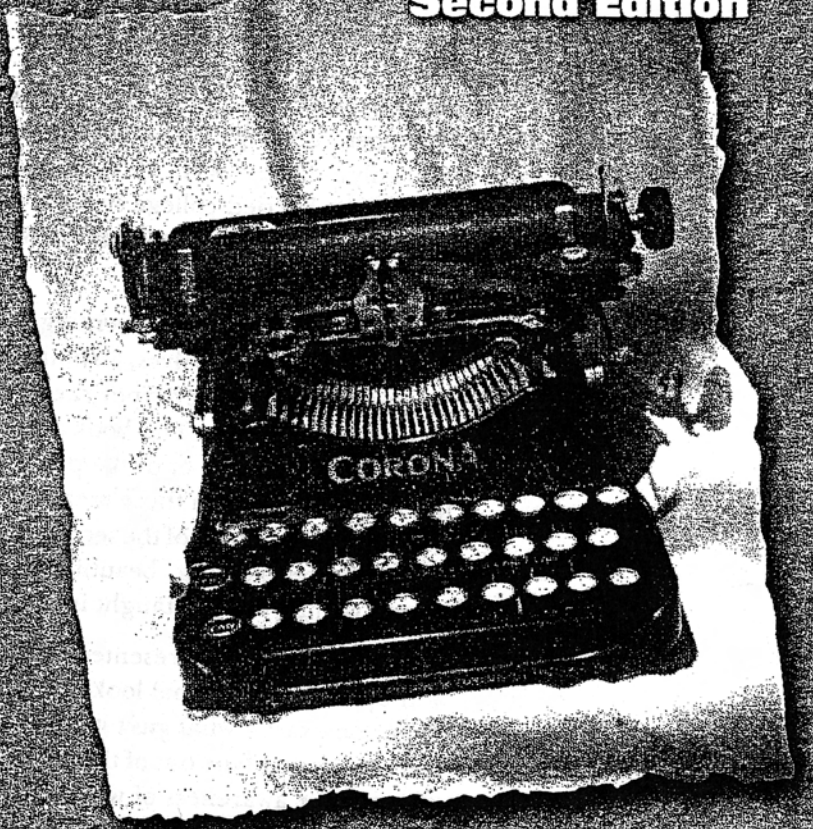
The Mac is Not a typewriter

Second Edition



Robin Williams

Read me first.

It has long been an axiom of mine that the little things are infinitely the most important.

Sir Arthur Conan Doyle, 1925

This phenomenon of desktop publishing is certainly incredible. Never before has professional-level type been available so readily and easily and, best of all, inexpensively—even the smallest business or the most harried college student can create high-quality pages, from annual reports to a letter for Mom to theses papers to visual presentations.

Thousands of us are circumventing the professional typesetters and creating this type ourselves, assuming that because this machine has a keyboard it works like a typewriter. Wrong. Professional typesetters know things we don't. This book does not pretend to be a treatise on design or typography or desktop publishing—there are many excellent books available in those areas. Rather, the purpose of this book is to let you in on some of the secrets that have been used for centuries to make type pleasing, beautiful, readable, legible, and artistic—secrets we just weren't taught in Typing 1A.

Many of the concepts presented in this book are subtle, yes—but they add up to a professional look. Perhaps most people couldn't put a finger on exactly what *gives* it that look, but everyone is aware of it. If we are taking type out of the hands of professionals, then we must upgrade *our* awareness of what makes their work *look* professional. It's just a matter of raising our consciousness, of looking closer at our printed pages with a bit more critical eye.

And of forgetting the rules our typing teachers taught us. **The Mac is not a typewriter.** The type we are using is not mono-spaced, mono-weight, mono-sized, mono-boring; it's capable of being the highest quality. And, as Mies van der Rohe said, "God is in the details."

I strongly feel it is our obligation—every one of us who uses the computer to create text on a page—to uphold the highest possible level of typographic quality in this changing world.

One space between sentences.

Use only one space after periods, colons, exclamation points, question marks, quotation marks—any punctuation that separates two sentences.

What? you say! Yes—for years you've been told to hit two spaces after periods, and on a typewriter you should. But this is no typewriter.

On a typewriter, all the characters are **monospaced;** that is, they each take up the same amount of space—the letter **i** takes up as much space as the letter **m.** Because they are monospaced, you need to type two spaces after periods to separate one sentence from the next. But . . .

On a Macintosh (unless you're using the fonts Monaco or Courier, which are monospaced just like a typewriter and what would you want to use those for anyway) the characters are **proportional;** that is, they each take up a proportional amount of space—the letter **i** takes up about one-fifth the space of the letter **m.** So you no longer need extra spaces to separate the sentences. Take a careful look at these two examples:

> Notice in this paragraph how the letters line up in columns, one under the other, just as on your typewriter. This is because each character takes up the same amount of space. This *monospacing* is what makes it necessary to use two spaces to separate sentences.

