## Ex differences – version 1.1 to 2.0

This sheet summarizes the differences between the old version 1.1 of ex and the new version 2.0. The new ex is available as the standard ex on the VAX on the 5th floor of Evans, and as a new and experimental version in /usr/new on the Cory 11/70. It will soon be available in /usr/new on the Computer Center and Ingres Machines. Send problems over the Berkeley network to "vax:bill".

## Changes to existing features

### Options.

The options editany, edited, fork, hush, printall and sticky have been deleted because of lack of use. The notify option has been renamed report.

The *home* option will soon be superseded by the environment feature of version 7 UNIX and has been deleted. Similarly the *mode* option is superseded by the *umask* of version 7 and has also been deleted.

The *visualmessage* option has been deleted; use "mesg n" at the system command level to inhibit interconsole messages.

The iul option is replaced by a more general mechanism which allows portions of the buffer to be processed through specified commands; you can get iul processing on lines 1 to 100 of a file by doing "1,100!iul". This replaces the lines 1 to 100 by the output of an iul command, giving the command these lines as input.

#### Invocation

The options  $-\mathbf{o}$ ,  $-\mathbf{n}$  and  $-\mathbf{p}$  have been deleted.

#### Filename formation

The alternate filename is now represented as '#' rather than '', since '' is a shell metacharacter. The editor now uses a shell to expand filenames containing shell metacharacters. If you use *csh*, then you can use all the shell metasyntax in forming new filenames, including home directory references with '~' and variables you define in *.cshrc* using '\$'.

### Character representation

Control characters are now represented as ' $\hat{x}$ '; thus a control X is printed as ' $\hat{x}$ '; the delete character is represented ' $\hat{z}$ '.

### Command changes

There have been major changes to open/visual (incompatible ones are described below).

It is no longer possible to discard changes by repeating the *quit* command twice. You must use the variant form **quit!** to get out of the editor discarding changes. Similarly the variant forms **e!** and **next!** must be used to edit a new file or the next file without saving changes you have made.†

A new form of the '!' shell escape replaces the *expand* and *tabulate* commands. Thus the command "1,10expand" of the old version is replaced by "1,10!expand" in the new. Note also that the command abbreviation **ta** no longer refers to the *tabulate* command, which has been deleted, but rather refers to the new *tag* command.

The format of the *args* command has been changed; the files are no longer numbered, rather the entire argument list is always printed with the current file name enclosed by '[' and ']'.

 $<sup>\</sup>dagger$  Less useful are  $\mathbf{rewind!}$  and  $\mathbf{recover!}.$ 

The format of the *file* command output has been changed; the editor says '[Not edited]' in the rare case that this is true rather than saying '[Edited]'. The command also gives the percentage of the way into the buffer that the current line is.

The format of the *set* command has been improved; "set all" now prints in a three column format. The commands "set %", "set !" and "set `" have been deleted. The command "set" now prints in a one line format rather than down the screen.

The commands echo, expand, help, reset, sync, tabulate and xpand have been deleted.

# Changes to open and visual

A large number of changes have been made to open and visual; we summarize only the most noticeable ones here. See the attached reference card for more information, and (even if you know how to use visual already) you should look at *An Introduction to Text Editing with Vi.* We do not discuss any of the new commands in visual here.†

The delete line command is now  $\mathbf{dd}$  rather than \\ (\\ no longer works!.) In fact,  $\mathbf{d}$  and other operators can now operate on lines; thus  $\mathbf{dL}$  deletes to the last line on the screen. The shift commands < and > are now operators, thus << and >> now have the effect that < and > used to have.

The command  $\mathbf{v}$  has been deleted; only its synonym  $\mathbf{z}$  remains. The  $\mathbf{K}$  operation has been moved to  $\mathbf{m}$ ;  $\mathbf{K}$  has no meaning in the new version. The  $\mathbf{\hat{S}}$  operation has been deleted, but  $\mathbf{\hat{G}}$  does a sync, and also prints some information. The  $\mathbf{\hat{W}}$  operation has been deleted (use  $\mathbf{B}$ ). The  $\mathbf{\#}$ ,  $\mathbf{@}$  and  $\mathbf{\hat{X}}$  operations have been deleted. To delete to the beginning of the line use  $\mathbf{d0}$ ; the commands and  $\mathbf{x}$  and  $\mathbf{X}$  are similar to  $\mathbf{\#}$ .

During inputs, **^W** backs up like **b** rather than **B**.

Terminal support has been vastly improved; the editor will now drive most any display terminal, using all terminal features such as cursor addressing, clear to end of line, insert and delete line and insert and delete character. To help performance on slow terminals some options are now set based on the intelligence and speed of the terminal; in particular, the default window size is 1/2 a full screen at 300 baud, or 2/3 of a full screen at 1200 baud.

 $<sup>\</sup>dagger$  It is now possible to edit with the focus of the editing being *visual* using a command vi rather than ex on the command line, and using a new : command from within visual to run command mode commands.