

# RESEARCH IN WORD PROCESSING NEWSLETTER

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## IN THIS ISSUE . . .

Volume 4 Number 4

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- |  |           |
|--|-----------|
| <b>Personal Publishing on Microcomputers</b>           | <b>2</b>  |
| <i>By Tom Carney</i>                                   |           |
| <b>Writing-Instruction Software with HBJ Writer</b>    | <b>12</b> |
| <i>By Joel Nydahl</i>                                  |           |
| <b>Software Review: WordPerfect 4.1</b>                | <b>18</b> |
| <i>By Tom Williams</i>                                 |           |
| <b>Bibliography Update</b>                             | <b>24</b> |
| <i>By Bradford A. Morgan</i>                           |           |
| <b>The Scholar's Software Library: Rightwriter 2.0</b> | <b>27</b> |
| <i>By Bryan Pfaffenberger</i>                          |           |

### DESKTOP PUBLISHING

Microcomputing's  
NEW WAVE

see page 2

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## **2--Research in Word Processing Newsletter**

### **Personal Publishing on Microcomputers**

*Tom Carney*

#### **OUR CHANGING INFORMATION ENVIRONMENT**

A new communication technology, such as the computer, impacts on all the other technologies in use, altering their share of the media mix used by consumers of information and entertainment. It usually takes time for this impact to become evident; but indicators are that, since computer use has become relatively widespread, a major shift in media use has occurred.

There has been a major shift in the reading habits of the serious reader, who is also, usually, involved in using a computer. Computing defies time budgeting: it requires on-going discovery learning, involving un-anticipatable blockages. So it wreaks havoc with use of other media. TV tends to suffer most heavily. Radio survives: on-the-move listening is possible. There's a drop in the amount of newspaper reading; the serious reader does not care for scatter-gun, brush-fire-fighting coverage of important events. He or she relies on specialist journals, of necessity, because the rate of job-related change is now such as to require continuing learning if one is to keep up.

Keeping up generally means self-directed, discovery learning—a very demanding form of learning. The higher the level of education, the more demanding the job, generally; so the more the reader tries to read. Such readers have less time for any one item; so they skim. They want the essence, early. So specialist journals become the most critical item in their intellectual input. The signs of resulting changes in media use patterns are as follows:

1. By 1980, specialist magazines grossed \$7.8 billion to TV's \$5.1 billion.
2. By now, 94% of adult Americans read a magazine at least once a month.
3. Professionals have come to rely on specialized magazines/journals for their survival reading.
4. A new type of presentational format has evolved to meet the needs of readers of these specialized publications.

Continuing learning requires a very special kind of support group, one that few of us are able to put together. So these new specialized magazines do it for us. Their editorial boards (or the combined resources of the mutual help groups behind them, if they're "self-help" groups) gather together the different kinds of information purveyors required for the diffusion of innovations: innovators (quick to spot novelties with potential); opinion leaders (alert to the practices of those around them); liaisons (inside-dopesters); cosmopolites (knowledgeable on industry-wide trends); specialists (up to date re: technical breakthroughs) and gatekeepers (knowledgeable on how their organizations are reacting). The journals *MacWorld* and *MacUser* are good examples of such a mix of information purveyors.

This is the mix of expertise you need to consult, if you're thinking about embarking on any important venture. Your specialist magazine provides it—while functioning as an early warning system on an on-going basis.

Meanwhile, there have been marked changes in small printing, so far as organizations are concerned. The drop in printing equipment costs, down from about \$120,000 to about \$11,000, makes it economical for many organizations to own their own print shops. In-house publishing can mean enormous savings (especially where manuals that need frequent up-dating are concerned). Besides, it's crucial that a newsletter editor is perceived as being "one of us" readers, so an outsider won't do. With the trend towards participative management, especially in employee stock option programs, it's essential to have a very proactive and quickly responsive newsletter. Again, this means finding your editor in house. Meanwhile, it's becoming easier to develop your own people as in-house editors.

