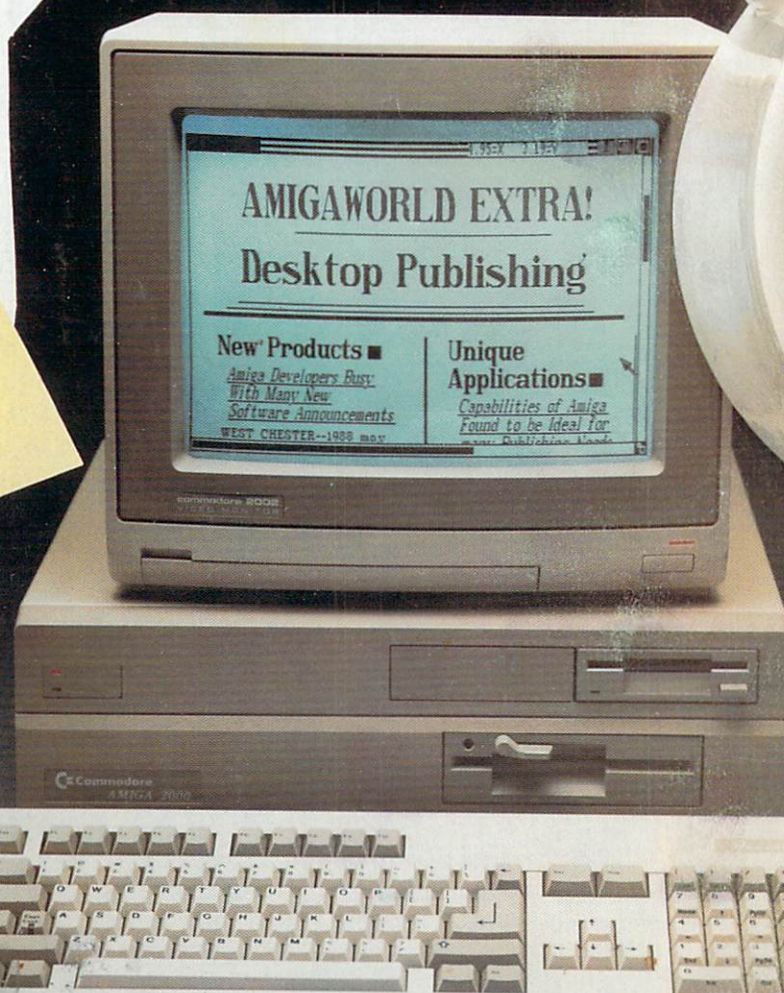# AMIGA
WORLD

DESKTOP PUBLISHING

▶ WHAT IS IT?
▶ HOW YOU CAN USE IT
▶ WHAT'S AVAILABLE

3-D:
DEPTH-DEFYING GRAPHICS

PD PICKS

SPREADSHEETS FOR YOUR AMIGO

EDIT-PLEASE HAVE CORRECTIONS TYPESET

AMIGAWORLD EXTRA!

Desktop Publishing

New Products ■
Amiga Developers Busy With Many New Software Announcements
WEST CHESTER—1988 may