> This paragraph, however, uses a font with *proportional* spacing. Each character takes up a proportional amount of the space available. Thus the single space between sentences is enough to visually separate them, and two spaces creates a disturbing gap.

Of course, this one-space rule applies just as well to the spacing after colons, semi-colons, question marks, quotation marks, exclamation points, or any other punctuation you can think of. Yes, this is a difficult habit to break, but it must be done.

Take a look at any magazine or book on your shelf—you will never find two spaces between sentences (the only exception will be publications or advertisements produced on the Mac by someone who was still following typewriter rules).

Quotation marks.

Use real quotation marks—never those grotesque generic marks that actually symbolize inch or foot marks: use " and " — not " and ".

Of course, on a typewriter when you wanted quotation marks you used the typewriter quote marks, the ones that otherwise one would think are inch marks (") and foot marks ('). Those symbols are never found, though, as quotation marks in a book, magazine, ad, poster, etc., simply because that is not what they are.

Fortunately, the Mac thoughtfully provides us with real quotation marks. Unfortunately, they're tucked away on one of those invisible keyboards that you can only see with the desk accessory Key Caps (see page 21 for more info on Key Caps). It takes an extra split second to access them, but you get used to it. The subtle, added professionalism they give your work is very well worth the effort, even on the ImageWriter. This is where they are hidden:

Opening double quote:	“	Option [
Closing double quote:	”	Option Shift [
Opening single quote:	‘	Option]
Closing single quote:	’	Option Shift]

Do you see the pattern? When you are typing, instead of pressing the revolting " key, hold down the Option and/or Shift keys while you press the opening or closing bracket (near the Return key). You may even want to put a piece of tape on those bracket keys and draw in the proper quote marks to remind you exactly where they are.

Some software applications will convert the typewriter quotes to the real quotes for you automatically, but it is sensible to get accustomed to placing them yourself. They are also available at your Desktop when you're naming files, as well as in the Save As... dialog boxes, in

paint programs, database and spreadsheet programs—just anywhere you can type. There's no excuse for not using them. *Typewriter quotation marks are the single most visible sign of unprofessional type.*

Punctuation used with quote marks

There often seems to be confusion about where the quotation marks belong when there is punctuation involved. These are the guidelines:

- Commas and periods are **always** placed **inside** the quotation marks. Always. Really.
- Colons and semicolons go **outside** the quotation marks.
- Question marks and exclamation points go **in or out,** depending on whether they belong to the material inside the quote or not. Logically, if they *belong* to the quoted material, they go *inside* the quote marks, and vice versa.
- If more than one paragraph is quoted, the double quote is placed at the beginning of each paragraph, but only at the end of the last one. What an interesting convention.

Apostrophes.

Use real apostrophes, not the foot marks: ' not ' .

This is actually exactly the same as the previous chapter, but it's set off separately because it is so important and often people don't connect quotation marks with apostrophes. But the apostrophe is nothing more than the single closing quotation mark.

Repeated from the previous page:

Apostrophe: ’ Option Shift]

Apostrophe rules

As an aside, people often are confused about where the apostrophe belongs. There are a couple of rules that work very well:

For possessives: Turn the phrase around. The apostrophe will be placed after whatever word you end up with.

For example, in the phrase **the boys' camp,** to know where to place the apostrophe say to yourself, "The camp belongs to the **boys.**"

The phrase **the boy's camp** says "The camp belongs to the **boy.**"

Another example: **the women's room;** "The room belongs to the **women.**"

The big exception to this is "its." "Its" used as a possessive *never* has an apostrophe!!! The word **it** only has an apostrophe as a contraction—"it's" always means "it is" or "it has." **Always.**

It may be easier to remember if you recall that **yours, hers,** and **his** don't use apostrophes—and neither should **its.**

For contractions: The apostrophe replaces the missing letter. For example: **you're** always means **you are;** the apostrophe is replacing the **a** from **are.** That's an easy way to distinguish it from **your** as in **your** house and to make sure you *don't* say: Your going to the store.

As previously noted, **it's** means "it is"; the apostrophe is indicating where the **i** is left out. **Don't** means "do not"; the apostrophe is indicating where the **o** is left out.

For omission of letters: In a phrase such as **Rock 'n' Roll**, there should be an apostrophe *before and after* the **n,** because the **a** and the **d** are both left out. And don't turn the first apostrophe around—just because it appears in *front* of the letter does not mean you need to use the opposite single quote. An apostrophe is still the appropriate mark (*not* **'n'**).

In a phrase such as **House o' Fashion**, the apostrophe takes the place of the **f.** There is no earthly reason for an apostrophe to be set *before* the **o.**

In a phrase such as **Gone Fishin'** the same pattern is followed—the **g** is missing.

