LEGHTHOUSE MAGAZINE DESIGN

Turnover File

Tobias Lee Summer 1992



LIGHTHOUSE MAGAZINE DESIGN TURNOVER FILE FIRST EDITION JULY 1992

For Lighthouse Magazine c/o Dean of Students Office 4 University Hall Harvard College Cambridge, MA 02138

Special thanks to Shana Birnbaum who stayed up many long nights with me designing and printing, all of the people involved with *Lighthouse* design for the 1991–1992 academic year—we could not have done it without you, the guys at ElseWare Corporation who taught me (perhaps a little too much about design and fonts), mom, and dad.

This text was written on Macintosh SE/30, IIcx, and IIci personal computers. Proof pages were output to an Apple Personal Laserwriter IISC. Final output was to an Apple Personal Laserwriter IINTR. Graphics were created with a combination of screen shots and Aldus FreeHand. Final layout was done using Aldus PageMaker 4.2.

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INTRODUCTION

Headline Style: Optima font at 30 points, 25 leading (30 on 25); Rule Below; and Small Caps.

Drop Cap.

Body Text Style: Adobe Garamond Regular 13 on

The Lighthouse Logo to the right is a graphic with text wrapped around it.

Toby's Aside Style: Optima Oblique 9 on 12. hope that this turnover file will be complete enough to serve as a guide for Lighthouse design. Though there are many technical standards for design, I will use the standards set in the second year of Lighthouse (1991–1992) as a model. I may make some suggestions for design that you choose to ignore. However, I also may have overlooked some very important aspects of

have overlooked some very important aspects of design that you will want to focus on in your magazine.

The responsibilities for design are very straightforward: transfer all the text, graphics, and other pieces gathered for a particular issue to form a complete and aesthetic magazine. You may also have to design some posters, flyers, and printed material for Lighthouse such as stationery, business cards, etc. However, the job becomes much more complex and difficult when you begin to deal with the computers, fonts, printers, and resources available at Harvard-Radcliffe.

I will first go through the design process step by step. While I outline the design process, I will try to explain the technical details. Finally, I have included a few supplements and tips that might be helpful. Be sure to remember and mention any additional pieces of advice in *your* turnover file. Good luck!

DESIGNING THE MAGAZINE

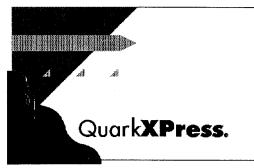
BEFORE THE SUBMISSIONS MEETING

Subheader Style: Optima 14 point with Auto Leading and Small Caps. he first step of designing the magazine is to choose the layout program you want to use. We have been using Aldus Page Maker 4.01 which is available on the server in the Science

Center. However, in January 1992, Aldus released Page-Maker 4.2 which has the ability to automatically put in drop caps. Adding drop caps has always been a lot of

trouble before, and now, it is as simple as choosing the "Drop Cap" option in the menu. Page-Maker 4.2 also has some other useful features. The other major desktop publishing program

available is QuarkXPress 3.1. Actually, Quark XPress is a more popular program among the higher-end



Repeating elements found on the Master Pages.

graphic designers because of the fine tuning that Quark provides. I think that for measurements, Aldus PageMaker allows for one decimal point of accuracy while Quark XPress allows for two. The Independent, The Harvard Science Review, and The Harvard Computer Review use PageMaker. The Crimson uses Quark. Lighthouse has been using PageMaker because it is fairly easy to use; we haven't had many problems with it. If we want to use Crimson computers and printers, or if our new design coordinator has

Pullout Quote with rule above and rule below.

Try To Be Consistent

experience with Quark, then it might be a good idea to switch. Otherwise, stick with PageMaker.

You need to choose the fonts you will use. What is a font? Technically,

a font is not simply Adobe Garamond or Helvetica. These are typefaces. Fonts are Adobe Garamond 12 points or Helvetica 18 points. Fonts designate typefaces and sizes. However, for this text (and for most Macintosh texts), font and typeface will be used interchangeably. For text, you will want a serif font. For headlines and pull-out quotes, choose either a serif or a sans serif font. Try to be consis-

tent. You might want to use a couple different typefaces per page, but be careful not to make the page look too confusing or too busy. If you start using more than eight *fonts* or three *typefaces*, ask

Serif Sans Serif

yourself whether all those different fonts are needed. You will probably want something for the headline or the title of the article, possibly a subheader, a unique font for the byline, something for the body text, a different one for the pullout quote, and a byline font. Maybe you will need a caption font for a graphic. Possibly a poem on the page will use a unique

Some Serif Fonts	Some Sans Serif Fonts
Adobe Garamond	Geneva
Bookman	Helvetica
Courier	Monaco
Palatino	Optima
Goudy	Marker

Normally, you will want to choose serif fonts for large blocks of text and sans serif fonts for short, attention-grabbing blurbs. The serifs make the text easier to read. I heard that it is the opposite in some parts of Europe. The difference between serif and sans serif fonts for the reader is supposed to be conditioned. In the U.S., we happen to find serif fonts easier to read as text.