Unique Applications ■
Capabilities of Amiga Found to be Ideal for New Publishing Needs
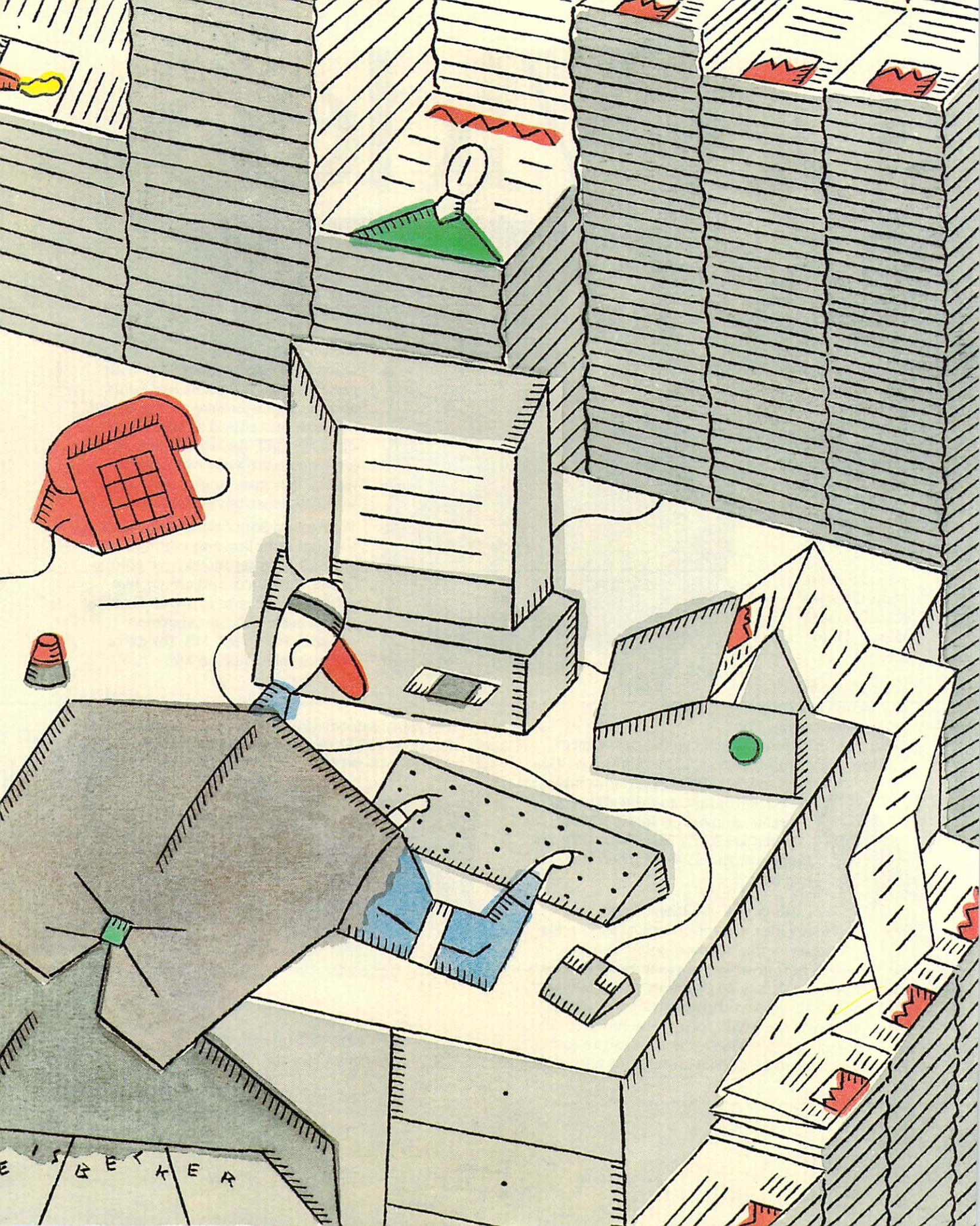
TO HAVE & HAVE NOT

AMIGA DESKTOP PUBLISHING SOFTWARE

IF DESKTOP PUBLISHING had been around 50 years ago when Ernest Hemingway was writing his powerful novel about hard-boiled Harry Morgan smuggling rum and refugees in pre-War Cuba, Hemingway would not have joined the throng of PC-clonesters to produce this novel. Always the iconoclast, he would have stayed with his more innovative and individualistic Amiga.

Alas, although a great admirer of both Hemingway and my own Amiga 1000, I parted ways with "Papa" last spring and bought an IBM-AT compatible computer. Not because I had any fondness for MS-DOS or had tired of my Amiga 1000. Quite the contrary. In order to establish a document-design business based on desktop publishing technology, I had to face the fact that software sophisticated enough to fill my needs, such as Ventura Publisher and PC-PageMaker, was not available for the Amiga. ►

Desktop publishing programs for the Amiga may not have all the features or frills of Mac and PC offerings, but the gap is beginning to narrow as market momentum starts to build.

◆

By Chris Dickman

ILLUSTRATED BY PHILIPPE WEISBECKER

At that time, PageSetter 1.0 was the sole Amiga desktop publishing program available, and while a valiant first effort, it came up short of its big-league counterparts in an alarming number of categories. The fullness of time has seen the release of a new version of PageSetter and its companion programs, LaserScript and Jet, as well as a number of competitors. Recently announced products indicate some directions Amiga desktop publishing software will be following, building on the Amiga's inherent strengths to provide color separation and sophisticated image processing capabilities as well as many of the features found in high-end MS-DOS and Macintosh programs. In the sidebar ("On the Horizon") below, we will take a quick peek at one or two of these soon-to-be-released programs and check out their advanced billing.