In a date when part of the year is left out, an apostrophe needs to indicate the missing year. **In the 80s** would mean the temperature; **In the '80s** would mean the decade. (Notice there is no apostrophe before the **s**! Why would there be? It is not possessive, nor is it a contraction—it is simply a plural.)

Dashes.

Never use two hyphens instead of a dash.
Use hyphens, en dashes, and em dashes appropriately.

Everyone knows what a hyphen is—that tiny little dash that belongs in some words, like mother-in-law, or in phone numbers. It's also used to break a word at the end of a line, of course.

On a typewriter, we were taught to use a double hyphen to indicate a dash, like so: -- . We were taught that because typewriters didn't have a real dash, as the professional typesetters have. With the Mac, we no longer need to use the double hyphen—we have an **em dash,** which is a long dash, such as you see in this sentence. We also have an **en dash,** which is a little shorter than the em dash.

Hyphen -
A hyphen is strictly for hyphenating words or line breaks. Your punctuation style manual goes into great detail about when to use a hyphen; there doesn't seem to be a great deal of confusion surrounding that issue. We all know where to find it—on the upper right of the keyboard, next to the equal sign.

En dash –
An en dash is called an en dash because it's approximately the width of a capital letter N in that particular font and size. It is used between words **indicating a duration,** such as hourly time or months or years. Use it where you might otherwise use the word "to." The en dash can be used with a thin space on either side of it, if you want a little room, but don't use a full space. Here are a few examples of places to use the en dash. Notice that, really, these are *not* hyphenated words, and a plain hyphen is not the logical character to use.

October – December

7:30 – 9:45 A.M.

3 – 5 years of age

The en dash is also used when you have a compound adjective and one of the elements is made of two words or a hyphenated word, such as:

San Francisco–Chicago flight
pre–Vietnam war period
high-class–high-energy lifestyle

Em dash —

The **em dash** is twice as long as the en dash—it's about the size of a capital letter M. This dash is often used in a manner similar to a colon or parentheses, or it indicates an abrupt change in thought, or it's used in a spot where a period is too strong and a comma is too weak (check your punctuation style manual for the exact use of the dash, if you're unsure). Our equivalent on the typewriter was the double hyphen, but now we have a real em dash.

Since you were properly taught, of course, you know that the double hyphen is not supposed to have a space on either side of it—neither is the em dash, as you can see right here in this sentence. There are six other examples of the em dash in this chapter.

OK—so where do you find those characters?

- **hyphen** Next to the zero at the top right of the keyboard
- **en dash** Option Hyphen
  (hold the Option key down while pressing the hyphen)
— **em dash** Option Shift Hyphen
  (hold the Option *and* Shift keys down while pressing the hyphen)

City-named fonts and the dashes

Please read the chapter on Fonts (p. 35) to understand the difference between city-named fonts and those without city names. Regarding en and em dashes, some city-named fonts have them switched; that is, fonts like Geneva or New York access the en dash with Option Shift Hyphen and the em dash with Option Hyphen.

A list for you

Below is a list of the commonly-used special characters in general typing. To create any of these, hold down the Shift and/or Option key while you press the letter for that character. See the following chapter for creating accent marks.

“	Option [	opening double quote
”	Option Shift [	closing double quote
‘	Option]	opening single quote
’	Option Shift]	closing single quote; apostrophe
–	Option hyphen	en dash
—	Option Shift hyphen	em dash
…	Option ;	ellipsis (this character can't be separated at the end of a line as three periods can)
•	Option 8	bullet (easy to remember as it's the asterisk key)
fi	Option Shift 5	ligature of f and i
fl	Option Shift 6	ligature of f and l
©	Option g	
™	Option 2	
®	Option r	
°	Option Shift 8	degree symbol (e.g., 102°F)
¢	Option $	
/	Option Shift !	fraction bar (this doesn't descend below the line as the slash does)
¡	Option 1	
¿	Option Shift ?	
£	Option 3	
ç	Option c	
Ç	Option Shift c	

Kerning.

Adjust the space between letters according to your sensitive visual perception.

One of the most important things a professional typesetter does for a client is **kern** the type. **Kerning** is the process of removing small units of space between letters in order to create *visually-consistent letterspacing;* the larger the letters, the more critical it is to adjust their spacing. Awkward letterspacing not only looks naïve and unprofessional, it can disrupt the communication of the words. Look carefully at these two examples (try squinting):

WASHINGTON unkerned

WASHINGTON kerned

The secret of kerning is that *it is totally dependent on your eye, not on the machine*. In the first example, each letter has mechanically the same amount of space on either side of it. Some spaces *appear* to be larger because of the shape of the letter—angled or rounded. In the second example, the computer application was set to adjust, or kern, the letters, and it did a fairly good job, but the letters still needed some manual adjusting. *Type needs a human eye for the fine tuning.*

Take a look at the square and circle below—which appears to be larger?

