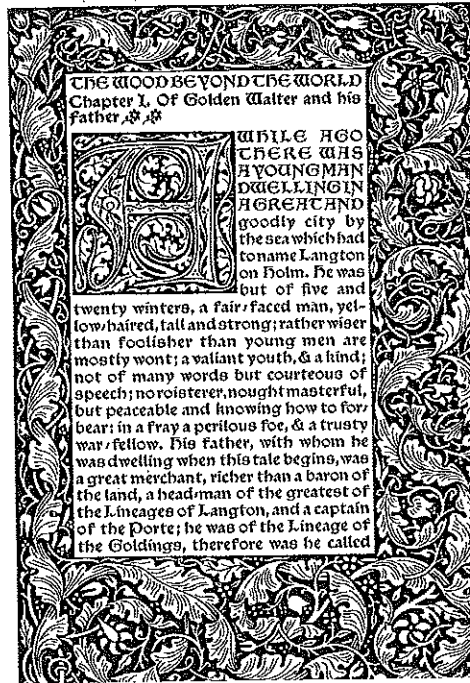
3. Roman alphabet

development of new type styles. Advances in mechanical design and cast-iron parts were applied to the printing press in the early 1800s, allowing for a much larger printed sheet. The *London Times* was the first to replace the hand press with a steam-powered printing press that could print over a thousand impressions an hour. Another important innovation of the 1800s was the invention of the Linotype machine in 1886 by Ottmar Mergenthaler. It replaced setting type by hand with a keyboard-operated machine that generated lines of type cast in melted lead. These lines of type were locked into slim wooden "cases" before printing. The invention of photo typography in the 1960s heralded the Age of Information as it became increasingly easy and important to disseminate information by word and image. Computers now make it possible to develop variations on existing typestyles quickly. Specialized software makes the creation of new styles simpler and more accessible than ever before, and digital presses continue to speed print production. Whatever technology is used, in whatever century, the eye and mind of the designer remains a vital factor.

## TYPE CATEGORIES

Like the alphabet, typography has undergone a long development. A brief look at its history will help you assemble and recognize types with similar attributes. History provides a key to proper use.

The type category we refer to as *old style*, with gently blended serifs leading into thick and thin strokes, was created in 1470 by Nicholas Jenson, a Venetian printer. The French typographer Claude Garamond built his type style Garamond on Jenson's design. This classic remains in use today. A modern revival of 15th-century Italian types occurred in Europe and the United States around 1890. Englishman William Morris produced a type called Golden that recalled the spirit of the 15th century (see Figure 6-2).



6-2

William Morris.

Page from *The Wood Beyond the World*. 1894.  
9½ x 6¾" (24 x 17 cm).  
Kelmscott Press.

Most roman types have variations available called *italics*. They are a slanted form that relates to the original type style but does not duplicate it. Venetian printer Aldus Manutius is credited with developing italics in 1501 as a method of fitting more characters on a line to save space. For about forty years, italic was simply another style of type, until an italic was consciously developed from an upright roman mold. Today most roman types have matching italics as well as several other variations such as bold and condensed.

Roman faces with strong contrast between thick and thin strokes and with thin serifs were developed in the 18th century. These faces are generally classified as *transitional*. They were more precise because they were designed for the printing industry. A widespread interest in copperplate engraving at that time helped the development of types that incorporate a very fine line.

Bodoni and Didot imitated the engraver's tool with precise hairline strokes. The term *modern* is used to describe this 18th-century type.

In the 19th century, many new faces were developed, with a wide variety of looks. The sans serifs and the Egyptians are among them. A revival of the old classic typefaces, such as Jenson, occurred. Printers such as William Morris contributed to the history of typography during this time, creating some handsome typefaces.

Since the early 19th century, serif and sans serif types have alternated in popularity. A great interest surrounded sans serif in the mid-20th century. Bauhaus designers in Germany during the 1920s began designing sans serif faces such as Futura. In the 1950s Univers and Helvetica became the dominant typeface used by design professionals. The sans serif dominance lasted throughout the 1960s and 1970s. Newer versions of the Helvetica typeface show more consistency among font variations. Large x-height and beautiful positive and negative shapes accompany a clean precision and understated elegance of line. The horizontals are cut along a common line.

Figure 6-3 is a layout by contemporary designer Paula Scher that uses sans serif

type to evoke an earlier era. Today's designers choose from a rich array of old and new type styles. In fact, such an extensive array of fonts is available on computer that selecting one can be quite difficult. A basic familiarity with typography will help you develop a discerning eye.

### Historic Type Families

#### Old Style

Characteristics of old style faces (Figure 6-4) include thick and thin stroke serifs that seem to merge into the main strokes. This feature is called *bracketing*. Garamond and Caslon are examples. Created in 1617, Garamond was the first typeface designed to appear uniformly printed rather than hand lettered. It remained the principal typeface for over two hundred years, with many derivatives.

