

Smartparens ****					
Description	Key	Function	<u>Note</u>		
Smartparens O Help & configuration Help on smartparens Toggle smartparens mode Mark block, Narrow block Navigate Copy & clone Transform Kill Kill/splice Delete/kill region Delete char Delete/kill symbol Indentation Highlight	Smartparens is a minor mode "that deals with parens pairs and tries to be smart about it" as per its author. It has features comparable to \$\mathbb{N}(\mathbb{X}\to \text{Lispy}\) but supports multiple programming languages and text formats. The smartparens external package \$\mathbb{M}\times \text{is activated by PEL downloads via the pel-use-smartparens}\) user-option. With PEL: Use the <f11> (they prefix to get information about smartparens or to activate it in the current buffer or globally. Once smartparens mode is active use the <m-f7> key prefix to quickly access smartparens key bindings.</m-f7></f11>				
Last updated on:	2025-05-12	See Smartparens manual			
Open this PDF file. See also: <u>▼ Help/Info</u>	<f11> (<f1></f1></f11>	(pel-help-pdf & optional OPEN-WEB-PAGE)	Open the <u>Ex Smartparens</u> local PDF. If the prefix argument (like C-u or M) is used, then it opens the remote GitHub hosted raw PDF instead. If the pel-flip-help-pdf-arg user-option is set it's the other way around.		
∑ Customize PEL smart parens control	<f11> (<f2></f2></f11>	(pel-customize-pel &optional OTHER-WINDOW)	Customize PEL text insertion support: rainbow-delimiters, smartparens. • If OTHER-WINDOW is non-nil (use C-u), display in other window.		
∑ Customize Emacs smart parens control	<f11> (<f3></f3></f11>	(pel-customize-library &optional OTHER-WINDOW)	Customize Emacs text insertion support: rainbow-delimiters, smartparens . If OTHER-WINDOW is non-nil (use C-u), display in other window.		
Smartparens Mode • Smartparens manual See also: Inserting Text	Simplify insertion of matching pairs with the smartparens minor mode. PEL binds a set of keys, described below, to toggle activation of that mode. This uses the smartparens external package. PEL activates it when pel-use-smartparens is set to t. Smartparens enhances the behaviour of certain keys, namely those that are part of any pair or tag. Mode line lighter: smartparens-mode: SP smartparens-strict-mode: SP/s				
Help on smartparens	<f11> (?</f11>	(sp-cheat-sheet & optional ARG)	Generate a cheat sheet of all the smartparens interactive functions. Shows inside Emacs buffer. • Print only the short documentation and examples. • With non-nil prefix argument ARG (C-u), show the full documentation for each function. • You can follow the links to the function or variable help page. • To get back to the full list, use M-x help-go-back. • You can use 'beginning-of-defun' and 'end-of-defun' to jump to the previous/next entry. • Examples are fontified using the 'font-lock-string-face' for better orientation.		
Describe user system	<f11> (M-?</f11>	(sp-describe-system STARTERKIT)	Describe user's system. Prompt for starter kit: Evil, Spacemac, Vanilla. • The output of this function can be used in bug reports.		
Print smartparens info	<f11> (i</f11>	(pel-smartparens-info)	Print smartparens setup info in *pel-smartparens-info* buffer. • The information printed includes values of several variables organized by sections. Sections and variable names are clickable buttons. Sections lead to relevant smartparens pages, while variables buttons open help for the variable.		
Toggle smartparens mode	<f11> ((</f11>	(smartparens-mode &optional ARG)	Toggle smartparens mode.		
Toggle smartparens-strict mode	<f11> ()</f11>	(smartparens-strict-mode &optional ARG)	Toggle the strict smartparens mode. • When strict mode is active, 'delete-char', 'kill-word' and their backward variants will skip over the pair delimiters in order to keep the structure always valid (the same way as 'paredit-mode' does). This is accomplished by remapping them to 'sp-delete-char' and 'sp-kill-word'. There is also function 'sp-kill-symbol' that deletes symbols instead of words, otherwise working exactly the same (it is not bound to any key by default). • When strict mode is active, this is indicated with "/s" after the smartparens indicator in the mode list		
Toggle smartparens mode	<f11> (M-(</f11>	(smartparens-global-mode &optional ARG)	Toggle Smartparens mode in all buffers. • With prefix ARG, enable Smartparens-Global mode if ARG is positive; otherwise, disable it. • Smartparens mode is enabled in all buffers except this identified in sp-ignore-mode-list.		
Toggle smartparens-strict mode	<f11> (M-)</f11>	(smartparens-global-strict-mode &optional ARG)	Toggle Smartparens-Strict mode in all buffers. • With prefix ARG, enable Smartparens-Global-Strict mode if ARG is positive; otherwise, disable it. • Smartparens-Strict mode is enabled in all buffers where 'turn-on-smartparens-strict-mode' would do it.		
Mark	See <u>Narking</u> for mo	re information on marking.			
Mark current block	M- <f7></f7>	(sp-mark-sexp &optional ARG ALLOW-EXTEND)	Set mark ARG balanced expressions from point. • The place mark goes is the same as M-x sp-forward-sexp would move to.		
	 Interactively, if this command is repeated or (in Transient Mark mode) if the mark is active, it marks the next ARG sexps after the ones already marked. This command assumes point is not in a string or comment. 				
Mark next	M- <f7> . n</f7>	(sp-select-next-thing &optional ARG POINT)	Set active region over next thing as recognized by 'sp-get-thing'. • If ARG is number 0 (zero), select all the things inside the current expression.		
	 If ARG is positive N, select N expressions forward. If ARG is negative -N, select N expressions backward. If ARG is a raw prefix C-u select all the things up until the end of current expression. If ARG is a raw prefix C-u select all the things up until the end of current expression. If ARG is a raw prefix C-u select the current expression (as if doing 'sp-backward-up-sexp' followed by 'sp-select-next-thing'). If POINT is non-nil, it's assumed it's a point inside the buffer from which the selection extends, either forward or backward, depending on ARG's value. If the currently active region contains a balanced expression, following invocation of 'sp-select-next-thing' will select the inside of this expression. Therefore calling this function twice with no active region will select the inside of the next expression. If the point is right in front of the expression any potential prefix is ignored. For example, ' (foo) would only select (foo) and not include ' in the selection. If you wish to also select the prefix, you have to move the point backwards. With 'sp-navigate-consider-symbols' symbols and strings are also considered balanced expressions. 				
Mark next and exchange	M- <f7> . N</f7>	(sp-select-next-thing- exchange &optional ARG POINT)	Just like 'sp-select-next-thing' but run 'exchange-point-and-mark' afterwards.		
Mark previous	M- <f7> . p</f7>	(sp-select-previous-thing &optional ARG POINT)	Set active region over ARG previous things as recognized by 'sp-get-thing'. If ARG is negative -N, select that many expressions forward. With 'sp-navigate-consider-symbols' symbols and strings are also considered balanced expressions.		
Mark previous and exchange	M- <f7> . P</f7>	(sp-select-previous-thing- exchange &optional ARG POINT	Just like 'sp-select-previous-thing' but run 'exchange-point-and-mark' afterwards.		
Narrowing	See <u>Narrowing</u> for m	nore information on narrowing.			
Narrow to sexp	M- <f7> M-n</f7>	(sp-narrow-to-sexp ARG)	Make text outside current balanced expression invisible. A numeric arg specifies to move up by that many enclosing expressions. See also 'narrow-to-region' and 'narrow-to-defun'.		