Actually, they are both exactly the same size from edge to edge. The circle *appears* to be smaller because of all the white space surrounding it. It is this fact that creates the need to manually and visually letterspace/kern type—each character presents a different visual impression on the page,

and reacts with the other letters according to their particular combinations of dark and light space. These impressions can be broken down into a few generalized combinations:

HL Characters with verticals next to each other need the most amount of space; this can often be used as a guideline with which to keep the spacing consistent.

HO A vertical next to a curve needs less space.

OC A curve next to a curve needs very little space.

OT A curve can actually overlap into the white space under or above the bar or stem of a character, and vice versa.

AT The closest kerning is done where both letters have a great deal of white space around them.

Remember, the point is to keep the spacing visually consistent—there should visually *appear* to be the same amount of space between all the letters. It's not critical how much—it's critical that whatever it is be consistent. You can usually focus better on that white space if you look at the text with your eyes squinted.

Kerning is not possible in all applications; typically you'll find it in page layout programs or in applications where text manipulation is a primary feature. You won't usually find it possible to control the kerning in a word processor.

In those applications where it *is* possible, each character and space is broken down into little sections, called *units;* 48 units per character is a common breakdown. Using the kerning function, it is possible to take out one of those units at a time between letters, allowing for very precise positioning. Check the manual for the particular method for kerning in your application.

Helvetica, another traditional font installed in most laser printers, is named after Switzerland (Confederatio Helvetia), the country where the typeface was created; Geneva, which we can associate with Switzerland, is the bitmapped version of Helvetica.

Courier, which looks like monospaced typewriter type (and why anyone would want to use a laser printer to make their work look like a typewriter is a mystery to me), has a bitmapped equivalent called Monaco.

The point of all this is that if you use one of those three bitmapped fonts just named (New York, Geneva, or Monaco) on a laser printer, many applications will use what appear to be their equivalents (they will *substitute* fonts); your type will not be bitmapped, but will look similar to the traditional font. What you will notice, though, are disturbing spaces between the words; your tabs won't line up properly; your underlining will show little gaps between the dashes; your formatting may be off; your work won't always print exactly as you have it on your screen. Here are some examples:

- This is 10 point New York printed on the LaserWriter with no font substitution. Notice the bitmapped look.
- This is 10 point New York printed on the LaserWriter with automatic font substitution. The resolution is better, but notice the disgusting word spacing.
- This is 10 point Times printed on the LaserWriter. It doesn't need font substitution. It looks great.

If you're doing a lot of word processing, it's easier to read city-named fonts on the screen. If you're going to be printing your work on a low resolution printer, city-named fonts will be more readable. If you are just going to *proof* your work on, say, an ImageWriter, it would be sensible to input all your text in something like Geneva or New York and then format it into the PostScript fonts for the final printouts on the laser printer.

All PostScript fonts look just lovely on high-end printers such as the Linotronic, and the bitmapped fonts look even more awful.

Widows & Orphans.

Never leave widows and orphans bereft on the page.

Now obviously this term isn't referring to bereaved widows and orphans such as some of us are ourselves—no, these are actually long-standing technical, typographic terms.

When a paragraph ends and leaves fewer than seven characters (not words, characters) on the last line, that last line is called a **widow.** Worse than leaving one word there is leaving part of a word, the other part being hyphenated on the line above.

A gentle joyousness—a mighty
mildness of repose in swiftness,
invested the gliding whale. Not the
white bull Jupiter swimming away
with ravished Europa clinging to
his graceful horns; his lovely, leering
eyes sideways intent upon the maid;
with smooth bewitching fleetness,
rippling straight for the nuptial bower
in Crete; not Jove, not that great
majesty Supreme! did surpass the
glorified White Whale as he so divinely
swam.

widow

On each soft side—
coincident with the
parted swell, that but
once leaving him, then
flowed so wide away—
on each bright side,
the whale shed off en-
ticings.

an even worse widow

When the last line of a paragraph, be it ever so long, won't fit at the bottom of a column and must end itself at the top of the next column, that is an **orphan.**

...Moby Dick moved on, still withholding from sight the full terrors of his submerged trunk, entirely hiding the wrenched hideousness of his jaw. But soon the fore part of him slowly rose from the water; for an instant his whole marbleized body formed a high arch, like Virginia's Natural Bridge, and warningly waving his bannered flukes in the air, the grand god revealed himself, sounded, and went out of sight. Hoveringly halting, and dipping on the wing, the white sea-fowls longingly lingered over the agitated pool

orphan

that he left.

With oars apeak, and paddles down, the sheets of their sails adrift, the three boats now stilly floated, awaiting Moby Dick's appearance.

In long Indian file, as when herons take wing, the white birds were now all flying towards Ahab's boat; and when within a few yards began fluttering over the water there, wheeling round and round, with joyous, expectant cries.