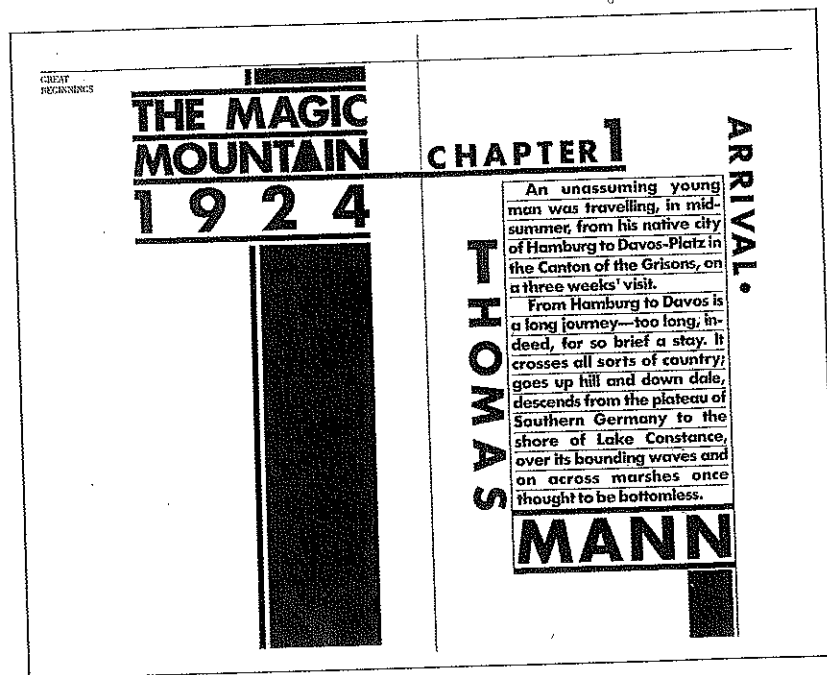
#### Transitional

A blending of old style and modern, the transitional has emphasis on thicks and thins and gracefully bracketed serifs (Figure 6-5). It is lighter than old style and has a more precise, controlled character. It is less

#### 6-3

**Paula Scher.**

Layout design for *The Magic Mountain* in "Great Beginnings" brochure.  
Courtesy of the artist.



abcdefghijklmn  
 opqrstuvwxyz  
 ABCDEFGHIJK  
 LMNOPQRSTU  
 VWXYZ\$12344  
 567890 (, " " - ; : ! ) ? &

6-4  
Garamond Book, a revised  
old style face.

abcdefghijklmnop  
 qrstuvwxyzAB  
 CDEFGHIJKLM  
 NOPQRSTU  
 VWXYZ\$1234567  
 890 (, " " - ; : ! ) ? &

6-5  
Baskerville, a transitional  
face.

design

mechanical and upright, however, than the modern faces.

Baskerville was designed in 1757 by John Baskerville, an amateur printer. The transitional Baskerville has straighter and more mechanical lines than the old style typefaces, with flatter serifs that come to a fine tip. Increased contrast between the thick and thin strokes of the letterforms and the rounded brackets give it more delicacy than old style faces such as Caslon.

John Baskerville introduced several technical innovations that affected the appearance of his type. He passed printed sheets through heated copper cylinders to smooth out the rough texture of the paper then in use. This smooth surface made it possible to reproduce delicate serifs clearly. Figure 6-6 shows text-size Garamond and Baskerville fonts in various combinations of point size and leading.

*Modern*

The modern styles evolved from transitional types. They have still greater variation between thicks and thins. Modern typefaces are characterized by thin serifs that join the body with a stiff unbracketed corner. There is strong vertical stress to the letters. The serifs are hairline thin.

Bodoni (Figure 6-7) fits this category. It was created in the late 1700s by Firmin Didot, a Frenchman who also gave Europe a fully developed type measurement system.

*Egyptian*

The first slab-serif type style was introduced around 1815. The category was dubbed "Egyptian" because Egyptian artifacts and Egyptian travel were in vogue. Napoleon's conquest of Egypt aroused great enthusiasm for that country. During this period, type

abcdefghijklmnopq  
rstuvwxyzABCDEFGFG  
HIJKLMNQRST  
UVWXYZ\$12345678  
90(.,'"'-:;!)?&

6-7  
Bodoni, a modern face.

design became less predictable and more eclectic. The characteristics were mixed and recombined, producing many variations. The heavy square serifs in this category often match the strokes in thickness. There is less difference between thicks and thins than in the modern and transitional periods. Clarendon and Century are examples of this group.

The popularity of square slab-serif type decreased greatly in the early 20th century, but then revived somewhat in its latter decades. Lubalin Graph (Figure 6-8), designed in 1974 by Herb Lubalin, Tony Di Spigna, and Joe Sundwall, has the characteristics of Egyptian type styles, as does Rockwell, shown in Chapter 3.

### Sans Serif

William Caslon created the original sans serif in the early 1800s. The 1920s saw the development of sans serif type families including Gill Sans, created by Eric Gill, as well as Herbert Bayer's Universal Alphabet. In the 1950s designers of the International School examined available typefaces and found them lacking. Weight changes were not subtle enough, and the various weights and widths in a type family often lacked coherency. This disorder was natural, because they were often designed by different people. A young Swiss type designer named Adrian Frutiger developed a sans serif style called Univers. He created a completely consistent family of types in all possible weights and widths.

Several classic sans serif typefaces were designed at the German Bauhaus (see Chapter 2). Influenced by the Bauhaus, the Swiss firm Haas worked with the German Stempel foundry to produce Helvetica (Figure 6-9). It is still considered by many designers to be the perfect type—versatile, legible, and elegant (Figure 6-10).