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Description
                                                                                     Function
                                                     Key
                                                                                                                                                                            Note
                                         PEL also provides 10 bindings using the C-M- modifiers combination for the main navigation commands. 6 of them correspond to the recommended navigation key bindings, the other 4 differ to allow valid bindings when Emacs runs in terminal mode and better reflect standard bindings. The changes
Navigation
                                                • sp-backward-down-sexp (&optional arg)
• sp-up-sexp (&optional arg)
                                                                                                                                   ;; C-M-a --> C-M-z
;; C-M-e --> C-M-]
                                                • sp-beginning-of-sexp (&optional arg)
• sp-end-of-sexp (&optional arg)
                                                                                                                                    ;; <del>C-S-a</del> --> C-M-e
                                         · The smartparens package does not bind any key by default. However, the recommended bindings are shown in blue as if they were. PEL binds them.
                                         • For bindings that differ from the recommended ones, the recommended binding is shown in crossed out red. PEL doe not activate these bindings.
                                                                                                                Move forward across one balanced expression. With ARG, do it that many times.
To end of next element/
                                                                        (sp-forward-sexp &optional
                                         • M-<f7> f
block
                                         • C-M-f
                                                                                                                 · A negative argument N means move backward across N balanced expressions.
  forward
                                         • If there is no forward expression, jump out of the current one (effectively doing 'sp-up-sexp').
                                         • With 'sp-navigate-consider-symbols' symbols and strings are also considered balanced expressions.