COMPARING THE CURRENT CROP: 5 CRITICAL TESTS

If you need the power promised by this new generation, you might consider hanging on to your wallet. If you are new to desktop publishing, however, and just want to get your feet wet or have documents that just can't wait, despite the limitations of the current crop of software, there are several offerings from which to choose. With that in mind, let's compare the salient features of Publisher 1000 (Brown-Wagh Publishing), PageSetter (Gold Disk Inc.) and City Desk (MicroSearch Inc.) in light of their performance in five critical areas.

1. FILE IMPORT ABILITIES

Because the central function of desktop publishing software is the integration of text and graphics files, poor performance on this score can cripple a program. Publisher 1000 performs credibly, supporting Notepad (ASCII), Textcraft and Scribble! files. As with all of the programs under review, it can also import IFF graphics files, converting them from color to black and white if necessary. City Desk handles Notepad and Scribble! files, with WordPerfect support promised in the future. In addition, font and style changes inserted in the file, such as underlining and boldfacing, are maintained when importing Notepad files. PageSetter can import Notepad, Scribble! and Textcraft files.

2. FLOWING TEXT

The relative ease with which a desktop publishing program places, or "flows," the imported text on the page has a big

ON THE HORIZON

NOT CAPTIVATED BY the current crop of Amiga desktop publishing software? The good news is that a new generation is set to arrive that makes better use of the strengths of the Amiga's unique hardware and software mix. Two prospective members of this group were to have been released at the end of 1987, and although I did not have copies in hand before this article went to press, I did have some advance information, and, in one case, a late beta version.

Shakespeare: The Page Integrator (Infinity Software, 1144 65th St., Suite C, Emeryville, CA 94608; tel: 415/420-1551; expected list price: $225; requires 512K) promises users the ability to create long documents containing full-color IFF graphics. Supplied on two disks containing an extensive library of page templates and clip art, the program provides solid support for PostScript printers. This includes the ability to directly download PostScript code, thereby opening up a new world of typographical special effects to Amiga owners.

Professional Page from the makers of PageSetter (Gold Disk—see Product Information box; expected list price: $395) promises to be the *ne plus ultra* in Amiga desktop publishing. In fact, it goes beyond this, providing features not found in desktop programs written for other microcomputers. Consequently, its hardware requirements are quite steep: It will take 1 MB of RAM (2 MB is better), two disk drives and a PostScript printer just to get you in the game. As the program runs in interlace mode, a high-persistence monitor would also be a good idea.

Judging from an advanced beta version, it appears to me that Professional Page is based on PageSetter but goes far beyond it in capability. For example, instead of a separate text editor, there is now a WYSIWYG version that lets you edit text right in its box. Text control is now more complete with the addition of hyphenation, variable tracking, baseline control and kerning. Also, you now have five different page magnifications, can create oversized pages, employ page templates and use PostScript printers.

It's in the area of graphics, however, that Professional Page has really made a giant leap forward. It is the first Amiga program in this category to support object-oriented graphics, such as those produced by CAD software. It provides a full complement of tools to create or edit this type of graphics, including the ability to draw the Bezier curves employed by the popular Macintosh Illustrator program. It also extends Bitmap graphic support to the point where Professional Page can import IFF or HAM graphics and display them on the screen in sixteen shades of gray. It enhances color support even further through an individual color-separation module that can divide any Professional Page or IFF file into cyan, magenta, yellow and black for offset printing purposes.☐

—CD

impact on productivity. Most such programs, including the three under review, deal with text in terms of blocks, called linked boxes by PageSetter, boxes by City Desk and guides by Publisher 1000.

To place a text file on a PageSetter page, you must create a blank box on the screen by clicking and dragging the mouse. After loading the file, you click in the box to fill it with text; to fill multiple columns or pages with a long text file, you must reflow every box manually by clicking in each one. These linked boxes form part of a chain; resizing one box thus reflows the text automatically in the other links of the chain, a feature unique to PageSetter. Boxes can be linked or unlinked from the chain as desired, providing quite a bit of flexibility. PageSetter is also the only program of the three that displays the actual text when you move a block; the others display only the outline.

Publisher 1000 works basically the same way, with text placed in columns or guides drawn on the screen. The program also reflows text manually, but it uses a somewhat less intuitive process than that of PageSetter; you have to pull down the Edit menu to Continue, then click the first text box, then the one in which the text is to be reflowed. A text file can be split into any number of boxes spanning columns and pages, but the boxes are not linked dynamically. You can move or size them easily, but there is no procedure to unlink them.