### Helvetica

Since the first person made a mark in the sand for another to find, we have been communicating with a visual language. The earliest forms of visual communication were pictorial drawings of everyday objects such as weapons and animals. As the desire to communicate grew, these pictures were combined to convey thoughts and ideas. With visual language, it became possible to "conquer" time. An individual's mark could be seen and understood after the maker had moved or even died. Civilization developed along with our visual record of the spoken language. So did the importance of the individual.

8/9

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8/11

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9/10

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9/11

## 6-11

**EI Lissitzky.**

*Table of Contents from Plastic Figures of the Electro-Mechanical Show: Victory over the Sun.* 1923. Collection, The Chicago Art Institute. Gift of the Print and Drawing Club. Gaylord Donnelley and Wm. McCallin McKee Fund, 1966.

## 6-12

**Diane Fenster.**

*Book cover for Ecology.* This appropriate use of an unusual typestyle fits well with the illustration. Courtesy of the artist.



Figure 6-11 shows a design from 1923 using a grid layout and sans serif type by El Lissitzky. A leading Russian Constructivist, Lissitzky believed in the power of graphic design to influence social order. He helped export Constructivist theory and style to Europe through his printed work and lectures.

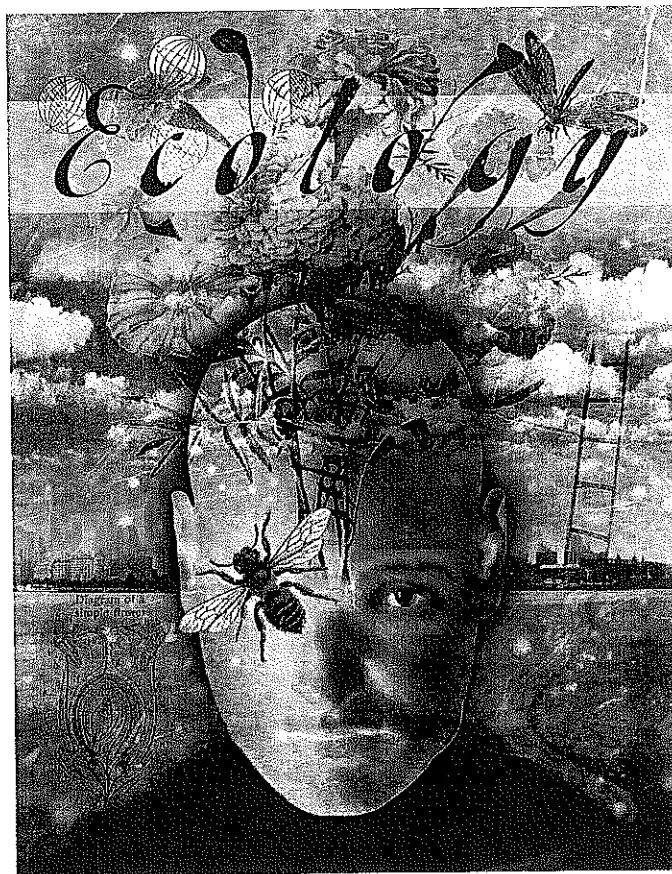
**Miscellaneous Faces**

Many fonts do not seem to belong to any category. They are often experimental, ornamental styles of limited application, sometimes created by hand. These eccentric types are rarely suitable for text type, but do find appropriate usage in display headings such as the book cover in Figure 6-12 where type and image are delicately integrated.

It is possible to use specialized, ornate styles in display headlines and not hamper readability too greatly. In large amounts of body copy, however, every subtle variation has a cumulative effect that can seriously hinder readability. A classic, all-purpose type style will remain legible and unobtrusive as body type. Selecting an appropriate, legible, and beautiful text type calls for a sensitive, educated eye. Figures 6-13 and Figure 6-14 show a few of the all-purpose styles.

**TYPE FAMILIES**

The five categories of type we have discussed are filled with type families, such as Bodoni and Baskerville. Each family comes in a variety of weights and sizes. A family is all the variations of a particular typeface. Helvetica, for example, now comes in a series of variations described as light condensed, medium condensed, bold condensed, ultra light, ultra light condensed, ultra light italic, light, medium, regular, medium light, bold, bold italic, and bold





extended. Figure 6-15 illustrates the Helvetica family.

A specific variation in a specific size is called a font. For example, 18-point Helvetica italic is a font. A great variety of shapes exist in a single font. There are 26 capitals, 26 lowercase letter forms, and assorted numerals and punctuation marks. These various shapes can be successfully combined into a unified design because of the similarities in width, brackets, serifs, and x-height. A well-designed type font is an excellent example of the interplay of repetition and variety that makes for good design.

Computerized layout gives the designer the ability to make a wide variety of changes in these carefully designed fonts. Vector programs allow type to be mirrored, scaled with varying horizontal and vertical values, and otherwise manipulated for effect. The pre-computer hot type technology was based on actual physical pieces of metal shaped into letterforms. These could not be stretched or set to overlap unless the sheet was printed twice and the font recast. Now that everything is possible, an enthusiasm for exploration needs to be tempered by respect for the subtle and complex beauty of a font.

### Selection

How do you select which style of type to use? What factors are involved in designing with text type? Selecting the type for a given layout means making decisions in six inter-related areas: type size, line length, type style, leading, spacing, and format.