The "authority of print" is now available to any small business and special interest group, even those businesses and groups with relatively modest financial resources. Print has an impact that Xeroxing & multilithing don't, and a small print run is no longer prohibitively expensive. So there's a lot of demand for the personal publisher, from a new clientele—small businesses and relatively small groups—for camera-ready copy. The advent of the copy centre

# Research in Word Processing Newsletter--3

with a Mac and a LaserWriter makes it possible to moonlight as a small "typesetting service", getting captured keystrokes into camera-ready formats, in this environment.

To sum up: a new environment, and new opportunities for personal or in-house publishers, has been created in "low-end" (small) publishing by the above changes.

## BACKGROUND CHANGES IN ELECTRONIC PUBLISHING

In 1985 there was an epochal development in electronic publishing. The advent of the electronic layout program and the laser printer provided a new type of use—personal publishing—for the personal computer. This development was analogous to the advent, earlier, of the spreadsheet, which made the Apple into a business machine instead of a hobbyist's plaything. The owner of a personal computer now has the capability of becoming a small printer.

The computer on your desktop gives you the equivalent of a team of printers. Its programs can do the following:

1. **Text entry:** outline- and word-processors make for rapid, legible (no messy corrections are evident) text entry.
2. **Typesetting:** advanced on-line word processors provide a range of fonts, including display fonts, and formats; and automatic footnoting and indexing.
3. **Proof-reading:** utility programs can now check spelling, enrich vocabulary, hyphenate automatically, and check for cliches, some forms of grammatical errors and readability.
4. **Graphics:** utility programs allow the manipulation of (a rapidly expanding library of) clip art; numbers can be rapidly turned into a variety of charts and graphs, and you can now digitize photographs, and crop-and-size pictures.
5. **Page makeup & copyfitting:** interactive electronic layout programs allow you to play intuitive "what if" games with your page makeup problems, and batch programs allow you to do kerning & letter spacing.

You can now produce a sophisticated publication on your personal computer, if you buy a little time on a LaserWriter printer.

Meanwhile, apprenticeships have effectively ended for printers. You can no longer compel a person whom you have trained through an apprenticeship to work for you as a printer. So it doesn't pay you to train him or her. Anyway, the requirement to acquire (and keep up-dating) computing skills, coming atop all the other skills required of a trainee printer, has tended often to be too heavy a burden. So trainees are harder to find, as well as harder to keep. Electronic publishing is having much the same impact on printer as CAD/CAM has had on draftspersons. A long, proud tradition of apprenticeship, going back to the earliest days of printing, has come to an end. It has left a skill shortfall in an area that's critical to our society: the area of producing printed material.

A new style of editing has come into existence, combining editing with printing activities. This type of editing requires the ability to continuously generate quality text, edit it, and set it out aesthetically and without errors. The personal publisher has to be a combined editor and printer. The savings in time, cost and flexibility promised by the new technology come at the expense of the new breed of editor, who has a more demanding job than editors in the past.

Skillful instruction is needed to train this new type of editor. It's beginning to look as though it's easier to train a person to handle the computer technology of personal publishing than to develop him or her as a personal publisher type of editor. The rapid development of workshops and specialist journals indicates that this problem is being met;

## 4--Research in Word Processing Newsletter

but formal training programs are as yet not widely available. Still, given what's now known about facilitating self-directed adult learning, this should not be an insuperable difficulty.

### GETTING THE PERSONAL PUBLISHER UP TO SPEED

The rapid development of a body of concepts and well articulated general principles is a welcome and striking feature of the specialist literature. Some people can learn from well designed instruction with surprising speed, on print-related matters.

They'll need capacity to learn. The role of the in-house publicist has been re-defined. He or she is no longer the "hired gun" of management. Gone, too, is the muck-raking journalist. What readers want to know is whether they'll have a job a year hence. Currently, in-house publicists are more like continuing educators, developing among their co-workers a sense of what the issues, alternatives, and likely technological futures are that face their organization. This role for an in-house publicist is one with which an able and socially-conscious person can readily identify.

A new breed of publisher may well rise from these developments in technology, training and task orientation.