Herman Melville, *Moby Dick*

Avoid both of these circumstances. Sometimes you'll need to rewrite copy, or at least add or delete a word or two. Sometimes you'll have to take spacing out of the letters, words, or lines, depending on the program you're working in. Sometimes widening a margin just a hair will do it. But it must be done. Widows and orphans on a page are tacky.

See what I mean?

Hyphenations & line breaks.

Avoid more than two hyphenations in a row.
Avoid too many hyphenations in any paragraph.
Avoid stupid hyphenations.
Never hyphenate a heading.
Break lines sensibly.

It's amazing how often silly line breaks show up. A line break is simply that—where a heading or sentence breaks off at the end of a line.

This is more often critical in headings or in short blocks of text than in long manuscripts, although even in lengthy text you can find those classic cases, like hyphenating the word *therapist* so it becomes *the-rapist*. We've all seen strange hyphenations like turn-ed, or-phans, occuren-ce. Some, obviously, are downright wrong. Not only are they wrong, they're a gross sign of unprofessionalism. Watch them. Don't rely on your software package to do it the best way. Use a dictionary to verify any word that looks a bit odd. Read the lines carefully; even if a word is broken properly, pick up on any instances where there may be a split second of confusion, ambiguity, racism, sexism, stupidity, etc., resulting from breaking the line at that particular point. If there is, fix it. Notice how awkward these sentences are (these actually came back from a typesetter):

**SRJC is an open-access cam-
pus.**

**Any prospective or interested stud-
ent can contact the Instructional Office.**

Almost as bad as dumb hyphenations are too many hyphenations in a row. Sometimes you can't avoid hyphenating, but it's never necessary to hyphenate three times in a row, or six of the eight lines in a paragraph. In those cases, you really must adjust something.

Often, too many hyphenations are the result of using a justified alignment (text aligned on both sides of the column, as this is) on a line that is too short for the point size. If you can't possibly left-align the text, try rewording, adjusting letter or word spacing if that's

possible, kerning (see page 33), widening the margin, or adding spaces before the offending word on a justified line to bump it down to the next line.

Never hyphenate a word in a headline

Any headline can be broken at a logical point. Even though you may have no hyphenations in a headline, insensitive line breaks can still make your text awkward or ambiguous. Generally, group lines of a heading into appropriate grammatical sections. Which of the following would be more appropriate?:

Jimmy's Lemonade Stand

Parade in the Bay Area was a Success

The Theater presents Don Quixote de la Mancha

Jimmy's Lemonade Stand

Parade in the Bay Area was a Success

The Theater presents Don Quixote de la Mancha

Watch line breaks in body text as well

Most of the text you create is flush left with a ragged right margin. Try to keep the right margin as even as possible, for the visual effect as well as for smoother reading—it can be bothersome to have lines ending at radically different points. This means you may need to bump words from one line down to the next line, or occasionally rewrite copy to adjust the lines.

Few things are pure, and they are seldom simple; and of all the impure and unsimple things in this world which befog and bedevil the minds of men, their ideas about women deserve to take first place.

—*Oscar Wilde*

Few things are pure, and they are seldom simple; and of all the impure and unsimple things in this world which befog and bedevil the minds of men, their ideas about women deserve to take first place.

—*Oscar Wilde*

Simply bumping the word 'and' from the first line to the second (by inserting a couple of spaces before the word) rearranged all the following lines to give a smoother right margin. Then I also aligned *Oscar Wilde*.

Leading, or linespace.

Keep the linespacing consistent.

Linespacing within a paragraph should be consistent. We often set an initial cap or a word in a larger point size than the rest of the text. This affects the linespacing, or leading (the space between the lines of type); if even one letter or word is larger, the linespacing adjusts to fit the larger character(s), creating uneven spacing.

The history of the term leading (pronounced *ledding*) may give you a better grasp of what leading itself accomplishes and how you can best adjust it.

Until the early '70s (yes, the 1970s), all printed type was set in hot metal. Each letter—each and every little letter—was cast onto a tiny piece of lead *backwards* so when printed the letter would be facing the right direction. All these letters were lined up in a row, with other tiny pieces of blank metal stuck between the words to separate them. Even the newer linotype machines (which composed these little pieces of type whole lines at a time instead of one letter at a time) used the same principle. Between each line of type another piece of blank lead was inserted to separate the lines—this was called the *leading*.

Now, the type was measured in points, just like the type on the Mac (72 points per inch). The leading was also measured in points. If the type was **10** points high and the little piece of lead inserted between the lines was **2** points high, then the **2** points was *added onto* the point size of the type and the leading was called **12** point. Got that?

10 point type on
2 points of linespace —— *a piece of lead 2 points thick*
makes 12 pt. leading

Typically, a standard unit of measure for the leading between the lines is 20 percent of the point size: in the example on the previous page, the type is 10 point, the leading would be 12 point. (Many manuals for Macintosh programs call the percentage 120 percent, which is the same as adding on the 20 percent.)

