Choosing a word processor

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Before you rush out and buy a word processor may I be so bold as to ask why you are parting with your money?

What word processing is—and isn't

The most obvious way to think of a word processor is as a rather clever typewriter that (a) allows you to enter all your text (letter, report, etc) on to a screen and edit it before you print it; (b) knows when to start new lines and new pages without you having to be bothered about such things; and (c) enables you to cover up all your typing errors without leaving your finished product an advertisement for Tipp-Ex. And when you've printed it out on your printer (while you type your next letter or drink a cup of tea) and it is still not to your liking you can go back and edit the original text and print it out again. And if your masterpiece of an article for the *BMJ* isn't appreciated by the folk at BMA House you can always retrieve it six months later, rewrite it, and try again. Word processors offer other bells and whistles as well, but my thumbnail sketch will do for now.

In deciding whether to invest in a word processing system of any kind there are two paramount questions. Firstly, do you do enough typing work to make it practical? No word processing is possible without some teach yourself sessions with the tutorial manual provided. Computers might be wonderful but they are not magic. If you can't remember how to do the basic operations from one work session to another then you do not have enough work to make a word processor worth while. Secondly, how much editing and re-editing do you do with the same script? If all you do is one off personal letters a word processor will show little advantage over an electric typewriter. Computers are best at doing repetitive tasks on the same data or on the same kind of data. The more your requirements fall into a standard pattern on standard paper the easier it will be to get the dumb machine to do it right each time. Word processors will do more complicated tasks like tables, columns, and personalised standard letters, even elementary arithmetic, but such things are not for the novice user. Some tasks are actually easier on typewriters—typing on envelopes, for example.

Hard and soft word processors

Up to 1980 there was only one kind of word processor, made by Wordplex, AES, and some others. This was a machine designed for one function—word processing—and essentially for one market—the busy secretarial office.

Their successors for the less intensive user are, on one hand, sophisticated typewriters with one line screens along which your script dances (and can be corrected) before being printed out and, on the other hand, full screen and typewriter outfits with diskettes to keep your text on for later retrieval. The first system will save on your Tipp-Ex but will not save your text; the second may well be cumbersome—and make sure you can read the screen easily. Olivetti and Brother have a whole range of machines from one extreme to the other. What they have in common is that they are essentially single purpose: word processing

or bust. Note too that diskettes from a hard wired word processor of this kind cannot be read by micro-computers or by machines of a different make.

The true microcomputer has a more flexible approach but comes out more expensive in the long run when you add all its bits together. As delivered it cannot do anything useful at all, but you can install software (that is, off the shelf programs on diskettes) for it to run: accounting, budgeting, record keeping, and, of course, word processing, all capable of being installed separately as and when the computer owner wants. This software is easier to produce and develop than the hard wired word processing facility offered on dedicated machines, and different vendors can offer rival products to run on the same machine.

Of course someone had to come up with a standard machine specification on which to run all this software. "Big Blue," alias IBM, produced its personal computer (PC) in 1981, and nearly everything has claimed to be "PC compatible" ever since. Apple with its Macintosh series has remained aloof and incompatible and therefore needs software specially written for it. So also do Atari and BBC machines, originally conceived for the educational rather than the business market. But if your software says "PC compatible" it probably subscribes to the IBM standard, though make sure with your dealer first (see below).

Caveat emptor

If all you want is a clever typewriter you shouldn't have any difficulty in installing it, but the more clever it is the more time you will need to discover how to unlock its secrets.

When it comes to computer systems, however, I would urge you most strongly to seek a dealer who will set up your entire system (hardware and software) in the shop, test it, and demonstrate it to you to your satisfaction before you accept delivery. The word processing software (or any other software) will almost certainly have been supplied by a third party, not the makers of the computer, and the printer for your system will probably hail from somewhere else, so it is most important that the whole lot be assembled and "configured" so that the word processing software communicates properly with the computer and the printer. Check that when you press the £ sign key on the keyboard a £ sign duly appears on the screen and also on the printed copy (most computers are designed in the United States, most printers in Japan . . .). Will you want to use accented characters for foreign languages, or fractions, or to create borders round your text? Most word processing software will allow you to do these things, but they have to be set up in advance in their own peculiar way.

Once you are satisfied with what your dealer is offering you can get it delivered and set it up in your own home, office, or wherever you want to use it. And—this is the vital bit—reach a clear understanding about what happens when things go wrong. Will the dealer come to you? Within how many hours of your call? How long will it be before you are up and running again? If the dealer doesn't undertake this support personally, a maintenance contract with a third party

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may be offered, in which case it behoves you to find out something about the maintainer and where your dealer's support ends and the maintainer's starts.