### LAYOUT PRINCIPLES

It's now possible to state fairly concisely what constitute the principles of a good layout. The main concept seems to be that of formatting. Formatting a page of text adds meaning to its content, visually emphasizing points which are cognitively important. A solid, unbroken text block is like a verbal statement unaccompanied by any non-verbal indications of emphasis: it sends a crossed message, saying that certain points are important while representing everything in the text as *equally* important. Solid text blocks are printer-oriented layout: they're easy to set up, but they make for boring or difficult reading.

Likewise, the absence of diagrams and pictures makes for much easier layout procedures. But pictures are, some claim, 26 times quicker to comprehend than printed text. And diagrams make the relationships they present far easier to understand: a diagram can say in half a page, understood at a glance, what it may take 5 pages of print to explain.

The personal computer has made it easily possible to format a page and add graphics. Readers have acquired the taste for such visually explicit presentations, which reinforce the meaning of the words in the text. In fact the specialist journals played a prominent role in introducing such reader-oriented presentational formats, to build readership.

There can be no going back on reader-oriented layouts now. The development of the electronic layout, and the laser printer, ensure this. The principles of a reader-oriented layout have been worked out, and a set of terms for talking about them has been developed. It takes a speech community to produce such terms, and the terms in turn guarantee the continuing existence, and further development, of that community.

The grid is another basic organizing concept, providing possibly the major means of introducing order into one's layout. It establishes a matrix that organizes typography, pictures and diagrams. A grid organizes the presentation of content while maintaining a uniform set of proportions that unify the whole publication. A grid lets you group related elements together so that their inter-relationships are immediately and intuitively evident to the reader (important when you've got 3 seconds to get the reader's attention at the point of sale at the magazine rack). If anything "makes the page," it's the grid. And it's easily teachable—even storable, as a "style sheet"—on some computer programs (for example, *Microsoft Word* on the IBM PC).

Grids set out the number of columns to be used: how these columns are to be broken horizontally; the size of page margins and gutters (spaces between columns); whether the columns should be ragged (unjustified) right or justified; the use of rules (hairline lines dividing up the page); body copy font(s), and size and placement of headlines.

# Research in Word Processing Newsletter--5

Essentially, a grid enables you to visualize the page as a set of modules, the building blocks of your page planning. The grid allows for considerable variation, while subliminally—as far as the reader is concerned—maintaining a uniform underlying presentational format. Grids come in 9 different forms, each form developed to serve specific presentational purposes. These forms embody years of experience, gained by generations of editors. They can be taught in half an hour.

A "model page" acts as a kind of "ideal type," to help new editors put these principles into application. Readers read from left to right, and from the top down, generally. So the top right of the page is likely to get most attention, the bottom left least. So you put highly salient items top right, in a "grouping" (see more below). A "model page," embodying ideal sequences (big graphic, with caption, and then sub-caption below, then the body copy of the related, follow-on text block), has been evolved to help in page layout. Again, it embodies generations of practical, tested (by gains in readership) wisdom. And, again, it's readily teachable.

The basics of typography can be briefly set out. Typesetting revolves around 3 basic parameters: the font (a combination of kind [regular, italic or bold, generally] and point-size [height] of typeface); the "leading" (space between lines, added to the height of the font; for instance, "10" [points of font height] "on 12" [plus 2 extra points to separate this line of print from the one below it]) and "measure," or width, of line (lines of 40-50 characters make for easy reading; those longer or shorter don't).

There are rules of good typography: use few typefaces, generally; preferably not more than 2 or, at most, 3. Stick to one "family" of fonts, plus one other font in a matching typeface. Use one set of font sizes throughout: for instance, headlines, 18 point; section heads, 14; subheads, 12; running heads, 12—but bolded; body text, 10; and footnotes 9 (this collection of fonts constitutes a font "family"). There are guidelines on body text limits (9 point is the minimum font size comfortably readable by middle-aged eyes); on positioning heads/sub-heads in relation to body text, and on use of "all cap(ital)s," italics and bolding. Again, the experience and market research of generations of printers can be distilled into easily learnable prescriptions.