| (foo bar baz) -> (foo bar baz) |
| (foo bar baz) -> (foo bar baz) |
| (foo bar baz) -> (foo bar baz) |
| (foo bar baz) -> (foo bar baz) |
Behaves as lispy j when
point after end parens
                                                                                                                                                        ;; with ARG=2
                                                                                     (foo (bar baz|)) -> (foo (bar baz)|)
                                         • M-<f7> b
                                                                        (sp-backward-sexp &optional | Move point backward to beginning of previous block element. With ARG, do it that many times.
To beginning of previous
element/block

backward
                                                                                                                 · A negative argument N means move forward across N balanced expressions
                                         • C-M-b
                                         · If there is no previous expression, jump out of the current one (effectively doing 'sp-backward-up-sexp'): moves out of block, then previous block.

With 'sp-navigate-consider-symbols' symbols and strings are also considered balanced expressions.

(foo bar baz) -> (foo bar baz)

(foo bar baz) -> (|foo bar baz)

(foo bar| baz) -> (|foo bar baz)

((|foo bar| baz) -> (|foo bar) baz)

((|foo bar| baz) -> (|foo bar) baz)
                                                                                                                                                        ;; with ARG=2
To beginning of next
                                         • M-<f7> n
                                                                        (sp-next-sexp &optional ARG) Move forward to beginning of next block element. At end of block move to beginning of outer
element/block
                                                                                                                 block. With ARG, do it that many times. A negative argument N means move to the beginning of
                                         • C-M-n
                                                                                                                 N-th previous balanced expression.
                                         · If there is no next expression at current level, jump one level up (effectively doing 'sp-backward-up-sexp').
                                         • If 'sp-navigate-interactive-always-progress-point' is non-nil, and this is called interactively, the point will move to the first expression in forward direction where it will end up greater than the current location.

With 'sp-navigate-consider-symbols' symbols and strings are also considered balanced expressions.

((foo) |bar (baz quux)) -> ((foo) bar |(baz quux))

((foo) bar |(baz quux)) -> |((foo) bar (baz quux))

    With non-nil 'sp-navigate-interactive-always-progress-point':

                                                                                     (f|oo bar) -> (foo |bar)
((fo|o) (bar)) -> ((foo)
                                                                        (sp-previous-sexp &optional
                                                                                                                 Move backward to end of previous block element.
To end of previous element
                                         • M-<f7> p

    With ARG, do it that many times. If there is no next expression at current level, jump one level up
(effectively doing 'sp-up-sexp').

  backward
                                         • C-M-p

    A negative argument N means move to the end of N-th following balanced expression.

