

21 Feb 1984  
From Misawa to 1710 Falls Felix  
Las Cruces, NM

Dear Kelley,

This is the technical letter that I promised you, on word processing with, and selection of, a computer. I'm writing on a computer that is using a fairly classic editor, named EDT. With this type of editor, text entry/changes is reasonably well supported; however, text formatting (centering, justifying, etc.) is not. That's why the funny "dot commands" over there on the left; any line that begins with a period will be interpreted as a formatting command by the text processor that will message this later on.

I'll only send the first page in this mess, to give you the general idea.

The text processor is neat, if you don't mind the hassle of entering the commands along the way. Dot commands are used by almost every microprocessor-based editor around; however, each editor has it's own structure of commands, so experience on one is usually not really transferrable to another editor. The files aren't either!

It's the dot commands that give an editor it's "personality"; there are only 26 single-letter commands (obviously), so the writer of the editor has to choose which 26 functions he thinks are most important;

then use these shortest, easiest-to-remember commands for those functions. If you disagree, then the editor may be difficult for you to work with.

Typical commands that the dot commands call up are INSERT, SEARCH FOR, REPLACE WITH, CUT OUT, PASTE, OVER-TYPE, INSERT, DELETE, JUSTIFY-RIGHT, JUSTIFY-LEFT, CENTER, MOVE BY WORD, MOVE BY LINE, MOVE BY PARA, JUMP TO BEGINNING OF TEXT, END OF TEXT, MOVE DIRECTION FORWARD, MOVE DIRECTION BACKWARD, CHANGE CASE, ITALICIZE, SAVE FILE (whoo boy, is this one important !!!), EXIT EDITOR WITH SAVE, EXIT WITHOUT SAVE, PRINT FILE, PAGINATE, INDENT, OUTDENT, AUTO-HYPHENATE, and on and on and on... .

The best known, most widely used word processor is WORDSTAR. It was written years ago for the early microprocessors ("8 BIT MACHINES") and is pretty much of a disaster in terms of ease of use. However, all of the dot-command types are tough and memory intensive! WORDSTAR has the advantage of being surrounded by a small industry of book/tutorial products, accessory software products (spelling checkers, grammar checkers, auto-indexers, footnoters, etc.). If you choose to go with the d.c. types, WORDSTAR is probably the best.

From the tone of the above, you probably guessed that I think there is an alternative† right!

Microsoft WORD, with mouse.

WORD is a recent addition to the software world, currently in it's first release. It's written to take advantage of the new machine ("16 BIT") features, mainly more memory to hold larser text blocks, faster text moves, etc. It was specifically built to run on the IBM Personal Computer, versus WORDSTAR which will run on almost any small computer you can buy.

So how can WORD be different? Well, it comes with a small piece of hardware called a mouse . . . which is a pointing device you push around on your desk. The on-screen pointer ("CURSOR") follows the mouse, sort of. You push the mouse forward, the cursor moves up; you push the mouse to the right, the cursor moves to the right. Since the cursor is what you use to point at the text you want to effect (DELETE, CUT, JUSTIFY, etc.) next, ease of movins the cursor helps ease the program in general.

Then, after you have pointed to the text in question, you use the mouse to point at the command you want to execute; they're available along the bottom, in a menu. For most of the commands there are subcommands, such as, for FORMAT there might be PARA SPACE, JUSTIFY, WIDTH, PAGE LENGTH, etc. Then, for JUSTIFY, there might be RIGHT, LEFT, BOTH, CENTER, and so forth.

This cuts down on the memorization factor a lot.

WORD also contains really nifty formatting abilities, like multi-column printing (decide after text entry), running headers/footers, standard style sheets (you type in the text, then select PRINTINLETTERFORMAT, sort of . . . puts names and dates where they belongs, spaces between paragraphs, indents, etc.), and a lot more. It's a really neat program, and I think the mouse is a very handy device . . . at least in theory. I haven't used mine yet, but one day now . . .

Disadvantages exist with this scheme, too. The mouse requires that your hand leaves the keyboard periodically; not during text entry, though, so it ought to be OK on that front. Another problem is that the on-screen menus always take up 4 lines, and the on-screen WINDOW bars (of which more soon) use 3 more, so the 25 line screen only shows 19 lines, of up to about 75 characters each.

WINDOWS . . . a current buzz word. What it is, is the ability to designate several sub-screens on your screen, each one a "window" into the program(s) you're working with. In WORD, you can place up to 8 windows on the screen, each window holding its own file or a copy of any other windows file. Each window can be at a separate place in the file, and you can move data

between windows. This means that you can have, say, three parts of a chapter on the screen to look at simultaneously, and to move text between. Might be handy . . . then again, each window is pretty small, too. Tough choice.

So, in my opinion WORD is the easier, better, zoomier, snazzier, whiter-tooth processor . . . with flaws. WORDSTAR leaves you a little more screen (selectable . . . it has on-screen listings of commands, too . . . prompts, really), has more support in magazines and books (needs it, too), and a WORDSTAR listing on a disk is more likely to be acceptable at a publishing house than a WORD disk, at least for a little while to come. In text entry, all word processors are about the same.

← AUTO-HYPHENATION  
AIN'T PERECT;  
THAT'S "ZOOMIER"

There are others, but these are (I think) the two to choose from, for you. WORDSTAR usually runs \$300 - \$400; WORD with mouse is about \$350. Sometimes there's a special on WORDSTAR - I've seen it for \$229 . . .

Then there's equipment . . . here the choice is easy. Go IBM or compatible. The support is enormous, the equipment performance is decent, it's proven technology, and so weiter. I just bought (and Lech is buying, I believe) a TAVA PC. It's wholly IBM compatible.

ble, excepting that it does not include a language (BASIC) that the IBM does. It comes with 256,000 bytes of memory (roughly 30,000 words in memory at once under WORD), keyboard (like the IBM's, but no click from the keys, which is nice to be rid of), two floppy disk drives, high resolution green-color monitor (don't even TRY to use a TV, PLEASE) ... everything you need except software and a printer, for \$1995. You'll need a copy of MS-DOS 2.0 (\$40 from the same vendor), and then a printer. Two printers, actually. First, a fast, cheap draft printer, of the dot matrix type (like this letter). I can set you one here that will type 120 characters per second in various fonts and thicknesses, for right at \$250. Then, you'll need a letter-quality, fully-formed-character printer like a typewriter. The best value I know of is the JUKI 6100. It uses IBM ribbons, types at 18 char per second, is not too noisy, takes many different font wheels (like the Selectric balls but flat) and costs around \$580. Add in \$100 to \$300 for shipping, paper, cables, what-have-you, it's around \$3000. Talk to Lach (or me, it's OK to call...) in a month or so.

Having covered all that, how are you/John/Hazel/David/Rebecca? Is everything settling down as predicted, or is it already a bit tiring? I heard from Lach that David wouldn't be out until this

Oh, yeah - you'll end up wanting to add a HARD DISK, too... cost \$1000, makes for 10X speed in disk saves and 10,000,000 characters of storage space - well worth while!

← set left margin to space 5

.1a5 ← right margin to 70

.SP2 ← double space

Dear Kelley, ← text

.b ← line break

.i 5 ← indent following line 5 spaces

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.b

.s2

.i 5

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.i5

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Can set up list with auto-number, change margins  
in mid-stream, turn on-off justify, etc.