Some guidelines have been developed governing the use of graphics. A skim reader will flip through your publication, going from picture to picture, if you don't control his or her eye movements—and half of these readers skim from back to front. So your graphics have to form a unified theme, enabling such a "reader" to get the gist of the publication from a back-to-front sweep as well as from the "normal" sequence. You can control eye movement by putting captions under the pictures. Make these captions attention-grabbing but not self-explanatory. Then provide a longer sub-caption, in a smaller font, to explain the caption. This succession leads the reader into the body text, by an orderly progression, in the text, of font sizes and levels of meaning.

As graphics are so striking for a reader you have to choose them carefully (NOT merely because they're all you've got available, or because they're visually attractive). What's needed are strong visuals that contribute powerfully to the body text while being able to stand by themselves. Combining a typeface with a picture adds to the power of them both. You edit, "crop" and "size" your graphics to indicate their importance and in keeping with your grid.

## DESIGN PRINCIPLES

What gives a feeling of unity to a publication is the harmony of the underlying grid pattern, the font family in the headings and body text, and a unified graphic theme. Another basic concept is balance. A page is invisibly divided by its vertical and horizontal axes. Formal balance is symmetrical; informal is asymmetrical. The general rule is the "heavier" items (those that are larger, coloured and irregular in shape) should be closer to the balance point—centrality on this axis—than "lighter" ones. Headlines can be employed to set up the balance on the page, emphasizing the position of the main text block in relation to the vertical axis.

"Grouping" is another means of unifying a presentation. A combination of headline, sub-head, picture and captions can be aligned (by "flushing" the headlines to various sides of the picture) so that the whole becomes one integral, inter-related grouping. Subliminally, grouping makes the combined text and graphic highly memorable to readers. Aligning the various modules on the page—headline, graphic and major column/text block—also subliminally reinforces the invisible axis which orients the reader to the page.

## **6--Research in Word Processing Newsletter**

A sense of movement can be gained by laying out a series of pictures, or some other graphic element, so that it is clearly repetitive—as a narrow column down the page, for instance, with a running commentary in the text block beside it. Or there may be some form of pointer, or the direction of the gaze of persons pictured may direct attention, to appropriately positioned text. In any event, the sense of direction is achieved through the positioning of a number of elements on the page.

Specific individual elements of the layout are consciously seen; but it's the underlying design principles which give a publication that intangible element, its "feeling" of being a unity.

### **FORMATTING CONTENT**

So far we've dealt with the mechanics of editing. But it's the creative side of editing—getting good material and writing it up so that it holds readers' attention—that determines whether a publication lives or dies. Again, there are formats to help in doing this. The wider the readership, the more formulaic the product has to be. It's the only way to guarantee that a wide variety of readers, habituated to formatting, can understand you quickly and easily.

First comes building a masthead. Securing material for a newsletter, let alone a journal or magazine, is an unending struggle. As indicated by research on the diffusion of innovations cited above, a team of people with diverse kinds of information (or leads to it) is required. The names of the members of this team constitute your "masthead." The variety of designations for such informants—consulting, contributing, or visiting editors; stringers, and so on—reflect the ingenuity needed to build an effective masthead. To do such building, an editor has to be knowledgeable about the topic on which the publication is focused.

Modems make it possible to have as contributors consultants and stringers who live at great distances from the editor, if they and the editor can handle this technology (or can find intermediaries who can do so).

Next come the storyboarding and issue-organizing principles. Possibly the most dramatic uses of formatting, so far as content is concerned, are involved here. If a periodical is to attract and hold readers, experience indicates that it must contain certain kinds of information. The acronym SHIP sums them up. There has to be some form of Service piece (a "how-to" article), a Human interest story (a story about how major developments involved in the topic on which the periodical focuses are impacting on the lives of ordinary persons), an Informational or news piece (an expose, trend survey or the like), and a Personality profile (scuttlebut about major personalities involved in the topic focused on).

The core of any periodical is 5 or 6 such articles; the regular "housekeeping" columns/departments, together with the SHIP items, make up an issue of the periodical. With these SHIP categories, and one more—the major pictorial theme for each number of the periodical (usually centering on one particular picture)—you can make a "storyboard."

This is what its name implies: a board containing an indication of the stories you need for a year's run of your periodical. These are indicated in a giant matrix (usually a wallboard with a matrix formed by vertical and horizontal strips of tape). Along the top are the names of the months. Down the side is the acronym SHIPP (the second P being for the pictorial theme). With such a board, you can see at a glance the months and categories for which you have—and haven't—got material.

