－－NB：These are partial lists
for mnemonic purposes only：
consult manuals for more！－－

Select（＋â⿷匚～－OPT for non－contig）
Word

2－Click

Sentence
3－Click
（to end or start of sentence：SH－3－click）

Line

OPT－3－Click

Para

4－Click
Doc

5－Click／âチェ～－A

Rect
opt－drag
Move（＋SH for Extend）
by char
by word

OPT－rt／left
by line
up／dn arrow
by screen
âチ～～up／dn
by doc

OPT－up／dn
by this para
â⿷匚～${ }^{\sim}$－rt／left
by next para
âc ${ }^{\sim}$－ent／ret
（SH＋Jump menu extends）
Delete（left）
by char
del
by word
OPT－del
（OPT＋Jump menu deletes）
［NB：to recover last deleted text，
choose Copy with nothing selected;
this puts it on the clipboard]
Format
(Unnamed Rulers)
all similar paras
â⿷匚~ ${ }^{\sim}$-change
(to name all similar unnamed rulers,
type name in popup menu, â $\mathbb{F}^{\sim}$-<ret>)
all similar, selected
â두 -change
(changes all similar to first)
all dependent paras
OPT-change
change identically
move indent
change relatively

## SH-move indent

(Tabs)
lead char, this tab
dbl-click leaderbar
lead char, later tabs dbl-click tab icon
(Layout)
in Layout, OPT-margin does not
move text
in Layout, SH-drag does not
move other page
(Rulers and Styles)
Insert Ruler makes an unnamed ruler
appear
directly changing a paragraph's format
causes an Insert Ruler below; pasting
does not
choosing a ruler Name with insertion pt
in paragraph causes an Insert Ruler
below; doing it with a ruler selected
does not
applying a Style with a named ruler
selected affects all material governed
by that ruler
applying a Style with text selected
affects only selected
text if no ruler is named; it affects
whole paragraph if ruler is named

- and furthermore, subsequent
para gets an Insert Ruler, and, if
named, the Inserted ruler is named!
to import a ruler, paste it with both
docs open
to import a style (and associated ruler),
apply it with both docs open
cannot paste a ruler if ruler of same
name exists; so, to make styles
conform, change ruler name first,
then apply with ruler selected

Windows
tile 2

SH-click in zoom
tile all

OPT-click in zoom
stack

OPT-SH-click in zoom
zoom
dbl-click title bar
keep inactive
hold âG ${ }^{\sim}$
close other
âG~-OPT-click this close
synch scroll
SH scroll
rev scroll

OPT scroll
unsplit
dbl－click split bar

Files
open 2 nd window
SH－dbl－click catalog
open by name
select，Open Selection

Characters
soft hyphen
â⿷匚̃ ${ }^{\sim}$－hyphen
soft return

SH－enter

Menus

OPT makes command effect all docs
OPT－macro／style edits it
OPT－click clip title for clip menu
âモ゙～－click wind title for windows menu
OPT－click wind title for macros menu

SH－cut／copy appends

SH－paste swaps
modified menus：

File：OPT，â $\mathcal{F}^{\sim}$ ，â $⿷^{\sim}$－OPT－SH

Edit：SH，OPT，SH－OPT

Tools: all combs of SH, OPT, âc
(affect find/replace)

Format: SH

Size: SH

Graphics: SH, OPT
Locate
named ruler

SH-select in menu
hdr, ftr, ftnt
SH-close window
cursor
enter

Footnotes
change symbol
SH-click
change placing
SH-click sep line

Graphics
select all touched OPT-drag
restore char graphic SH-dbl-click

Find
enter 9 or $\mathbb{\square}$
use SH
clear text attributes clear both \& close
general help
find works in loops; in each loop
a selection is made, and if it fails
to match a new try is made starting
outside the selection
find expressions are evaluated from
right to left, meaning that a selection
is made that satisfies each component
before the next component is looked at the metacharacters
wild
any exc return
:[space] any ctrl exc return
:!
any ctrl exc tab, ret; + hi ascii
:@
any ctrl, + hi ascii, + SP; not ret
$\therefore$
any at all
:A
alpha + diacritic + under
:a
alpha + diacritic; not under

## :Å

not alpha nor diacritic nor under
:å
not alpha nor diacritic

```
:I
locase alpha + diacritic
:u
upcase alpha + diacritic
:d
digit
:n
alpha + diacritic + digit
:N
alpha + diacritic + digit + under
:\partial
diacritic + under
:Î
not diacritic nor under
:0
octal digit
```

```
:X
hex digit
:w
not punctuation
:b
space or tab
\approx
whole word (+ space)
    [...] any in set of chars and/or ranges
[^...]
    any not in set
    :[...]
    set can include return
    times
    * zero or more
```

```
+ one or more
```

- zero or one
:* :+ :-
shortest match
position
:s doc start
:e doc end
^ para start
\$ para end
:^
line start
l<
word start

```
\>
word end
:<x
after x
:>x
before x
```

[what's looked at is the rtmost
part of the insertion point]
clipboard

ICC current clip
\C0
clip 0, etc.