One or two lines at the end of a paragraph alone at the head of a new page is called a widow. This is considered bad form, so you should try to avoid it

A page is boring with no graphics and no pullout quotes. If nothing else, stick in a pullout quote or two.

Try to avoid lines at the end of paragraphs with one or two words alone. Use the Tracking option to squeeze these words onto the preceding line. If you choose to force the word or words onto the next page, you get a single line from this paragraph alone at the head of the page—an undesirable widow. One or two beginning lines of a paragraph at the bottom of a page is a yucky orphan.

font. But whatever the reason, each font you choose to put on a page should serve a purpose.

Choose the grid you will use throughout a given section of the magazine. How many columns of text do you want on a page? Using more than one column makes the text easier to read. However, too many columns will get annoying. According to the October 1991 issue of *MacWorld*, "a line should be wide enough to accommodate two and a half lowercase alphabets in the desired type size and style." And though you should be consistent for a given section (fiction, non-fiction, clips, etc.), you do not need to be consistent throughout the magazine. The same applies to the fonts.

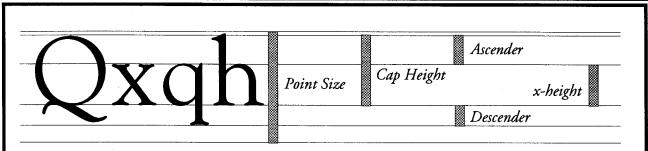
Decide how you want the by-line to look. Do you want it to read "by Toby Lee" or just "Toby Lee"? How do you want the bio? My bio would be "Tobias Lee '94 is a biology concentrator living in Cabot House. He was on the *Lighthouse* editorial board." Where should the bio go? And do you want rule lines above the bio like we have now? What fonts do you want to use? How about the spacing? Do you want a lot of space between the headline and the by-line? What font do you want for the headline? And for the subhead? What is the page size? What are the margins that the printer requires? Do you want any elements to run through the entire magazine? How will the reader tell a fiction piece from a non-fiction piece? What will you do with a continuation? Will you have a marker for the end of a piece? How large do you want the drop cap, and how do you want it to look?

LAYOUT WITH STYLE

Initial Cap—we at Lighthouse call it an "Up Cap." The Leading is set from the Paragraph... Option to line up from the bottom of the baseline. fter choosing all these options, you need to make a style sheet. For PageMaker, defining styles is done by choosing "Define Styles..." in the "Type" Menu. For a new style, choose "New," name it, and set its attributes: type attributes define the font and font size; paragraph attributes determine spacing between lines, borders, and widow/orphan control; tab attributes designate custom tabs; and hyphenation controls the amount of automatic hyphenation by PageMaker. Tab and hyphenation options are rarely modified.

Styles are used to make layout easier and more consistent between many people. Rather than telling each and every layout person that the body text will be Adobe Garamond 11 points with a leading of 13 points, we can just tell the people to use the "Body Text" style. For headlines, we tell them to use the "Headline" style. All these styles are already pre-defined on the template that you give them. So all they have to do when they do layout for you is to open the template, import the text which is the submitted article, decide on a layout look, find pullout quotes, set all the text to the right styles, and do some final polishing.

Of course all this requires careful planning on your part. You have to have decided the different style attributes beforehand and set these up in a "template." Basically, a template is a fancy name for a PageMaker publication (or file) that has no final text on it except for the items that will be standard on everyone's layout. Such standard items include page numbers, logos that will be present throughout the magazine, and styles. Use the "Save As..." option and select "Template." This will guarantee that a person opening your template cannot save over your template.



The point size is determined for each font in the "Type" menu. There are 12 points in a pica and six picas in an inch. However, a 72 point character such as a capital X does not have a vertical height of one inch because some of the 72 points is reserved for the space above and below the letter. So a 72 point capital letter might only be only half an inch high on paper. An important line to keep in mind is the baseline which is found at the bottom of the x-height. The baseline is the imaginary line on which all the letters sit.