There's another kind of format, one involving story "architecture," which is equally useful. Interviews with successful writers, and analyses of successful writing in various genres, have revealed the "architecture" underlying various types of story. There's now an outline of the principles underlying the writing of a personality profile, and another one about the principles underlying writing a trend survey. Such outlines make an editor's task much easier when it comes to assessing, or even writing, such pieces. These principles are quickly teachable.

Readability formulae constitute yet another type of formatting device. They're based on a measure of average sentence length and the number of words of 3 syllables or more in those sentences.

# Research in Word Processing Newsletter--7

At 16 words, on the average, per sentence, and 150 syllables per 100 words, you've lost 24% of your potential readers. At 18 words and 160 syllables, you've lost 48% of them. At 22 words and 170 syllables, you've lost 76%. *Reader's Digest* averages 14-17 words; *Time* averages 17-19.

A computer will readily provide you with your readability score. A wise editor won't buck it. There are KISS (Keep It Short & Simple) guidelines to help you not to over-write your readers' reading skills level.

## **BENEFITS FROM THE DEVELOPMENT OF A SPEECH COMMUNITY AMONG PERSONAL PUBLISHERS**

The centuries-old jargon of printers is being pressed into service, with an admixture of computerese, to develop a speicalized vocabulary for personal publishers. It's amazing how quickly this new, modernized jargon is coming together. It's amazing, too, how quickly the "overnight editors" of personal publishing are coming to realize that, with the new, tested layouts, one can influence a reader's eye movements—and, with them, that reader's highly selective perception.

This new vocabulary provides concepts and a framework of reference for discussing matters of layout and design and of content. This vocabulary raises the level and competency of debate among newcomers to publishing, and makes its users more reflective about what they are doing. It enables self-directed learning to proceed with much greater assurance as to attainable goals and likely futures. This is only to be expected of persons who are central agents in our learning society.

## **USES & USERS OF PERSONAL PUBLISHERS' PRODUCTS**

The technology is new and undergoing rapid development. Its users are, for the most part, a latent group: they're newcomers to their area of expertise who don't fully appreciate the importance of their role, or the opportunities and costs that lie before them. It's a chaotic situation.

What electronic layouts do, essentially, is this: they enable you to create a page, as one in a succession of pages. They largely eliminate the labour of layout, proofing, paste-up, sizing and cropping, and copy-fitting. They make the production of camera-ready copy a speedy and relatively cheap process.

The types of material most in demand are notices and flyers, newsletters, and manuals (and maybe monographs). These materials are characterized by being often required at short notice, having a short shelf life, aiming at having high impact, and involving complicated layouts and frequent upgrading.

These different kinds of materials require quite different types of layout programs. Flyers and newsletters require interactive layout programs. The latter are usually easy to use. But large amounts of text require batch processors. These are NOT easy to use, at least not at present. Large quantities of ASCII text—simple unformatted characters—have to be, essentially, programmed. "Spaghetti macros" weave through your text. You can't see whether you've got your programming right—and it's very complex programming, if you're not employing undifferentiated blocks of text—without printing the whole text. Acquiring control over such programs is not a trivial matter, in terms of time and effort; besides, the programs are undergoing constant updating.

The person who needs these materials is rarely their producer, so the term "personal publishing" is somewhat misleading. The principle users seem to be:

## 8--Research in Word Processing Newsletter

- (1) "Communications companies": advertising agencies, public relations firms, consultants, professional companies, and increasingly, small publishers, typesetting services and Quick Copy Centres (the latter two constituting new types of printing businesses).
- (2) Firms and large organizations, for corporate, in-house publications. Smaller associations and groups are, as yet, proving slower to see the potential of personal publishing.
- (3) Educational and governmental institutions.