Incidentally, you are much less likely to get this kind of dealer and maintenance support if you buy a machine at the bargain end of the market, like an Amstrad—the dealer's margins are just too small to make it worth while. But ask your dealer about the Opus range.

Choosing a computer system

The computer comprises three units: screen, keyboard, and system unit. All system units have at least one diskette (or floppy disk) drive for loading the machine and backing up the data. You need at least a two drive system: the second drive may be for another diskette, but I would recommend a hard disk machine, which will contain your entire filing cabinet permanently, removing the worry of having to find the right diskette with the bit of information you want. A hard disk machine can be started up by simply switching on, whereas a two diskette unit always needs some fiddling with diskettes to get it started and to do any work on it. When you are using the word processing software the size, spacing, and quality of the typeface displayed on the screen are important, as is the feel of the keyboard (make sure all the keys work at the same finger pressure).

The printer—The cheapest printers are dot matrix ones; when these are used in "near letter quality" mode they produce a reasonable quality of print, adequate for letters but not up to the quality of a carbon ribbon electric typewriter. Daisywheel printers produce excellent quality type but are slower and noisier. Laser printers are likely to be outside the personal budget. There are some quiet, reasonably priced and high quality printers that use ink jet or other new technology, but find out how expensive the refills are for them.

The word processing software—For this, as for everything else, cost is related to quality. There may be some cheap word processing software that comes free with the computer but it may well be limited in scope. Volkswriter is often "bundled" with Amstrad machines, but beware the "de luxe" label as the version is in fact a subset of a much more comprehensive and expensive package. Of the best known word processing software, WordStar was in danger of being left behind, but the 2000 version and the forthcoming release 5 are endeavouring to keep it up to its rivals, notably Microsoft's Word and WordPerfect. These last two are top of the market products costing about £400 each; WordPerfect is the market leader and, incidentally, the standard software used at BMA House.

You and your data

You now have your word processor or micro ready on your desk and are about to entrust your finest thoughts to its tender mercies. The hard disk in the machine (or your collection of diskettes) is about to

become your filing cabinet: it is imperative that you know how to take security copies from it, otherwise you may one day find it locked up for good or totally rubbished. If your filing cabinet is important enough for you to entrust its contents to a computer, taking care of it is even more important. That applies even when you are in the middle of your editing; you should back up to disk or diskette frequently so that when your dog trips over the power cable you will lose only a page or two and not your whole morning's work.

Incidentally, personal information, including names and addresses, may be covered by the Data Protection Act 1986. This means that any person may require you to provide details of all the data you may have about him or her on your computer.

Over to you

There are other goodies on offer like spelling checkers (which make hilarious nonsense of proper names) and thesauruses (also useful for solving crosswords). You can even get software to comment on your writing style, but that might be too much for the blood pressure. Unfortunately, you still have to write the text yourself.

Update box for *Oxford Handbook of Clinical Medicine*, p 697

Oral charcoal in salicylate poisoning

Forced alkaline diuresis to enhance the elimination of salicylates has a significant morbidity, and even mortality, unless carried out in an intensive care area by experienced staff. Alkalinisation of the urine alone is thought to be more effective and is probably safer. It entails giving a bolus of intravenous sodium bicarbonate—for example, 50-100 ml of a 1.2% solution—repeated in the light of frequent—for example, every 15 minutes—measurements of urinary pH (the patient should be catheterised). Aim for a pH of about 8. Seek expert help.

Repeated oral doses of activated charcoal are an alternative and much safer means of enhancing the elimination of salicylates.¹ Charcoal is, however, unpalatable—and patients may be vomiting after salicylate poisoning. Therefore give charcoal by nasogastric tube. The optimum dose of activated charcoal has not been established with certainty, but a reasonable regimen is 50-100 g activated charcoal on admission or after gastric lavage, followed by 50 g every four hours until recovery or plasma drug concentrations have fallen to safe values.²

If neither activated charcoal nor alkaline diuresis is practicable haemodialysis or charcoal haemoperfusion is an effective means of removing salicylate from the circulation and is indicated particularly if the plasma salicylate concentration exceeds 1 g/l. —J M LONGMORE

Principal sources

- 1 Hillman RJ, Prescott LF. Treatment of salicylate poisoning with repeated oral charcoal. *Br Med J* 1985;291:1472.
- 2 Anonymous. Repeated oral activated charcoal in acute poisoning [Editorial]. *Lancet* 1987;i:1013-5.