With 'sp-navigate-consider-symbols' symbols and strings are also considered balanced expressions.
If 'sp-navigate-interactive-always-progress-point' is non-nil, and this is called interactively, the point will move to the first expression in backward

                                            direction where it will end up less than the current location.
                                                                                     ((foo) bar| (baz quux)) -> ((foo)| bar (baz quux))
((foo)| bar (baz quux)) -> ((foo) bar (baz quux))|

    And if 'sp-navigate-interactive-always-progress-point' is non-nil:

                                                                                    (foo b|ar baz) -> (foo| bar baz)
(foo (b|ar baz)) -> (foo| (bar baz))
                                                                        (sp-forward-parallel-sexp
                                                                                                                 Move forward across one balanced expressions at the same depth.
                                         M-<f7> F

    If calling 'sp-forward-sexp' at point would result in raising a level up, loop back to the first
expression at current level, that is the first child of the enclosing sexp as defined by 'sp-get-

                                                                        &optional ARG)

    forward

                                                                                                                    enclosing-sexp'.
                                                                        (sp-backward-parallel-sexp
                                                                                                                 Move backward across one balanced expressions at the same depth.

• If calling 'sp-backward-sexp' at point would result in raising a level up, loop back to the last
                                         M-<f7> B
                                                                        &optional ARG)
  backward
                                                                                                                    expression at current level, that is the last child of the enclosing sexp as defined by 'sp-get-
                                                                                                                    enclosing-sexp'.
                                                                                                                 Move forward to the beginning of inner element of a block. With ARG, do this that many times.
Into block forward
                                         • M-<f7> d
                                                                        (sp-down-sexp &optional
                                                                                                                 • A negative argument N means move backward but still go down a level.
                                         • If ARG is raw prefix argument C-u, descend forward as much as possible. If ARG is raw prefix argument C-u, jump to the beginning of current list.
                                         • If the point is inside sexp and there is no down expression to descend to, jump to the beginning of current one. If moving backwards, jump to end of
                                            current one.
                                                                                    foo (bar (baz quux)) -> foo (|bar (baz quux))
|foo (bar (baz quux)) -> foo (bar (|baz quux))
|foo (bar (baz (quux) blab)) -> foo (bar (baz (|quux) blab))
(foo (bar baz) |quux) -> (|foo (bar baz) quux)
(blab foo |(bar baz) quux) -> (|blab foo (bar baz) quux)
                                                                                    |foo (bar (baz quux))
                                                                                                                                                                                                 ;; with ARG=2
                                                                                                                                                                                                 :: with C-u
                                                                                                                                                                                                  :: with C-u C-u
Into block backward
                                                                                                                Move backward down one level to end of block element.

• With ARG, do this that many times.
                                         • M-<f7> z
                                                                        (sp-backward-down-sexp
                                                                        &optional ARG)
   backward
                                         • C-M-z
                                         · A negative argument N means move forward but still go down a level. If ARG is raw prefix argument C-u, descend backward as much as possible. If
                                            ARG is raw prefix argument C-u, jump to the end of current list. If the point is inside sexp and there is no down expression to descend to, jump to
                                            the end of current one. If moving forward, jump to beginning of current one.

foo (bar (baz quux)) | -> foo (bar (baz quux)) |

(bar (baz quux)) foo | -> (bar (baz quux)) foo

foo (bar (baz (quux) blab)) | -> foo (bar (baz (quux) blab))

(foo | (bar baz) quux) -> (foo (bar baz) quux blab))
                                                                                                                                                                                                   ;; with ARG=2
                                                                                                                                                                                                   ;; with C-u
                                                                                                                 Jump to beginning of the sexp the point is in. The beginning is the point after the opening delimiter.
To beginning of block
                                         • M-<f7> a
                                                                        (sp-beginning-of-sexp
  backward/forward
                                         • C-M-a
                                                                        &optional ARG)
                                                                                                                 • With no argument, this is the same as C-u C-u 'sp-down-sexp'
                                         C-S-d
                                         • With ARG positive N > 1, move forward out of the current expression, move N-2 expressions forward and move down one level into next expression.