Academics are not, as yet, proving particularly enterprising in devising uses for this new technology. For instance, it doesn't seem to have dawned upon our universities—or school districts, for that matter—that desktop publishing could provide a solution to the rising costs of textbooks. Faculty could develop their own textbooks, maybe over a period of years, in response to local needs, at a fraction of the cost of big-league textbooks. This would enable local faculty to publish, circumventing the vagaries of the refereeing process, and keep texts up to date. A new type of university press would come into existence, training students—Art students—in an in-demand, practical and professional skill. The press would use book-loving students with word processing, rather than number crunching, skills.

Such small-scale "presses" would make more effective use—group use—of a technology that is rapidly becoming far too expensive for the ordinary individual. You now need a MacPlus with its megabyte of RAM, a hard disk, an image digitizer and a LaserWriter printer to effectively use the cutting edge of this "cheap" desktop publishing technology.

The costs of personal publishing are much greater than usually recognized. With short-run publications involving demanding designs and layouts, it's the make-up (rather than the printing) costs that are prohibitive. Personal publishing only appears cheap because its costs in time and effort are largely being absorbed by the personal publisher. It is the latter who has to do what was formerly done, in a much longer time, by a *team* of people.

The personal publisher works on his or her own, unobserved, at a task, and with a concentration and expertise that isn't often appreciated by those who use his or her products. Work is, effectively, judged by what you're *seen* to be doing, not by your actual accomplishments. This is why people stopped working out of their homes by modem. Besides, long hours of intensive work before a VDT is a recipe for stress and isolation. Far too little attention is being paid to the costs exacted by the new technology from its new user, the personal publisher. The electronic cottage has turned into an electronic sweatshop; personal publishing may well do the same.

It's hard for an outsider to appreciate how much creativity and effort goes into getting out a newsletter or manual from a desktop computer. Unless time and recognition are specifically granted, it's often career suicide to become involved in "getting out the departmental newsletter" or whatever. There's *always* some pressing need or cause which urgently needs a flyer or a printed newsletter.

When needs and expectations are high, refusals are taken amiss, at best as "a lack of interest in the department," The Cause, or whatever. As an amateur desktop publisher, you will be used by your colleagues, at your personal cost in time, money (you'll have to upgrade your hardware to meet the demands pressed upon you), lifestyle (time out for exercise and personal relaxation), and socializing. If you have to train new generations of student publishers, the costs in time and stress will escalate enormously.

### THE CURRENT STATE OF THE DESKTOP PUBLISHING TECHNOLOGY

This technology is barely a year old, and is undergoing rapid development, as Apple and IBM strive for the lead in the lucrative desktop publishing market. Upgrades of hardware, and with them, of software, come fast and furious. (One leading Mac journal runs a monthly table giving the upgrade numbers of the current top pops in programs—4.2, 5.1 etc.). New software products—especially in the utilities which spring up around popular programs—proliferate (and sometimes fight with each other in the computer's RAM). It's not possible to keep up with all these technological developments across the board, but let's take a quick look at some of the big issues.



# Research in Word Processing Newsletter--9

## THE MAC vs THE IBM PC

Whether to purchase a Mac or an IBM PC will be the question facing most personal publishers. In spite of IBM's huge lead in established user base (12 million PC's or clones to half a million Macs), the Mac, with its superior graphics capability and its 68000 chip, has the lead in the personal publishing field. (The Commodore Amiga and the Atari ST 520 & 1040 may well be superior machines to either the PC or the Mac; but they lack the large library of fine programs without which no machine can be great, so aren't considered here.)

Indeed, desktop publishing is easier to do on the Mac, which has, along with its superior graphics capability, the advantage of having the LaserWriter printer (the first printer ever to win *Infoworld's* coveted "computer of the year" award and undeniably superior to the PC's LaserJet)—and now there's the Linotron 100 typesetter, producing spectacular output from Macs (2400 dots per inch to the LaserWriter's 300) and *Thunderscan*, an image digitizer which can transform photographs into graphics—cheaply (*Thunderscan I* costs \$200). There are now 300 dots per inch scanners that read images into the Mac as *MacPaint* files. The top-of-the-line interactive program, *PageMaker*, was written for the Mac.

Generalized claims as to what it's possible to do in desktop publishing are apt to be misleading, however. They represent what all the hardware and software together can do. Unfortunately neither machines nor the software that runs on them can do everything that's currently do-able. But let's review what the technology that you are most likely to be able to (afford to) use can do.