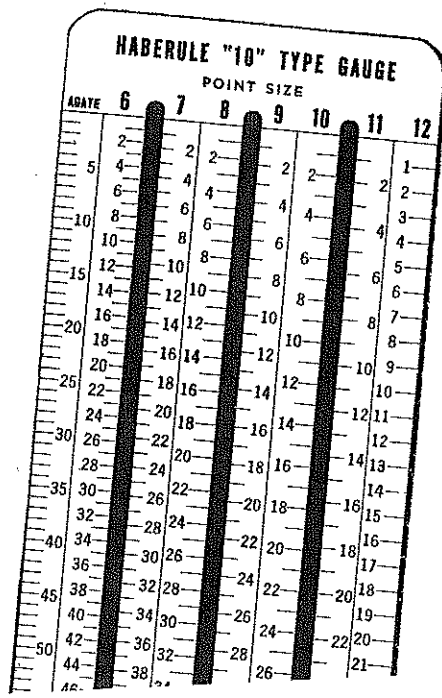
Designers sometimes set their own type as they develop a layout design. But whether you set the type yourself or someone else prepares it, the six characteristics mentioned earlier need to be specified. It is important to develop a fine, critical eye for type quality, watching for problems such as uneven letterspacing and low resolution. Oftentimes the type printed on a desktop laser printer inkjet is unsuitable for reproduction, especially if the type is reversed and in a small serif font (Figure 6-16).



6-15  
The Helvetica family.

*This is an example of a  
reversed 9 point serif font.  
Often such delicate lines will  
be overwhelmed by a reversal.*

6-16



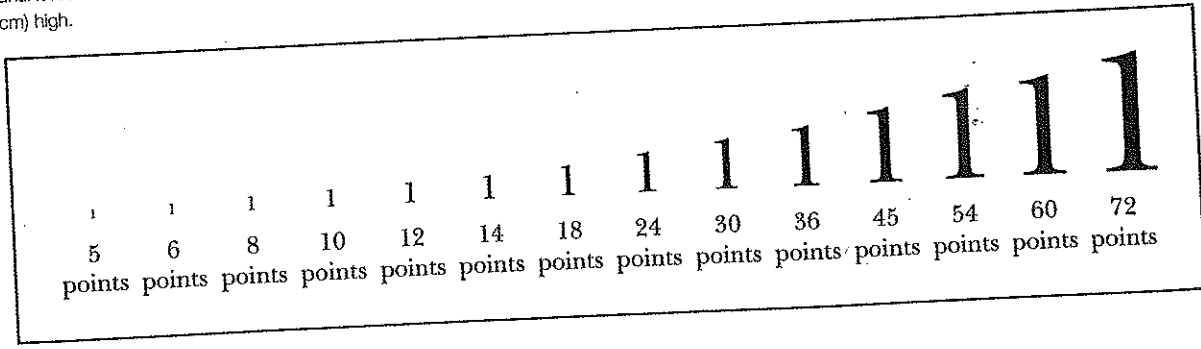
**6-17**  
This pica rule gives measurements in points, picas, and inches.

**Size**

Text type is any type that is under 14 points in size. A point is a unit of measurement based on the pica. There are 12 points in a pica and approximately 6 picas in an inch, so there are 72 points in an inch (Figure 6-18). The point system of measurement was introduced in the 18th century because the small sizes of text type called for a measuring system with extremely fine increments (Figure 6-17).

**6-18**  
Type is measured in points until it reaches about 2" (5 cm) high.

Type size is measured in points until it reaches about 2" (5 cm) high. It is available



from 5 points to 72 points on desktop computer menus, or larger sizes can be specified (Figure 6-18). When measuring type size by hand, include the ascender and descender in the measurement. The easiest way to measure type without a computer is by comparing it with a type specimen book and matching the size visually. It can also be measured with a point and pica ruler. Remember to measure from top to ascender to bottom of descender.

When choosing a type size, keep the audience in mind. Type smaller than 10 points is often difficult for older people to read.

Type size can be difficult to judge on the computer monitor, because the screen image may not be the same size as your final printed page. Also, the vertical, backlit quality of a monitor is a very different medium than the printed page, and we interact with it differently. Student designers have a tendency to choose sizes that are too large when they first begin designing with type on the computer. It is easier to judge the effect of typography accurately in a printed proof than on line. If the final format will be a Web page, however, this changes.

**Line Length**

Line length also is measured by the pica system. It is the length in picas of a line of text type. When laying out a page and marking copy for the typesetter, use pica measurements. The dimensions of the page

itself, however, are usually expressed in inches (or centimeters). For example, an 8-point type may be set in a 22-pica line length on an 8½ × 11" (22 × 28 cm) page format.

The length of a line is closely related to the size of type. A small point size such as 6 point or 8 point on a line 44 picas long is difficult to read. The type seems to jump around along the midsection of the line, and the eye must search for the beginning of each new line. This trouble is worse when there is insufficient space between lines. Usually you want the reader's eye to move smoothly, never being forced to slow down or lose its place. The standard line length and point size ratio for optimal legibility is a line of 50 to 70 characters long. To remember this ratio, keep in mind that line length should be approximately double the point size. An 8-point type sits well on a 16-pica line. Variations on this theme can be used purposely to slow the reader down.

### Style

When you choose text type, legibility is a prime consideration. Although there are many beautiful, elegant, and accessible styles, stay away from styles with an excess of ornamentation when selecting text type.