What all this boils down to is that when you type on the Mac, you automatically get a 20 percent leading (that's **auto leading**). When a word or character is made larger, it automatically comes with more leading. This creates an awkward look to a paragraph, as then one line has more space after it than the others. For instance, if you use 12-point type, the auto leading is around 14 (about 120% of the point size). But when you insert a 24-point initial letter into your paragraph, the leading for that one line automatically bumps up to about 29.

In this example,
the first letter is larger and
disrupts the even linespacing
of the rest of the paragraph.

This paragraph
also has a large initial cap,
but the leading has been
adjusted.

It's usually possible to correct the line spacing, depending on the program you're creating it in.

- If your application allows you to adjust the leading, then select the entire paragraph and reset the leading to what it originally was for the *smaller* type.
- Sometimes you can adjust the leading, but it won't let you go smaller than the auto-leading for the larger size, the one that's disruptive; in that case you'll need to adjust the line spacing for the entire paragraph to match the *larger* size.
- If you're having difficulty fixing the leading in a page layout program, you may find it easier to set the initial

cap in its own text block and move it in next to the rest of the text as a separate unit.

- In some of the less sophisticated programs, you can't adjust the line spacing at all. But you can sneak this trick in: select one of the blank spaces between the words on a line; change the point size of the blank space to the same size as the large initial cap or word that's causing all this trouble. You'll have to do this separately for each line in the paragraph in order to make them all match.

Adjust leading with all caps

You'll find extra, awkward leading between lines of all capital letters (on those rare occasions when you use all caps!). That's because caps have no "descenders"—those parts of the lowercase letters g, j, p, q, and y that drop below the rest of the letters. To tighten up the leading, figure out what the auto leading is (120% of the point size). Then set the leading to less than that. For instance, the auto leading for 36-point type would be about 43; reset it for less than 43. Usually on all caps you can actually reduce it to less than the number of the point size of the type; e.g., 36-point type and 34-point leading—try it! Notice that the example below is 18-point type with 16 leading, or linespace.

TOO MUCH LINESPACE

(18-point type; Auto leading)

LINESPACING ADJUSTED

(18-point type; 16-point leading)

The same is true of a line, generally a headline, that has few descenders. Lacking descenders, lines with no visual interruption in them can create space that looks larger than necessary.

Too much spacing

(18-point type; Auto leading)

Better spacing

(18-point type; 16-point leading)

Adjust the spacing between paragraphs

To have more space between paragraphs on a typewriter, our only option was to hit the carriage return twice. You've probably noticed in Macintosh typesetting that this turns out to be an excessive amount, giving a clunky look to your paragraphs. Most software applications that use type, such as word processing or page layout programs, have a means for you to separate paragraphs by as few points as you would like. Generally it is found in a "Paragraph" command.

Wherever you find this feature in the particular application you are using, you can add a few points in a box usually called **after.** These few points *after* mean that whenever you press Return, those few points will be *added onto* the leading used in the previous paragraph before going on to the next paragraph. If you are using 10-point type with 12-point leading, you can add 5 points after, creating about half a linespace between paragraphs. The text you are reading here is set 10/13 with 6 extra points between the paragraphs.

It is redundant to indent the first line of paragraphs if you are setting extra space between them. Use one or the other. But do always use *something,* or the text becomes difficult to read.

Justified text.

Justify text only if the line is long enough to prevent awkward and inconsistent word spacing.

The power of a word processor is so much fun that it's easy to go overboard. The tendency is to try to do all those things we couldn't do on a typewriter, and one of the most common things is to justify all the text (that is, to align it on both margins, like this paragraph). On a few kinds of typewriters it was possible to do this with a great deal of trouble, and heaven forbid if you made a typo and had to go back later and correct it. But with these magic machines, a push of a button and the entire body of text aligns itself. It's irresistible.

Resist it. The only time you can safely get away with justifying text is if your type is small enough and your line is long enough, as in books where the text goes all the way across the page. If your line is shorter, or if you don't have many words on the line, then as the type aligns to the margins the words space themselves to accommodate it. It usually looks awkward. You've seen newspaper columns where all text is justified, often with a word stretching all the way across the column, or a little word on either side of the column with a big gap in the middle. Gross. But that's what can happen with justified type. When you do it, the effect might not be as radical as the newspaper column, but if your lines are relatively short, you will inevitably end up with uncomfortable gaps between some words, with other words looking all squished together:

"A traveller! By my faith, you have great reason to be sad: I fear you have sold your own lands to see other men's; then, to have seen much and to have nothing, is to have rich eyes and poor hands."

Rosalind
W. Shakespeare

— When the space between the words becomes greater than the space between the lines, it creates what are called "rivers" running through the type.

When your work comes out of the printer, turn it upside down and squint at it. The rivers will be very easy to spot. Get rid of them. Try squinting at the example on the previous page.