City Desk takes a slightly different approach. You do not have to place loaded text in a previously created box; instead, you can dump it anywhere on the page, thereby forming its own box. You may reflow long text files either manually or automatically throughout a document and they will remain linked, albeit in a confusing manner. When you make a text box smaller, for example, rather than the extra text flowing into one of the other linked boxes, the pointer changes to indicate it is loaded with the surplus text, which you must place somewhere before you can continue. This is messy, despite the fact that you are able to link or unlink boxes from the chain.

3. MODIFYING TEXT

One of the claims to fame of desktop publishing software is its ability to modify text by changing its size, typeface, alignment and attributes. The ease with which it does this is a good yardstick of the software's sophistication. Ideally, you should be able to make such changes both to blocks and individual words. City Desk encourages you to change such text attributes as alignment, typeface and size a block at a time. To enlarge page elements such as headers thus forces you to break a document into many separate chunks—a dismal task at best. An alternate route is to load a block into the program's rather weird editor, which displays the text as one long, scrollable line. Into this you can insert up to fifty different commands to control everything from font type, size and attribute to widow and orphan line checking. The problem here, however, is that although you can make multiple changes within a text block, you will need to work with

The ease with which a desktop publishing program lets you modify text is a good yardstick of the program's sophistication.

embedded codes, a task perhaps more appropriate to high-end, dedicated typesetting machines than your personal computer.

PageSetter follows a similar approach, whereby typeface, font size and so forth are controlled in block moves. With this program, fortunately, it is relatively simple to cut out part of a text block for individual treatment. You may also load blocks into a competent, full-screen editor and apply a limited range of embedded formatting codes to individual words; these include the unusual outline, shadow and reverse commands.

Publisher 1000 also forces you to perform most text operations a block at a time. This is all the more frustrating in that it is the only one of the three programs that wisely forsakes a separate text editor, allowing you to edit the text— and even to change attributes such as boldface or italics— right on the screen. Despite this feature, you are still stuck with the inability to change typeface or size within a block. The block move operation itself is not an easy process, as the screen responds slowly and the cursor is almost invisible. Close but no cigar.

4. CONTROL OF VIEWS

Views are the different levels of magnification at which the page is displayed. Being able to move smoothly among them is essential, because the process of page composition is a continuous reversal between zooming in to work on a detail and pulling back to see the entire page. Each of the three programs uses a slightly different approach.

City Desk relies on a pop-up gadget that can be set at a magnification level between one and six, with the latter setting required to read 10-point type. The zoom is not pointer-sensitive, however, so that once you enlarge the page, you must use the scroll bars to move to the part of the page you were working on. (None of the programs, for that matter, permit zooming a specific area of the page.) A function key to toggle between one and six would have been preferable in this case.

PageSetter lets you rotate among three views of a page simply by clicking on a magnify icon. In place of scroll bars, it employs a strange little gadget off to the edge of the screen to allow you to move around the page. This is an unusual but workable arrangement.

The best of the lot is the elegant approach employed by Publisher 1000. It provides only two views: the entire page and a highly magnified fragment in which you navigate with the aid of scroll bars. Working at the highly magnified view for long lengths of time is possible, because, unique to Publisher 1000, the screen scrolls quickly and smoothly and does not redraw as you move about the page. It even scrolls with you when you size or move graphics or text blocks. Although the process eats up a lot of memory, it is an enormous aid to production. Even when a full-page view is required, the magnified view pops up on top of the expanded view before vanishing with a click of the mouse—quite a neat feature. ▶

DESKTOP PUBLISHING VS. SLICED BREAD: RAGING 'BULL' OR REAL CONTENDER?

By Eric Grevstad

IT'S DOUBTFUL desktop publishing could have flattened Dempsey or Tunney, Lewis or Marciano, Ali or Frazier. However, it can definitely KO the typing pool, decision the Xerox machine and go the distance with the copying center next door. But, the buffs and the bookies ask, can it really be a contender in the print game?

Strictly speaking, using a personal computer to design pages combining text, headlines and graphics is a vertical application; it affects fewer people (whose jobs involve page layout) than the advent of word processing affected secretaries or the spreadsheet affected financial planners. Be that as it may, there are some intriguing numbers to consider. *The New York Times* recently quoted Jonathan Seybold, of *The Seybold Report on Desktop Publishing*, as estimating that more than 300,000 programs will have been sold in 1987 (compared with 60,000 in 1986). Another such increase in 1988 would guarantee desktop publishing a formidable niche in the personal computer marketplace.