    With ARG negative N < 1, move backward out of the current expression, move N-1 expressions backward and move down one level into next expression.</li>

                                         • With ARG raw prefix argument C-u move out of the current expressions and then to the beginning of enclosing expression.
                                                                                     (foo (bar baz) quux| (blab glob)) -> (|foo (bar baz) quux (blab glob)) (foo (bar baz|) quux (blab glob)) -> (foo (|bar baz) quux (blab glob)) (|foo) (bar) (baz quux) -> (foo) (bar) (|baz quux) (foo bar) (baz) (quux|) -> (|foo bar) (baz) (quux)
                                                                                                                                                                                                                    ;; with ARG=3
;; with ARG=-3
                                                                                     ((foo bar) (baz |quux) blab) -> (|(foo bar) (baz quux) blab)
                                                                                                                                                                                                                    :: with C-u
                                                                                                                 Jump to end of the current block.

• With no argument, this is the same as calling C-u C-u 'sp-backward-down-sexp'.
To end of current block
                                         • M-<f7> e
                                                                        (sp-end-of-sexp &optional
                                                                        ARG)
  forward
                                         • C-M-e
                                         C-S-a

    With ARG positive N > 1, move forward out of the current expression, move N-1 expressions forward and move down backward one level into previous expression. With ARG negative N < 1, move backward out of the current expression, move N-2 expressions backward and move down backward one</li>

                                            level into previous expression.
                                           With ARG raw prefix argument C-u move out of the current expressions and then to the end of enclosing expression.
                                                                                   (foo |(bar baz) quux (blab glob)) -> (foo (bar baz) quux (blab glob)) |
(foo |(bar baz) quux (blab glob)) -> (foo (bar baz) quux (blab glob)) |
(foo (|bar baz) quux (blab glob)) -> (foo (bar baz) quux (blab glob))
(|foo) (bar) (baz quux) -> (foo) (bar) (baz quux)
((foo bar) (baz) (quux|) -> (foo bar|) (baz) (quux)
((foo |bar) (baz quux) blab) -> ((foo bar) (baz quux) blab|)
                                                                                                                                                                                                                    ;; with ARG=3
;; with ARG=-3
                                                                                                                                                                                                                    :: with C-u
```

```
Description
                                         Key
                                                                   Function
                                                                                                                                       Note
                                                                                           (f|oo) (bar) (baz) -> (foo) (|bar) (baz) (f|oo) (bar) (baz) -> (foo) (bar) (|baz)
To beginning of next block
                                                        (sp-beginning-of-next-sexp
                                M-<f7> i
                                                                                                                                                     ;; with ARG=2

    forward

                                                         &optional ARG)
                                                                                                  (b|ar) (baz) -> (|foo)
(bar) (b|az) -> (|foo)
To beginning of previous
                                M-<f7> k
                                                         (sp-beginning-of-previous-
                                                                                           (foo)
                                                                                                                                  (bar) (baz)
                                                                                                                                                      ;; with ARG=2
                                                                                                                                  (bar) (baz)
                                                         sexp &optional ARG)

    backward

                                                                                           (f|oo) (bar) (baz) -> (foo) (bar|) (baz) (f|oo) (bar) (baz) -> (foo) (bar) (baz|)
                                                        (sp-end-of-next-sexp
&optional ARG)
To end of next block
                                M-<f7> N
                                                                                                                                                      ;; with ARG=2
 forward
                                                                                           (foo) (b|ar) (baz) -> (foo|) (bar) (baz) (foo) (bar) (b|az) -> (foo|) (bar) (baz)
To end of previous block
                                M-<f7> K
                                                         (sp-end-of-previous-sexp
                                                                                                                                                      ;; with ARG=2

    backward

                                                         &optional ARG)
Out block forward
                                • M-<f7> ]
                                                         (sp-up-sexp &optional ARG
                                                                                         Move forward out of one level of parentheses. With ARG, do this that many times.
 forward
                                • C-M-]
                                                        INTERACTIVE)

    A negative argument means move backward but still to a less deep spot.