Next, seek a type appropriate to the audience, the publication, and your own sense of aesthetics. Sans serif has a modern feel and is highly legible in the limited amounts of copy used in most annual reports, newsletters, and so on. The serif types are generally more traditional and classical in feeling. They are easier to read in large amounts. Many of the newer styles strive to combine the virtues of serif and sans serif type.

Trends arise in type, just as in music, clothes, and lifestyles. Notice how they change from year to year. Use the ones that seem both appropriate and aesthetically pleasing.

The printing process can help determine type style selection. Delicate, hairline serifs are not appropriate when a heavy ink coverage is required, because the ink will block up the serifs and result in a blotchy look. Heavily textured paper will also make a delicate serif unadvisable. The texture of the paper will cause the finely inked serifs to break up.

Beginning designers often combine several type styles in a typographical layout. They choose each for its own beauty and interest but forget the effect of the whole design. Diverse styles usually refuse to combine into an organized whole and have an undisciplined and chaotic look. Many experienced designers prefer to work within one type family, drawing on its bold, italic, and roman faces (Figure 6-19). They achieve a look of variety without risking going outside one family. This course is certainly the safest for a new designer.

Exciting layouts, however, often do mix distinctively different typefaces. Mixing takes sensitivity to how the styles affect one another and contribute to the whole. A good rule of thumb when mixing type families is to make certain they are very different. The composition will work if there is either deliberate similarity or definite variety. It can confuse and displease the eye if the distinctions are muddy. Figure 6-20 is a highly successful design that combines type styles to make a point. The MacPros layout in Figure 6-21 uses typography to achieve an overlapping visual texture. Contemporary designers have many more choices of typefaces and design effects than ever before.

### Leading

Leading (pronounced like the metal lead) describes the vertical spacing between lines of type. The historical origin of the term goes back to hot-metal typesetting, when a thin strip of lead was inserted as a spacer between lines of metal type. This type and

<p>Helvetica ultra light</p> <p>ABCDEFGHIJ KLMNOPQRS TUVWXYZøa bcdefghijklmno. pqrstuvwxyzæ 1234567890&amp;! ?%\$&amp;BCEAE(⌘⌘)</p>	<p>Helvetica medium</p> <p><b>ABCDEFGHIJ KLMNOPQR STUVWXYZ Zabcdefghijklmnop lmnopqrstuv wxyz123456 7890B&amp;?!(⌘⌘)</b></p>	<p>Helvetica bold</p> <p><b>ABCDEFGHIJ KLMNOPQRS TUVWXYZab cdefghijklmn opqrstuvwxyz zæœøç12345 67890ÆCEØ? !£\$%B&amp;(⌘⌘⌘)</b></p>	<p>Helvetica medium outline</p> <p>ABCDEFGHIJ KLMNOP QRSTUVWXYZ XYZ123456 7890ÆCE&amp;! %?£\$¢Ø(⌘⌘)</p>
<p>Helvetica ultra light italic</p> <p>ABCDEFGHIJ KLMNOPQRS TUVWXYZabc defghijklmnopq rstuvwxyzæœ 1234567890\$ £&amp;%?!BÆØ(⌘⌘)</p>	<p>Helvetica bold italic</p> <p><b>ABCDEFGHIJ KLMNOPQRS TUVWXYZab cdefghijklmn opqrstuvwxyz zæœç:12345 67890ÆCEØ! ?&amp;%£\$¢B(⌘⌘)</b></p>	<p>Helvetica light</p> <p>ABCDEFGHIJ KLMNOPQRS TUVWXYZab cdefghijklmno pqrstuvwxyz 1 234567890?! %\$£&amp;BØ(⌘⌘⌘)</p>	<p>Helvetica light cond</p> <p>ABCDEFGHIJKL MNOPQRSTUVWXYZ XYZÆCEØabcde fghijklmnopqrstu vwxyzæœç1234 567890CECØÆ¢ £\$B%?!&amp;/(⌘⌘⌘)</p>
<p>Helvetica medium italic</p> <p>ABCDEFGHIJ KLMNOPQRS TUVWXYZøa bcdefghijklmn opqrstuvwxyz 1234567890?! B&amp;£\$%CE(⌘⌘⌘)</p>	<p>Helvetica bold extended</p> <p><b>ABCDEFGHI JKLMNOP QRSTUVWXYZ WZÆCEÇØ abcdefghijklmnop jlmnopqrst uvwxyzç12 34567890 B\$£&amp;?!%(⌘)</b></p>	<p>Helvetica regular</p> <p>ABCDEFGHI* JKLMNOPQ? RSTUVWXY- ZÆØabcdef! ghijklmnopqr stuvwxyzæø 1234567890 £\$&amp;%(⌘⌘⌘; /)</p>	<p>Helvetica medium cond</p> <p>ABCDEFGHIJKL MNOPQRSTUVWXYZ XYZabcdefghijklmnop mnopqrstuvwxyz zæ1234567890! ?&amp;%£\$BÆCE(⌘⌘)</p>

6-19

One type family can offer a great deal of variety.