## THE MAC'S BIG THREE

The leading desktop publishing programs on the Mac are *PageMaker*, *ReadySetGo* and *MacPublisher*, in that order. They're cheap, can already do more than many dedicated typesetting programs can do, and are constantly being upgraded.

*PageMaker* is a superbly interactive program: it allows completely intuitive pagemaking—you can play "what if" [I try 3 columns, with that picture over here] games. It's VERY easy to use: it looks after the details while you do the in-the-big planning. The screen display is uncluttered; it shows what the page that you're creating looks like as you're creating it. (You create text and graphics in advance on *MacWrite*, *Word*, *MacPaint*, *MacDraw*, *Chart & Multiplan*, importing them by merely moving the icons on to your *PM* Master disk via *Word*). Text flows between columns, clicking to your column guides and accommodating to changes made anywhere within one of them (pages back, even). You can set 2, 3 or more columns; crop pictures; wrap text round documents; insert boxes, circles, rules and shading, and expand the page to normal—or twice normal. *PM* prints out on the LaserWriter.

*PM* is a great program for graphics-intensive texts: just what you need if you're publishing a newsletter. But it's not meant for setting large blocks of text: imagine setting 300 pages, each one by hand, in batches of 16. *PM* is the most expensive program of the big three (but wait till you see the costs of the IBM PC's programs, below), costing \$495, plus \$75 per year for extended technical support and free upgrades (it's already at upgrade 1.3, with a big jump to version 2.0—which everyone has to pay for—in the offing), and you need a hard disk if you want to print more than 2 or 3 pages at once. (But by now you really need a hard disk—and a 512K Mac—for all the pagemaking program upgrades.)

*ReadySetGo*, the first pagemaking program to make the Mac best seller list, has the largest established use base (15,000) of the three. It's the fastest of the pagemaking programs, being entirely memory resident. It's easy to use and doesn't bomb. It works by creating blocks. Each block is an active Mac window: a text window if you're placing text (and it places text with GREAT precision), and includes a paint program if you're placing graphics. *RSG 2* lets you print 32 pages (to *PM's* 16). It's a great program for close, detailed work such as forms (it has all the boxes, circles and bells and whistles that *PM* has) and tables (it's the only pagemaking program to support tabbing right in the program), and for fitting material into a closely specified area. It supports the LaserWriter printer. Price as of the time of writing: \$125, but due to go up in March, when *RSG 2* appears (maybe supporting database-like manipulation of articles). The mavens rate it at 4 mice—the same rating that they give to *PM*.

# 10--Research in Word Processing Newsletter

*MacPublisher 1.0* was the pioneer: the first program that enabled you to put multiple columns of text on a page, flowing the text around pictures. It enabled you to control letterspacing, crop & size pictures, and allowed you to view your page either as a "dummy" (the page displayed as a number of solid blocks, indicating type) or as a miniature. You could enter text directly on to your page, or prepare it in advance and import it via clipboard or scrapbook. And it was cheap: \$99!

But the page was a clutter of windows; important text was a cumbersome business, and changing or re-arranging it a nightmare. Bombs were a common occurrence. *MP 2.0* (still to be generally released, and due to go up to \$150 in price) apparently allows you to import text and graphics and may provide more features than the other two programs, but is more cumbersome and complicated to use than ever. The mavens currently rate *MP* at 3 mice.

## THE "INTERACTIVE vs BATCH" ISSUE

For large amounts of complex text—text intensive publications—a batch processor is required, rather than an interactive pagemaker. *JustText* (\$195, and rated at 5 mice by the mavens) is the batch processor for the Mac. You feed in your captured keystrokes as ASCII characters into *JT*, then insert macros in *PostScript*, the language that drives the LaserWriter printer, to print out the entire document to your specifications.

*JT* provides complete control over the placing of every element on your page (this means kerning, automatic hyphenation and justification), combined with the power of pagination—the power to defer a diagram, picture or table until it will print in its entirety on one page (this requires "try-tables"). Personal publishing is really the art of paginating text and graphics. With a batch processor, instead of interacting with the items on each page, you enter one set of instructions and these print out the whole document. A batch processing program is the program for someone who's heavily involved in publishing text-intensive monographs.