Desktop publishing may offer the same promise that Johannes Gutenberg's movable type did in the 1450s. Gutenberg was not the inventor of movable type (the Koreans had nearly identical presses a century earlier), but he was the first to make the printed word widely available in the vernacular (the Koreans printed only Chinese classics for the royal court). Like Gutenberg, desktop publishing could make printed communication available to more people at lower cost.

Gutenberg Invents ASCII

Actually, the kind of printing perfected by German goldsmith Gutenberg resembles most of today's word processors. Gutenberg's impact printer pushed paper against a frame holding an inked rack of type, raised letters and symbols arranged line by line to spell the desired text.

It was more efficient than its predecessor—a wooden block painstakingly carved with all the letters on a page— because it broke down the document into rearrangeable, reusable characters. So does ASCII (American Standard Code for Information Interchange), the computer shorthand that lets one byte (the decimal value 65) stand for a capital *A*, another byte for *B* and so on. It's much simpler for software to slap the letter *A* on screen than to draw it as a pattern of pixels in a bit-mapped graphics image.

The leading character-based desktop publishing device is something Gutenberg would recognize easily: a daisy-wheel printer. Daisy wheels' scant variety of fonts or typefaces can be supplemented by dot-matrix printers, but their text looks like, well, a matrix of dots—low-quality output, rarely suited for newsletters or reports.

Meanwhile, however, the art of printing has in some ways moved back toward the carved block of a whole page. From racks of "hot type," print shops have gone to techniques like offset printing and lithography—the transfer of an image such as a page to a metal plate or drum, different areas of which attract and repel the ink that copies the image to paper. Desktop publishing is sometimes called page publishing or document processing because it follows this path, seeing the big picture instead of working one character at a time.

Desktop Horsepower

Most word processors can edit ASCII text files sprinkled with imbedded codes like {cm} or {ep}, which a typesetting machine can translate into instructions to change fonts or indent paragraphs. This is still a widely used practice, if unrelated to today's WYSIWYG (what you see is what you get) trend; it's how *AmigaWorld* sends text via modem to the typesetter. Yet, what most people call desktop publishing did not begin until 1984, with the advent of the laser printer and the Apple Macintosh.

Laser printers, which work like photocopying machines (a photoconductive drum attracts toner to printed areas of an image), offer superior speed and resolution—usually 300 dots per inch (dpi) compared to matrix printers' 75 or 150. This is good enough for most newsletters, business presentations or brochures, although most programs also support dot-matrix printers for drafts or simple jobs.

The fanciest publications or users determined to avoid "jaggies"—slightly jagged edges of big letters—can buy one of the expensive new 600-dpi lasers, take 300-dpi output and photographically shrink it 50 percent to get the same effect, or they can send their files to a real phototypesetting machine, such as an Allied Linotronic 100, and receive over 1,000-dpi quality.

As for the Macintosh, it got people accustomed to bit-mapped, graphics-based computing and it remains the belle of the desktop publishing ball, although Amiga and MS-DOS systems are catching up. Just as significant has been Apple's LaserWriter, which set the standards for powerful laser printers with its own 68000 processor and page description language, Adobe Systems' PostScript, built in. A page description language is a sort of specialized super-ASCII, a

compromise between limited character codes and the brute-force approach of drawing an 8- by 10-inch page as 7.2 million dots. PostScript combines sophisticated graphics control with flexible, memory-efficient font management.

Even with PostScript, both computers and printers need ample memory and power to handle millions of dots instead of a few thousand text characters, taking over jobs held by the $30,000 Unix workstations used in professional page layout systems from such firms as Xyvision and Interleaf. The 68020 CPU should be desktop publishing's greatest hit; most of today's MS-DOS page programs already require an 80286 or 80386 system instead of a plain PC.

Words and Pictures

Desktop publishing combines on a computer screen the jobs of page layout and paste-up and gives this work the convenience of word processing. It makes it easy to change things, to see how a headline would look in larger type or to drag a paragraph with a mouse instead of peeling it from beneath its Scotch tape. It draws straight lines for you. It lets you zoom in on a corner or see a view of the whole page. And it saves your finished composition as a disk file, ready for the laser printer or phototypesetter.