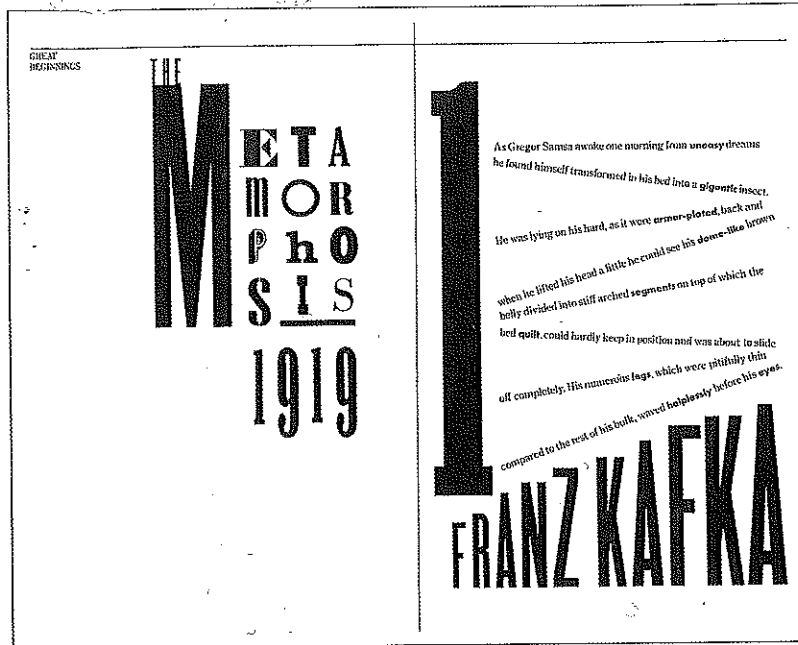
leading were locked together into a galley, inked, and printed. Leading strongly affects the look and readability of the layout. Type is considered to be set solid when no space is inserted between the descender of the top line and the ascender of the bottom line. A 10-point type set on a 10-point leading is an example of solid leading. Herb Lubalin's design for *Avant Garde* magazine in 1967 uses very tight leading (see Figure 7-10). How much leading you use is important. Several factors affect that decision. Among

those factors are type size, line length, and type style (see Figures 6-6, 6-10).

*Type Size*

Leading must be proportionate to the size of the type. Although there is no standard, correct leading for any certain type size, we often find 10-point type set on 12-point leading. An extra 2 points of space have been inserted between the lines of type. A larger or smaller type size will require less extra leading. A 14-point type might need

design



**6-20**  
**Paula Scher.**  
Layout design for *The Metamorphosis* in "Great Beginnings" brochure.  
*Courtesy of the artist.*

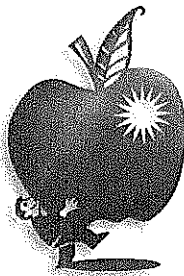
only 14- or 15-point leading, for instance. It is rare to find minus leading, or a 10-point type set on a 9-point leading. Current typesetting technology makes it possible to set one line of type on top of another and to weave entire paragraphs over each other for visual texture. The important criteria is always "is it appropriate" and "is it good

design"? Does the form follow and enhance the function?

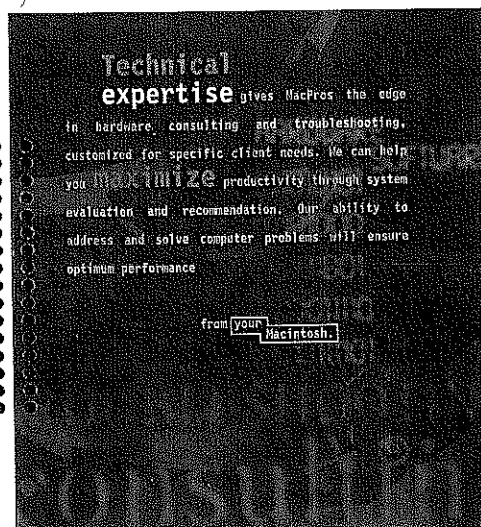
**Line Length**

Line length is an important factor in determining leading. The longer the line, the more leading is appropriate. With longer line lengths, the eye has a tendency to wander.

easy. effective.



MacPro offers comprehensive  
Lectisch software training in  
a classroom environment that  
promotes individualized  
instruction. Our classes are  
small and hands-on...  
Buffed to six students per  
instructor with a workstation  
furnished for each student.  
MacPro can also conduct  
training sessions at your  
location as well, with computers  
and projection equipment  
available for rent.



**6-21**  
This brochure for MacPros plays with overlapping typography, as well as changes in size and style in order to get a point across.

If there is insufficient space between lines, you will find yourself reading the line above or beneath and having difficulty finding the beginning of each line.

#### *Type Style*

Three aspects of the type style also affect leading: x-height, vertical stress, and serif versus sans serif. The x-height, as you know, refers to the size of the body of the letter, without its ascender and descender. The x-height of Helvetica is much greater than the x-height of an older type such as Garamond. Consequently the Helvetica would probably require more leading. It does not have lots of extra white space packed around its body because it has relatively short ascenders and descenders, so the lines of type appear closer together.

The vertical stress of a type style also affects leading because the stronger the ver-

tical emphasis, the more the eye is drawn up and down instead of along the line of type. Hence the greater the vertical stress, the more leading required. A type style such as Baskerville has a strong vertical stress and requires more leading than Garamond.