Though powerful and elegant, *JT* isn't without its problems. It doesn't have a WYS WYG (what you see is what you get) screen; its language, *Post Script*, is "verbose," requiring entry of many commands even for relatively minor tasks such as changing fonts. So oversights in making such entries, which essentially constitute complex programming, are inevitable. The only way to detect such errors is by running the program. *JT* will print out formatted text only on a LaserWriter, which few individuals can afford, as yet (a version of *JT* which allows you to toggle to a screen showing the formats which result from your input macros is under development).

Though not as difficult as, for example, *Gutenberg* (which runs only on Apple's IIe in its most powerful form), *JT* is nonetheless a program that's fairly demanding to acquire proficiency in, and it's not as flexible as *PM*. Unless you must produce manuals right away, I'd recommend making do with a word processing program (many professionals do) while you wait for development of a hybrid interactive & batch program combined (already here, in early form: see comments on *Fantasy* below).

Batch processing is possible on the IBM-PC, too:

*ScenicWriter* (\$995), requiring at least 256K RAM and a hard disk, delivers powerful formatting, indexing, footnoting and justification, but with graphics limited to boxes and rules.

*Do-It* (\$2495 minimum, extras optional) requires a PC XT with 640K RAM, and 8087 arithmetic coprocessor and a colour graphics card. It's best for single page makeup requiring graphics capability and sophisticated typesetting (advertisements, for instance).

*SuperPage* (\$6995) requires a PC with a minimum of 512K RAM, a Hercules colour graphics card and a hard disk. It's a VERY sophisticated page makeup typesetting program, having all the bells and whistles, but is difficult to learn and not easy to use.

# Research in Word Processing Newsletter--11

If you have to publish a monograph of some kind, as things stand the easiest way to do it is to use Microsoft's *Word 1.05* (for the Mac), which supports the LaserWriter. Run footnotes at the end of your text rather than at the foot of the page. Choose the LaserWriter as printer before paginating (this gives you LaserWriter page breaks, which are different from the Imagewriter's). Then you can work interactively with the LaserWriter to create pages without excess of white space at the foot on pages preceding the tables and diagrams you've inserted in the text. Such interacting need only mean running off a few pages a few times to get the pagination right.

Clearly, what's wanted is a full-featured page-creation program, one that allows both interactivity and batch processing. *Fontasy* (\$49.95) for the PC is such a program, and represents the shape of the future. Apparently, it operates in a batch pagination mode but allows interactive page assembly, with a WYS WYG screen. As yet it has a lot of roughnesses: it runs on dot matrix printers, so produces low resolution typefaces; its hyphenation is poor, so you get rivers and white space in text; you can't go back & change fonts, etc. Wait for *JT 2.0* —or *PM 2.0*: they're promising big developments and will undoubtedly be looking *Fontasy* over.

## SUMMING UP

Personal publishing is a costly business, both in terms of the cost of its hardware and software and in terms of the time required to master the cluster of application programs it entails. Probably personal publishing is not for the hobbyist. If all you need it for is to get your manual printed, it will be far cheaper to word process the manual yourself and have a personal publisher operating professionally as a typesetting agency make it up for you.

Gaining some proficiency in desktop publishing as the logical extension of your interest in word processing may well prove counterproductive, as has already been argued. Superiors and colleagues at work will inevitably "request" services, exerting a pressure, and getting you involved over your head in projects, which will prove ruinous to your career.

On the other hand, a formally negotiated, specific job assignment as in-house publisher (or being assigned responsibility for teaching personal publishing) could advance your skills, and, with them, your career. In either case, it's because personal publishing puts you in the centre of things, communications-wise, that these results follow.

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Welcome Contributing Editor Tom Carney, who teaches in the Department of Communication Studies at the University of Windsor (401 Sunset Avenue, Windsor, Ontario, Canada N9B 3P4). Tom has held full professorships in three different disciplines at three different universities and has published over 17 books and 120 articles and chapters. Watch for more on personal-publishing software and applications from Tom in future issues of the *RWPN*.

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