NB: to use, may need single-
quotes to force metachar eval
other chars

I
Logical Or
\&
found str
<br>(..<br>) parentheses
\1...\9 parenth expr
\E10...\E63 parenth expr
[count from left]
$\backslash 0$
null
lb
backspace

```
\t
tab
\n
linefeed
\f
forced pagebreak
\r
return
\s
space
lv
soft return
    else,\ switches to literal
    Macros
    to copy, include || before name
general
    "..." strs must be literal
```

(for variable, put on clip
and use '\CC' etc.)
for " in str, use ""
use ' instead to include metas
use \return to insert fake
return into a quote
(e.g. to allow ruler in quote)
digit
change clipboard
:1 "text1" ["text2"]
makes dialog
box; text1 is prompt; text2 allows
user to enter text (goes to clip)

Key [text]
no quotes! no text = ret; use ASCII

Table to type arrows etc.
menu commands
enter name or title:name
if |-able, can take "on" or "off"
can precede with symbols Shift

Option Command from ASCII

Table (hex 19, 20, 17)

Copy["clipnum"["text"]]

Cut["clipnum"]

Paste["clipnum"["text"]]
(cannot omit clipnum, but can
leave empty, so you can insert
a literal string directly)

Mark Text... ["n1"["n2"]]
( n 2 to mark start and end of
selection w/ diff names)

Jump
["pos1"["pos2"]]
(pos2 to select from one to
the other (but not including!!);

NB a pos can be a name, linenum,
or "END" (use "1" for start))
Ruler menu commands

Left, Center, Right, Full

L 1, L 1.5, L 2, L 3, L Other

ๆ| 1, ๆ1 1.5, ๆ 2 , ๆ 3 , ๆ Other
(after Other, enter val and ret)

Find commands

Find Next ["exp" ["options"]]

```
Find/Replace ["exp1" "exp2" ["options"]]
```

where the options are:
*
use dialog's options
C
copy text and options into dialog
-g
normal search
e
power search
g
power search +
w
whole word
-W
not whole word

## r

reverse (search backwards)
i
ignore case

W
wrap
-W
don't wrap

G
search all open
-G
search front doc only

0
ignore styles in Find
-O
use styles in Find

0
ignore styles in Replace
-O
use styles in Replace
a
replace all

I
replace all in selected paras
s
replace all in selection
n
with s , select last changed

I
index, not replace
t
no dialogs
v
dialogs

E
jump to end on failure
terminate macro on failure

M
search all files on search list
-M
search current doc only

X
with Find Next, puts pathnames
from search list onto clip
Programming Language
//
comment
label:
label
$+$
concatenate strs
remove first instance of str2

1
remove every instance of str2
variables

DOUBLE
printf() formatting str

LONG
ditto
[see 32-34 of manual]

DoubleLock boolean; if true, forces
all constants to double-precision
clipboard current clip

SelectWithRuler boolean; if true,
selections include ruler just to left

ReportErrors boolean; if false,
suppresses error reporting
commands
local x
make caller's x inaccessible
global x make $x$ live forever
(no need to repeat in other macros)
free $x$
kill x's var space
freeLocal, freeGlobal, freeAll
macroCopy, macroPaste between
clip and selection point
selectRuler(n)
selects ruler governing
char offset n
setSelect(n1,n2)
selects char range
setSelectMore(n1,n2)
builds non-
contig selections; first one is ignored,
so start with $(0,0)$
goto label
exit
from macro
if(E)
if $E$ is true, non-zero, or non-
empty, then statements on same
line will execute; use semi-colon to
separate statements on same line;
operators include !, \&\&, \|, ==, <>,
$<=,>=$, etc.
functions (e.g. cos(num))
sin, cos, tan, acos, asin, atan
sinh, cosh, tanh, exp
ceil
returns next int as float
floor
returns prev int as float
div, mod
fmod(f1,f2) rem f1/f2
modf
fractional part
random
integer
rrandom(f1,f2)
float betw args
seed
uses arg to seed later randoms

CharToNum, NumToChar
left(str,n)
right(str,n)
mid(str,startnum,n)
offset(soughtstr,targetstr)
upperRoman, lowerRoman
int to str
fabs (= abs val)
$\log , \log 1$
functions (no arg)
docName, docPath
of front doc
dateCreated, lastDateSaved
timeModified
charNum, lineNum, PageNum
of
insertion point
pageLineNum
lineNum on this page
endCharNum
char offset to end
rulerName
governing insertion pt
rulerStart
char offset
nextRulerStart
selectStart, selectEnd
in chars
numFound
how many found in last find
arrays
array must already exist via method

```
arrays are 1-based
[n] addrs absolutely
[[n]] addrs relative, e.g. [[1]] = next
methods (syntax: var -> method(arg))
type
return string naming type of var
create(n)
n storage spaces at start
qcreate(n)
n storage spaces at end
push(E)
adds E to var front
qpush(E)
adds E to var end
```

NB: these keywords can be used as E
to obtain info about current non-contig
selection: strings; starts; ends;
startends;
ints, floats
treats str as number
pop
removes and refs first element
first
refs without removing
last
refs without removing
size
reports size
shuffle
randomizes
swap(n1,n2)
error
reports boolean whether last access
to var caused error