Here is a general guideline for determining if your line length is long enough to satisfactorily justify the text: the line length in picas should be about twice the point size of the type; that is, if the type you are using is 12 point, the line length should be about 24 picas (24 picas is 4 inches—simply multiply the number of inches by 6, as there are 6 picas per inch).

Justified text was the style for many years—we grew up on it. But there has been a great deal of research on readability (how easy something is to read) and it shows that those disruptive, inconsistent gaps between the words inhibit the flow of reading. Besides, they look dumb. Keep your eyes open as you look at professionally-printed work (magazines, newsletters, annual reports, journals) and you'll find there's a very strong trend now to align type on the left and leave the right ragged.

Isn't that an odd thing to read as you see this whole book justified? But it's just like the choice to use all caps: when you choose to justify type, you must realize you are choosing that *look* and sacrificing the most effective word spacing. Depending on the project, one may be more important than the other. For this book, I wanted the *look* of the justified line and I felt the line length was long enough to give me a minimum amount of awkward word spacing (although I must admit I still find the uneven word spacing irritating, even on this length of line; I can't have everything, they tell me).

Serif and sans serif fonts

*Serif type is more **readable** and is best for text; sans serif type is more **legible** and is best used for headlines and signage.*

Type can generally be classified into two major groups: serif and sans serif. Those little ditties at the ends of the strokes of the letter are serifs. If a font doesn't have those, it's called "sans serif" ("sans" means "without" in French).

Readability

Many studies show that **serif type** is more **readable** in extended text than sans serif. It's not clear exactly why; suggestions are that the serifs tend to lead the eye along the horizontal line, or that the thick/thin variations in the strokes of most serif type eases reading, or perhaps simply the fact that we all grew up learning to read from books that used serif type. Whatever the reason, it has been well-established that serif type is easier to read in extended text. Have you ever seen a novel printed in sans serif type? (I have, and it was a dreadful experience.)

Legibility

Sans serif type, on the other hand, has been shown to be more **legible.** Legibility refers more to *character recognition* than to reading large blocks of text: sans serif is easier to recognize at a glance for short little bursts of type, as in headlines on a page, in a signage system in corporate headquarters, or the freeway signs that need to be read quickly. A full page set in sans serif may initially *appear* to be easier to read, but in the long run it proves to be tedious.

General use

Make a point to notice how serif and sans serif fonts are used in publications. Very typically you'll find that headlines are set in sans serif and the main body of text is set in serif. That's because it's a time-tested and infinitely variable solution.

Sans serif in text

If you do insist on setting your body text in a sans serif, keep these things in mind to improve its readability:

- Use a shorter line length (see page 60 regarding line length).
- Set not more than seven or eight words on the line (serif type can handle ten to twelve words).
- Avoid manipulating the type style to make it even less readable; i.e., use as few bold, italic, outlined, or shadowed words as possible.

Examples

Read this paragraph and the following one while trying to be particularly sensitive to which one feels a touch easier to read. Remember, *readability* becomes more important in lengthy text, such as a book or thesis paper, rather than in a paragraph or two of advertisement copy, but you can probably get a sense for it even in these short blocks. (This typeface is ITC New Baskerville.)

When the term legibility is discussed, it's referring to display type, such as headlines or signs. Read the following headlines, noticing which one is more distinguishable at a quick glance. Of course, you can *read* both of them, but once you become aware of the subtle differences in readability and legibility, you begin to have a clue as to how important the selection of a particular typeface can be to effective communication. (This typeface is Myriad Roman.)

STOP HERE

STOP HERE

Combining typefaces

Unless you have a background in design and typography, never combine more than two typefaces on the same page.

Never combine two serif fonts on the same page, and never combine two sans serif fonts on the same page.

When all those typefaces are staring at you from the Font menu and all it takes is a click of the mouse to change from one to the other, it's hard to hold yourself under control and not make the page look like a ransom note.

Try.

You can't go too wrong if you keep it down to two typefaces in a document. A particularly good combination is to use a sans serif for headings and a serif for the body copy (see the previous chapter). Now, within each typeface, it's fine to make some of it bold or italic or playful occasionally (try to keep the style you choose consistent with the purpose and meaning of the text).

Combining two san serifs

Just about never should you combine two sans serif typefaces on the same page, like Helvetica (Arial) and Avant Garde. Without going into a lot of design theory, the basic principle is that there is not enough contrast between the faces—they are too similar to each other and set up a subtle conflict. The combination will make your page look tacky and unprofessional.

Helvetica and Avant Garde do not have enough contrast between them to look good together on one page. They have very subtle differences in the shapes of the letters: Avant Garde is very geometric, while Helvetica has more classic shapes.

Helvetica

But the *similarities* between these two faces (both being sans serif) create a situation where there is neither **concord,** where all elements are working together, nor **contrast,** where elements intentionally contrast and strengthen each other. The result is **conflict.**

Avant Garde

Notice how the two sans serifs on the previous page compete with each other—they have some similarities and some differences, but not enough of either to work effectively together.