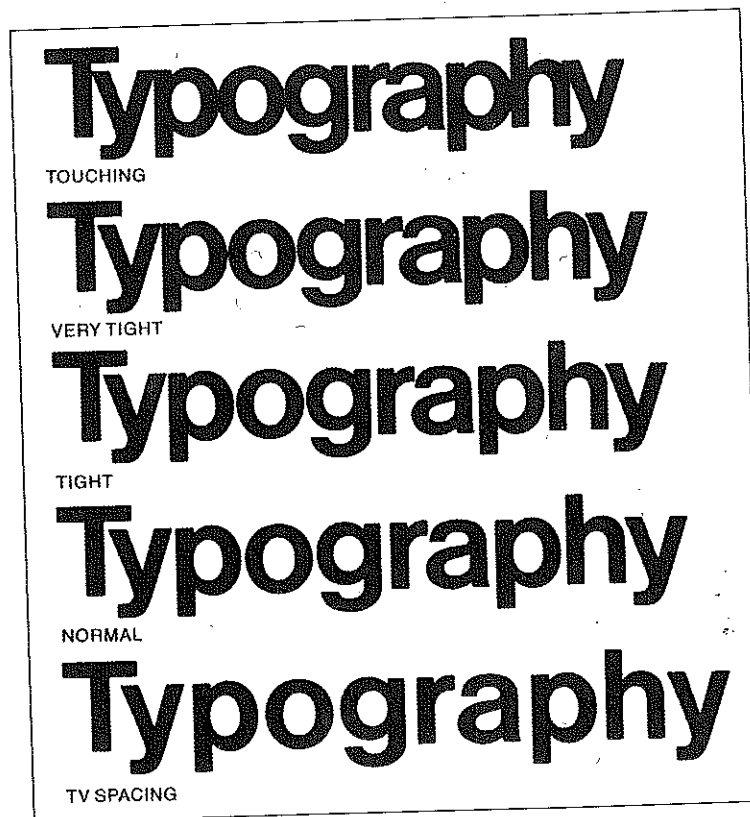
A serif helps draw the eye along in a horizontal direction, so serif type is generally considered easier to read than sans serif type. Sans serif type usually requires more leading than the serif style to keep the eye moving smoothly along.

#### **Spacing**

Letterspacing is the amount of space between letters of a word (Figure 6-22). A good figure/ground relationship between letterforms is as important with text type as with display type. If the letters are spaced too far apart, the eye must jump

#### **6-22**

There is a great deal of difference between tight and loose letterspacing.



between letters, and reading becomes strained.

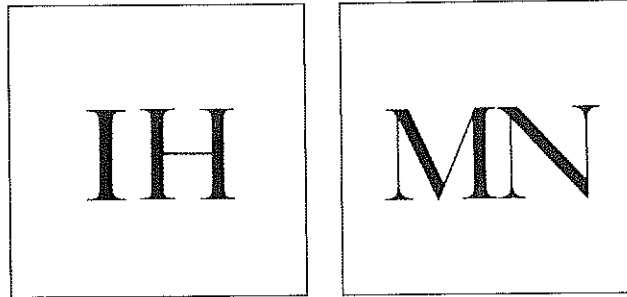
Whether designing with text type or display type, keep an eye out for the creation of equal volumes of white space between individual letterforms. *Kerning* is a term that describes the specific adjustment of space between individual letterforms. An "IH," for example, will require a different spacing than an "MN" (Figure 6-23). Again, examine Lubalin's design.

The amount of space between words is called *word spacing*. If it is too great, it is difficult for the eye to move quickly along the line of type. There is a tendency to pause between individual words. The reader should be unaware of the space between words, and aware instead of their content.

Word spacing usually is not a problem with text type, unless the type is being set in a justified format (flush left and flush right edges). To make the lines come out even, the computer will insert extra space between words. If the line length is long, with many words, this addition is not noticeable. However, if the line length is short, great white holes seem to appear in the copy (Figure 6-24). Look at your local newspaper, and squint. Often rivers of white will appear in the columns of text type as a result of poor word spacing.

### Format

Format design refers to the arrangement of lines of type on the page (Figure 6-25). There are two basic categories: justified and unjustified. In *justified* type the lines are all the same length, so that the left and right edges of the column of type are straight. This format is commonly used in newspaper layout and text and trade books. It is appropriate when speed and ease of reading are the primary considerations. Justified copy is considered by many to be slightly easier to read than unjustified copy. The straight, squared-off



6-23

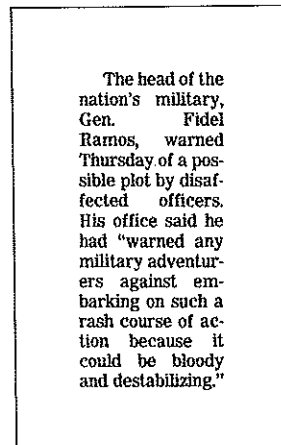
Spacing between letterforms must vary to please the eye.

columns of type give an orderly, classical feeling to the page.

*Unjustified* copy can be arranged in a variety of ways: flush left, flush right, centered, and asymmetrical. The "New Typography" of the 1920s believed ragged right type was more readable than a justified format. Unequal line length was also an important part of the International Style.

### Flush Left

The flush left format calls for a straight left edge and a ragged right edge. Typewritten copy is usually flush left. This format is commonly used in annual reports, brochures, identification lines under photographs, and any time when a slightly more informal look is desired than can be achieved with justified type. One of the benefits of this format is that it is possible to avoid hyphenated words. Page layout software programs usually allow the user to set parameters for



6-24

Justifying copy in a short line length will cause white holes to appear.