What desktop publishing programs do with text is a continuation of the formatting done by good word processors. The latter can go beyond the crude, insert-extra-spaces justification used to align the margins of mono-spaced text (where every character has the same width, such as $\frac{1}{10}$ inch) and support proportional spacing (where an *i* is skinnier than an *M*). Desktop publishing programs, whether importing a word processing file or letting you type words directly, add extra precision in pouring text into columns or wrapping it around a protruding piece of art, with typesetter-style control of features like kerning (adjusting the space between letters, moving an *o* under an overhanging *T*) and leading (spacing between lines).

Desktop publishing programs also support many different fonts—Times, Bookman, Helvetica, Palatino, Zapf Chancery and so forth—in styles such as roman (regular), bold and italic, and in different sizes. Fonts and spacing are measured in points ($\frac{1}{72}$ inch), other page areas—such as line or column length (measure) and margins—in picas ($\frac{1}{6}$ inch). Most word processors support superscripts or subscripts; desktop publishers add such options as drop caps (extra-large capitals, extending below the first line of text, for the first letter in an article, a holdover from medieval manuscripts).

Desktop publishing does not yet support color printing, aside from the advanced labor of making different versions or portions of a picture as four-color separations to be overlaid at the print shop. There are, however, many ways to merge graphics with type: importing clip art or files from drawing or painting programs, or artwork or photos converted to binary files by a digitizer or scanner.

What It Means

Points, picas, kerning, leading, halftones—all are terms and concerns of conventional publishing. The only difference with desktop publishing is that laying out a page on screen instead of on a drawing table gives much more flexibility for making changes and playing the designer's equivalent of spreadsheet jockeys' "what-if" games. Put that graph a few inches lower, split that column with a boxed quote, try the whole thing in two columns instead of three, use the "undo" command if your creative genius gets out of hand.

Page design, like drawing or sculpture, is hard. The great advantage of desktop publishing is that many individuals, community groups and businesses can save time and money by producing printed material themselves instead of hiring it out. This can result in substantial savings for such everyday office items as in-house bulletins, ads, announcements, forms, flyers, brochures, menus and letterhead. With larger, more complex undertakings—annual reports, magazines, books—the economics may be outweighed by considerations of quality and professional appearance.

For any task, however, the drawback of desktop publishing is that it cannot turn copywriters into artists, or executives into paste-up aces. Too many novice desktop publishers commit the same sin of mouse-driven word processor owners—font abuse. Such users—or abusers—can produce documents that, in the words of computer trends reporter Andrew Pollack, "resemble pasted-together ransom notes." In a *New York Times* article this past October, Pollack related the exasperation of one company executive who had to revoke the "font authority" of an overly eclectic desktop enthusiast in her employ. Combine that with all the cute clip art cartoon figures ready to be peppered all over a page, and the mind reels.

Still, the potential dangers of desktop publishing are small compared to an inadvertent spreadsheet recalculation or word processing search-and-replace. Viewed philosophically, anything that puts the power of the press into more hands is a democratic boon; more pragmatically, anything that gives your message a better chance of being read or makes you look more professional for less money is something worth following. Desktop publishing is the ultimate rebuttal to those who said the computer would create a paperless office, but at least it gives us offices full of good-looking paper. ■

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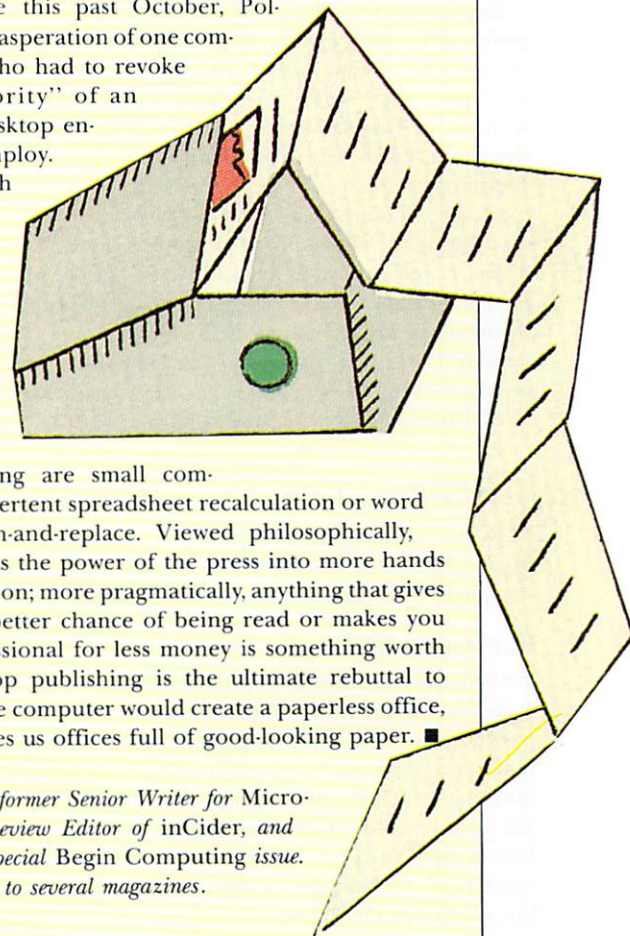
5. FONT SUPPORT