AFTER THE SUBMISSIONS MEETING

You will get really busy after the submissions meeting. During this time, the submissions must be typed into the computer (usually as a Microsoft Word file), edited, spell-checked, imported into PageMaker (or QuarkXPress), and polished. In the past, we got people to volunteer to type in the articles by hand into Microsoft Word on the Macintosh. These files were then edited. Page allocations were determined at this time, and the files were distributed to the design team, made up also of volunteers on a per-issue basis. They were given four days to a whole week to do their design magic. The designers were given from one to seven pages depending on how experienced they were, how reliable we found them, and how much time they had. The designers imported the Microsoft Word articles into Page-

Maker and completed the initial layout. They were given the "Final Checklist" handout at the back of this turnover file; however, they often did not go through each item. After the files were returned to us, Shana and I would check the layout, go through each item of the "Final Checklist" for each page, print out the pages, edit for typos and other

errors, and print out the final copy in Cabot House. This process took about two weeks to complete from the time the articles were edited. The final push of polishing, editing for the final time, and printing took two people a good many, *many* hours. However this method has been improved since.

I would suggest that the articles be grammar-checked with one of the many grammar checking programs available before being imported into Page-Maker. One very nice grammar checker is the one built into Microsoft Word 5.0. It is annoying how many errors it catches that are not errors at all, but it is better to find too many errors than to find too few. You can always choose to ignore its suggestions. By grammar checking, we can catch many basic errors including misspellings. You will need to have a person check the text again and edit it to make sure the grammar checker did not miss anything though.

Then, really emphasize to the designers that they need to go through the "Final Checklist" carefully. Perhaps an explanation of the checklist would be helpful. Give them the week or whatever time is available to design. Ask the designers to print out a copy of their finished pages if they can. This makes your final checking and editing *much* easier. During this time, you will be working on your pages and beginning the Table of Contents page. Find out what the graphics for the issue are—what sizes are they and what is their content—from the person in charge of graphics. Find out what the ads are and whether you will need to design any from the person in charge of advertising.

Do the final editing on a fast computer if you can find one. Try to avoid working on Classics, SEs, and Powerbook 100s. These are nice computers and excellent for word processing, but they are too slow for desktop publishing. You will save a lot of time by working on a fast Macintosh. Perhaps bring the *Lighthouse* hard drive to the Science Center and use their amazingly fast Macintosh IIfx.

After you are done with the editing, print out a rough copy of the entire magazine and have a proofing party if you have the time. If you are not too close to the deadline, get a bunch of people together to really go over the magazine to catch any remaining mistakes.

Then it is time to print the final copy.

This is what you will need to print: the PageMaker files that are ready to go to the printers, *Lighthouse* graphic files like the logo, all the fonts that are used, the PostScript font downloading program, and the PageMaker program. Also helpful are Suitcase II and Font DA/Mover to install fonts if you have to. You might run the

of time by working on a fast Macintosh.

You will

save a lot

Logo to the right with apologies to the people of Beverly Hills 90210.

ElseWare Checklist program to make sure that you have all the fonts you need. If you forget any fonts, the printer will most likely substitute Courier which is really ugly.

Find a good printer. You will need to print on a Hewlett Packard LaserJet III that has a PostScript cartridge, an Apple LaserWriter IIf, or an Apple LaserWriter IIg. These printer all have some sort of resolution enhancement with PostScript. Standard laser printers have a resolution of 300 dots per inch (dpi), but the printers I just mentioned with the resolution enhancement technology has a resolution of about 600 dpi. Even better would be a Linotronic which has a resolution of 1200 dpi. The Crimson

has one, but I do not think they would let us use it—why not try and see? One page from a Lino costs about \$12.00 if you do it at a Service Bureau (a laser printing service center) compared to \$1.00 per page on a standard laser printer. Lino printing is very expensive. However, the Crimson also has a HP LaserJet IIIsi which is very fast and very good. Cabot House has a HP LaserJet III which is really slow (but

B it still has the wonderful 600 dpi resolution)

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for 15¢ a minute which is what we used. It is actually a wonderful bargain because the printer is rated to go at 8 pages a minute.

After finding your printer and your computer, you need to install the fonts. I know that at Cabot House, they have the Suitcase utility on the computer already. So you just use this utility to "Suitcase" in your fonts. At the Science Center, they are very paranoid about their computers, so it is virtually impossible to install fonts. At whatever computer you finally use, you can install fonts because you brought Suitcase with you. Spend about

Goudy 30 on 15, Set Width

Use a laser printer with resolution enhancement technology.

