#### Command Line Wizardry

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#### Shells We Are Going to Talk About

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### csh VS bash VS zsh

## 1979 Stephen R. Bourne



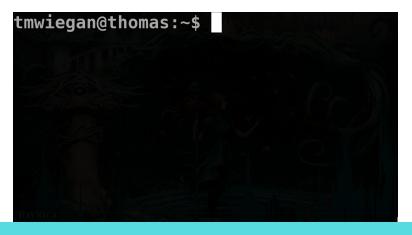
### Bourne Shell (sh)

```
Terminal
                   18296 Jun 8
                                                                                                 UNIX Programmer's Manual
                    1458 Jun 8 1979 getty
                      49 Jun 8 1979 group
                    2482 Jun 8 1979 init
                    8484 Jun 8 1979 mkfs
                    3642 Jun 8 1979 mknod
                                                                                   sh, for, case, if, while, :, ., break, continue, cd, eval,
                    3976 Jun 8 1979 mount
                                                                                   exec, exit, export, login, newgrp, read, readonly, set,
                     141 Jun 8 1979 passud
                                                                                   shift, times, trap, umask, wait - command language
                     366 Jun 8 1979 rc
                     266 Jun 8 1979 ttus
                    3794 Jun 8 1979 umount
                    634 Jun 8 1979 update
                     40 Sep 22 05:49 utmp
                    4520 Jun 8 1979 mm11
                                                                                   Sh is a command programming language that executes commands
# 1s -1 /*unix*
                                                                                  read from a terminal or a file. See invocation for the
                   53302 Jun 8 1979 /hphtunix
                                                                                  meaning of arguments to the shell.
                   52850 Jun 8 1979 /hptmunix
                   50990 Jun 8 1979 /rkunix
                   51982 Jun 8 1979 /r12unix
                                                                                   A simple-command is a sequence of non blank words separated
                   51790 Jun 8 1979 /rphtunix
                                                                                  by blanks (a blank is a tab or a space). The first word
                   51274 Jun 8 1979 /rptmunix
                                                                                   specifies the name of the command to be executed. Except as
                                                                                   specified below the remaining words are passed as arguments
                   17310 Jun 8 1979 /bin/sh
                                                                                   to the invoked command. The command name is passed as argu-
                                                                                   ment 0 (see exec(2)). The value of a simple-command is its
```

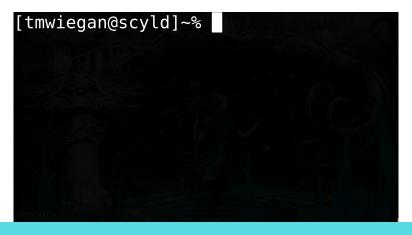
## "Tenex" C Shell (csh/tcsh)



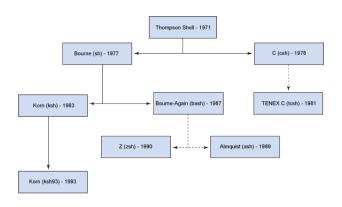
### Bourne Again Shell (bash)



# Z Shell (zsh)



### Pretty Family Tree



 Computer Scientists are super big lame-o's historically.

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- Names needed to be as well

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\$ program\_name

- \$ program\_name -a -options list of arguments
- The program we are trying to run is called program\_name
- The arguments are list, of, and arguments.
- The program is run with the options a and options

Troy

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