*The design principles of proximity, similarity grouping, and focal point are all important considerations in layout design. Variations in point size and font style function like a code to guide a reader.*

*The headings and subheadings in this text, for example, are carefully chosen to visually group information topics and to separate out new topics.*

*These headings should be physically grouped in closer proximity to the information they introduce than to the unrelated paragraph above.*

*These headings should be physically grouped in closer proximity to the information they introduce than to the unrelated paragraph above.*

**6-25**  
Variations in format.

hyphenation. A designer can specify how many can happen in succession and just how ragged the right or left edge can become.

#### **Flush Right**

The flush right format is unusual and consequently difficult to read. It has a ragged left edge and is used for design effect in special situations. It is difficult for the eye to search out the beginning of each new line without a common starting point.

#### **Centered**

Centered copy is often found in headlines or invitations, but rarely in standard copy. It is a slow-reading, classical format that encourages the reader to pause after each line. It is important to make logical breaks at the end of each line. This format has a pronounced irregular shape and packs a lot of space

around itself. The white space and irregular outline can draw the eye strongly. Consider the content of your material, how rapidly it should be read, and the overall look of the page before deciding on a centered format.

#### **Asymmetrical**

Asymmetrically arranged type can put across the point of a poem or an important statement. Asymmetry is also used in display type to achieve better balance among letterforms. Contour type is a form of asymmetry that fits the shape of an illustration, following its contour. Type that is set around the squared edge of a photo is called a *runaround*. Occasionally type will be set in the shape of a contour itself.

The ancient Egyptians and Greeks originally experimented with this format. It was used early in the 20th century by the poet Apollinaire and more recently by contemporary designers. Figure 6-26 is a typographic illustration created by a recent design graduate.

#### **Style and Content**

Typography sets a visual tone depending on the variables we have just examined. The style, the leading, and the format all contribute to a nonverbal communication that has a great deal to say. This visual communication, or visual language, affects the image of the client. It is a function of the choices the designer has made partly as a personal preference, partly in response to the client's needs, and partly in response to contemporary design trends.

Specific type styles and layout designs are associated with historical periods. Type styles can evoke the mood of an era just through careful type selection and usage. The 20th century in the United States has seen many styles come into vogue and then fade out. Typestyles reflect their era's philosophical and technological status.

Wood display type was widely used in the 1800s. By the latter part of the century,



these wooden type styles became elaborate, beautifully decorative designs. Type styles and trends continued to change, reflecting the sensibilities and technology of the time. Broadway type style was popular in the 1930s; the sans serif styles of Helvetica and Univers were widely used in the 1950s and 1960s. Today's styles show an appreciation for classic style as well as an eclectic willingness to experiment with unusual graphic effects, as digital typesetting encourages stylistic innovation.

With the advent of digital typography, special effects with type and layout design are easier to achieve than ever before. Experimentation is good, especially when tempered by a firm knowledge of traditional typographic design principles.

### Some Problems

Once the format for the layout is selected and the type is set, some awkward accidents may occur. If you are aware of these problems, you can avoid them.

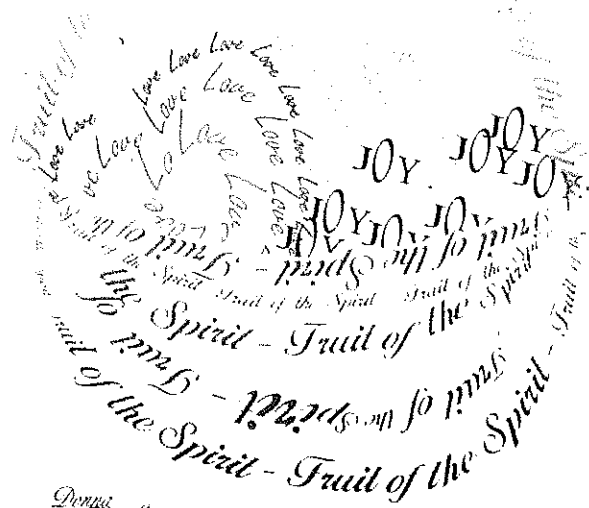
Widows and orphans are romantic names designating isolated line endings and dangling words. A *widow* is a short line that ends a paragraph and appears at the top or bottom of a printed column. An *orphan* is a single word that also appears in the isolated position and is most distressing when it appears at the top of a new page.

Hyphenation can also become a problem, especially if the line length is short and the format is justified. Too many hyphenated words will interfere with legibility. Hyphens should always fall at syllables, and they should not chop the word into unrecognizable segments.

### A DESIGN SUMMARY

Good design using typography is a delicate thing. It relies on so many interrelated variables that it cannot be reduced to a simple formula. Here, however, are a few summary comments:

*Galatians 5:22-23 But the Fruit of the Spirit is love, joy, peace, longsuffering, gentleness, goodness, faith, meekness, patience; against such there is no law.*



*Denny McWilliams  
1978*

#### 6-26

An asymmetrical typographic illustration by illustrator **D. McWilliams** for her student portfolio.

- When choosing type styles, remember that it is wise to either mix very different fonts or to stay within the same type family. For example, two fairly similar serif fonts will be more difficult to use together than a serif and a sans serif. Staying within a family gives a wide but unified choice.
- A combination of multiple fonts with strong personalities and highly distinctive styles are difficult to use together because they all call for attention. Thus it becomes difficult to establish a visual hierarchy.
- The design principles of proximity, similarity grouping, and focal point are all important considerations in layout design. Variations in point size and font style function like a code to guide a