20 minutes downloading all your fonts to the printer—it is worth it. Before we started downloading fonts, it took about 30 hours to print out the entire magazine. After downloading, the printer made fewer mistakes, and it only took two

hours to print. If the fonts are not downloaded to the printer with the program, the fonts will download automatically. However, automatic downloading is slow because the computer downloads every font for every page. If you use the font downloading program, the computer will know not to automatically download the fonts that you downloaded manually. I live at Cabot house so I will have an account and a key to use the printers. I think that it is the best deal unless the *Crimson* lets us use their printers for free.

After the printing, you're all done! Of course there are other responsibilities such as designing posters, *Lighthouse* material, and other small jobs. But they are easy once you have done a whole magazine. I would recommend learning at least a little of the following programs: Aldus PageMaker 4.01 (or 4.2), Aldus FreeHand 3.1 for drawing graphics and making posters, Fifth Generation Suitcase II for installing fonts, ElseWare CheckList 1.0 to check your PageMaker files, and the font downloader program. I would also recommend getting acquainted with Apple System 6.0 and Apple System 7.0. These are versions of the "DOS" for the Macintosh.



The text above left uses typogropher's quotes. The text below and left uses typewriter quotation marks. The top are the preferred quotes.

This is with no tracking.

This is with very loose tracking.

This is with loose tracking.

This is with normal tracking.

This is with tight tracking.

This is with very tight tracking.

You will notice that I did not explain the technical workings of PageMaker. There is a brief guide to PageMaker at the end of this turnover file. But it is impossible to explain how to use PageMaker without writing volumes. The PageMaker manual itself is many hundreds of pages long. And there are numerous books on how to use PageMaker in almost every bookstore with a computer section. But my experience is that the best way to learn Page-Maker—or any other Macintosh program—is to use it and experiment. Just be sure that you have a book around or someone knowledgeable to help you out and give you tips. Work with a test file that is merely for practice. Try different things. And give me a call. I'll give anyone a quick tour and help out whenever I can. My phone number for the 1992–1993 academic year is 493–6436. Have fun with the program. It is amazing what you can do with it.

TYPOGRAPHY

The final design is up to you; however, I would recommend following the "Final Checklist" with all its detail. These details separate a professional (or professional-looking publication) from a garden-variety high school news-

paper. Look at any other student publication. You will often find straight quotation marks inside. Straight quotes are acceptable for a font such as Courier because it is made to imitate a typewriter; however, Adobe Garamond—and almost every other font—needs to have typographer's quotes. For fractions, use the Adobe Garamond Expert font with the built-

Volvo Volvo

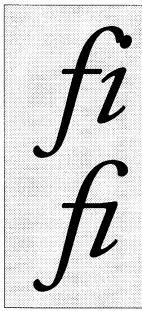
With no kerning, the letters of the 85 point Garamond font look too spaced out. Kern your headlines with the \$\mathbb{K}\$ \leftarrow and \$\mathbb{K}\$ \rightarrow and \$\mathbb{K}\$ \rightarrow bottom) to get better spacing. Notice that the initial "V" hangs over the first "o" to create a nicely spaced word.

in fractions. Ellipses are created with the **#**; keystroke.

Use tracking to control paragraph size. And kern your headlines. Try using small caps, too. One example I found that convinced me to use small caps was the word NASA. Four capital letters in the middle of a page really stands out—it is distracting. Why not NASA? Check

out the correct dashes for the text. Do you need a hyphen, an en-dash, or an em-dash? The rules set in the "Final Checklist" are followed in almost every professionally published, typographically correct publication. These guidelines were set hundreds of years ago with the invention of printing. Traditionally, layout was done by artists—typographers. For example, the typographers would manually kern their text. Well, the computer does an acceptable job with normal sized text, but at large sizes, manual kerning looks best. Same goes with leading. Auto leading works great with 12 point text, but larger text sizes should have less leading than what the computer gives on the auto leading mode.

Change your fi and fl combinations to ligatures. They are a nice touch. You probably have never noticed them, but they are used in many of the more expensive texts—take a look at a few of your nicer textbooks. And put only one space after a period. Two spaces is the standard on the typewriter, but text on a computer looks better with only



LIGATURES

The top Garamond Italic 100 point text is without ligatures, created with two letters. The bottom fi is a ligature—it is a single character. A good typographer will use the ligature for fi and fl over two individual characters because the top of the f and the dot of the i are cleaner.

one space after a period. But if you do nothing else, please use typographer's quotes and choose the correct dashes. Not using the right quotes or dashes is the most obvious sign of design ignorance.

Try to have a lot of graphics in the magazine. It makes the magazine look a lot better. Check out some of the design techniques in the more trendy publications and see what works. You can get a lot of ideas from looking around. Most important though is to have a good time. It is a wonderful feeling to see your design printed and distributed after all the hard work. Good luck again!