The trio differs widely when it comes to font handling. Publisher 1000 takes the most simplistic approach by assuming you will be printing with a dot matrix printer. To its credit, in addition to two Amiga fonts, it supplies a handful of others that not only print fairly well but are highly legible on the screen. More fonts are available on a separate disk. As for the Amiga fonts, the less said about using these for desktop publishing the better.

City Desk covers all the bases, providing support for matrix, PostScript and Hewlett-Packard laser printers. To be frank, it makes little use of the power of PostScript, as only a few typefaces and sizes are available. The same is true of its handling of the H-P LaserJet, because only two of its font cartridges are supported. A full complement of cruddy Amiga fonts is supplied, which look predictably foul on the screen and print almost as badly. Who designed these clunkers, anyway?

PageSetter was designed originally with matrix printers in mind and comes with just the Amiga fonts. For some reason they display better than their counterparts in City Desk but print much the same. Extra fonts, including such standards as Helvetica and Times Roman, are available on a separate Fontset disk. Things get more interesting, however, with the addition of the LaserScript and Jet utility programs, which let you print PageSetter documents with PostScript and H-P LaserJet printers. Again, the range of fonts and sizes is limited, although a utility is provided to resize fonts as needed. The program does allow you to get at such meaty aspects of PostScript as combining and rotating pages.

STRENGTHS AND WEAKNESSES

Now that we have put our three programs through a battery of separate tests, let's see how they stack up in an overall comparison of features and performance.

PUBLISHER 1000

While lacking a number of desirable features, Publisher 1000 is the easiest of the three to master and work with, in large part because of its smooth page scrolling, simple movement between views and uncluttered screen display. Its manual is minimal but clear, although the typos and spelling mistakes are annoying. While the package is short on frills, it does have a nice pattern editor utility which can be run at the same time as Publisher 1000 to create patterns for filling lines or boxes. On the negative side is the program's frequent disk accesses, lack of laser printer support and absence of a

graphics editor. But if you will be creating documents with a matrix printer, are willing to invest in more fonts and value the program's lean-and-mean feel, Publisher 1000 could be for you.

CITY DESK

The only program under review with built-in support for matrix, H-P and PostScript printers, City Desk is also unique in providing the ability to flow text automatically throughout a publication. This should make it the clear choice for working with lengthy documents, but its superiority here is tempered by its relatively clumsy handling of text blocks and view changing. The documentation is comprehensive enough, despite a short, confusing tutorial. The program design, however, runs counter to efficient document production. On a 512K system, for example, there is not enough memory to print a document; you must exit City Desk and run a separate print utility, which does not make for a smooth work cycle. Do not expect to do any useful work with its bare-bones graphics editor, either. If you need the printer support and can live with the clunky feel of the program, City Desk may be worth investigating.

PAGESETTER

With a longer heritage than its peers, one would expect PageSetter to be a serious effort. The program is certainly loaded with features, and the full-featured text and graphics editors are standouts. Controlling views and page movement is eccentric but not unmaneagable and is aided by the on-screen rulers. Although the screen refreshes every time you move the page, this is balanced by PageSetter's avoidance of disk accesses. While the basic version supports only matrix printers, the availablility of additional fonts and laser printer support make this a truly useful program. The best of the bunch? I'd say so.

THE BAD NEWS

None of these programs is a real stinker, but none of them represents serious competition for similar products in the MS-DOS and Macintosh environments. All lack such important features as hyphenation, master pages, an undo command, full PostScript support, etc. Until updates or next-generation products appear, however, they represent the state of the art in Amiga desktop publishing. ∎

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