Combining two serifs

Combining two serif typefaces can be done more easily, but again, it takes some visual literacy to understand how to do it effectively.

This is the typeface **Baskerville.** It's technically considered to be a "transitional" typeface between the oldstyle and the modern.

Now this typeface is **Garamond,** a classic oldstyle. These two faces are a bad combination because they are *too similar.* The problems with type combinations always lie in the similarities!

So choose combinations of typefaces that are very different.

This face, Poster Bodoni, is different enough to be a good combination!

Or a script is often a good combination with any of the other three faces I just named. Viva la difference! (This is Lucida Handwriting.)

The safe and easy route

If you have no background in design or typography, then it is very safe to stick to two typefaces, one serif and one **sans serif.** Even though you may be saying to yourself right now, "I'm not designing anything anyway," you are. Every time you turn on your Macintosh and create a document to be printed, you're designing the page that's going to come out. If it's a newsletter, a poster, an ad, a thesis paper, an essay, or even a letter to Grandma, you are designing that page. And how you design it affects the impression it gives people. There's no reason on earth not to make that page look good.

The fun and exhilarating route

When combining typefaces, don't be a wimp. The key is in the **contrast.** Contrast with strength. Contrast with power. If one face is light and airy, choose a dense black one to go with it. If one face is small, make the other one large. If you set one all caps, set the other lowercase. If one is roman (straight up and down), combine it with a script.

Avoid weak contrasts, such as a semi-bold type with a bold type; avoid combining a script with an italic because they're both sort of curvy; don't combine large type with almost-as-large type. Put some chutzpah into it!

Othou pale Orb that silent shines
While care-untroubled mortals sleep.

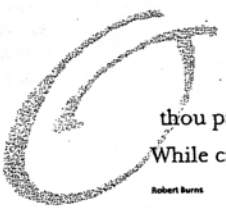
Robert Burns

This is the beginnings of a contrast of type (in the initial letter Bailey Sans O), but still much too wimpy.

thou pale Orb that silent shines
While care-untroubled mortals sleep.

Robert Burns

This is getting braver and more interesting, but try another typeface.



thou pale Orb that silent shines
While care-untroubled mortals sleep.

Robert Burns

This is a nice combination of differences, which creates a nice contrast.

thou pale Orb that silent shines
While care-untroubled mortals sleep.

Robert Burns

Contrast doesn't always have to include more than one typeface. Here only one typeface is used in the quote (Arcana), but one letter is much, much larger and shaded back to a pale gray, thus contrasting in size and in color.

Below are just a few examples of how combining typefaces can enhance the communication of text, as well as make it more visually interesting. When text is more visually interesting, it's more likely to be read because it draws the viewer's eye to the page.

Hormone Derange
O gummier hum
Warder buffer-lore rum
Enter dare enter envelopes ply,
Ware soiled'em assured
adage cur-itching ward
An disguise earn it clotty oil die.

Harm, hormone derange,
Warder dare enter envelopes ply,
Ware soiled'em assured
adage cur-itching ward
An disguise earn it clotty oil die.

Hormone Derange
O gummier hum
Warder buffer-lore rum
Enter dare enter envelopes ply,
Ware soiled'em assured
adage cur-itching ward
An disguise earn it clotty oil die.

Harm, hormone derange,
Warder dare enter envelopes ply,
Ware soiled'em assured
adage cur-itching ward
An disguise earn it clotty oil die.

These are classic examples of a sans serif headline and serif body copy. But you can see above, left, that simply making the headline sans serif isn't quite enough. On the right, I used the same sans serif but made it bigger and bolder which multiplied the contrasts, making it stronger and more effective.

ROSEMARY
Faithfulness and
remembrance.
PANSIES
Thoughts and love's
wounds.
FENNEL
Flattery and sorrow.
COLUMBINE
Ingratitude and
forsaken lovers.
RUE
Repentance, pity, grace,
and forgiveness.
VIOLETS
Death, especially early
death.

Rosemary
Faithfulness and remembrance.

Pansies
Thoughts and love's wounds.

Fennel
Flattery and sorrow.

Columbine
Ingratitude and forsaken lovers.

Rue
Repentance, pity, grace, and forgiveness.

Violets
Death, especially early death.

This is a goodhearted attempt to make a list easier to read by putting the headings in caps. But the contrast isn't quite enough.

This list communicates more clearly because of the contrast that allows your eyes to skim the heads. I also used extra "paragraph space above" each heading, as explained in Chapter 14, to more clearly separate each element. And I used lowercase instead of caps for the headings so they would be easier to read quickly.

Combining typefaces is one of the most satisfying aspects of design. If you find this intriguing and want to know more, read *The Non-Designer's Design Book;* the second half focuses on this particular challenge.