    The argument INTERACTIVE is for internal use only.

                                  If called interactively and 'sp-navigate-reindent-after-up' is enabled for current major-mode, remove the whitespace between end of the expression and the last "thing" inside the expression.
                                  This behaviour can be suppressed for syntactic string sexps by setting 'sp-navigate-reindent-after-up-in-string' to nil.
                                • If 'sp-navigate-close-if-unbalanced' is non-nil, close the unbalanced expressions automatically.

(foo | (bar baz) quux blab) -> (foo (bar baz) quux blab) |

(foo (bar | baz) quux blab) -> (foo (bar baz) quux blab) |

;; with ARG=2
                                · re-indent the expression
                                                                  (foo bar |baz
                                                                                                      -> (foo bar baz)|

    close unbalanced expression

                                                                  (foo |(bar baz)
                                                                                                      -> (foo) | (bar baz)
                                                                                        Move backward out of one level of parentheses. With ARG, do this that many times.
Out block backward
                                • M-<f7> u
                                                        (sp-backward-up-sexp

    A negative argument means move forward but still to a less deep spot
    The argument INTERACTIVE is for internal use only.

  backward
                                                         &optional ARG INTERACTIVE)
                                • C-M-u
                                  If called interactively and 'sp-navigate-reindent-alter-up is some expression and the first "thing" inside the expression.

(foo (bar baz) quux| blab) -> |(foo (bar baz) quux blab) (foo (bar baz) quux blab) -> |(foo (bar baz) quux blab) ;; with ARG=2 ( -> |(foo bar baz)
                                · If called interactively and 'sp-navigate-reindent-after-up' is enabled for current major-mode, remove the whitespace between beginning of the
Move over space
                                                        (sp-skip-forward-to-symbol & optional STOP-AT-STRING
To beginning of next symbol/
                               M-<f7> SPC n
                                                                                           foo
                                                                                                                  -> foo
                                                         STOP-AFTER-STRING
                                                                                           fool
                                                                                                   [bar baz] -> foo
                                                                                                                             [[bar baz]
                                                         STOP-INSIDE-STRING)
                                                                                                                       -> foo| bar baz
To end of next symbol or
                                                         (sp-forward-symbol
                                M-<f7> SPC m
                                                         &optional ARG
                                                                                           block
                                                                                                                                                                        check this
                                                                                           To beginning of previous
                                M-<f7> SPC p
                                                         (sp-backward-symbol
                                                         &optional ARG)
                                                         (sp-forward-whitespace
                                                                                         Skip forward past the whitespace characters.
Skip forward past
                                M-<f7> SPC .
                                                                                         With non-nil ARG return number of characters skipped.
                                                         &optional ARG)
Skip backward past
                                M-<f7> SPC ,
                                                         (sp-backward-whitespace
                                                                                         Skip backward past the whitespace characters.
                                                                                         With non-nil ARG return number of characters skipped.
whitespace
                                                        &optional ARG)
Copy and Clone
                                With PEL, the commands that are marked with 흟 👁 display the copied string when pel-show-copy-cut-text is t. Toggle this display with 🛙 <f11> M-=
                                                        (sp-copy-sexp &optional ARG)
Copy current & forward
                                                                                        Copy the following ARG expressions to the kill-ring. This is exactly like calling 'sp-kill-sexp' with second argument t. All the special prefix arguments
                                M-<f7> =
                                C-M-w
block(s)
                                                                                         work the same way.
                                                                                        Copy the previous ARG expressions to the kill-ring. This is exactly like calling 'sp-backward-kill-sexp' with second argument t. All the special prefix
Copy previous block(s)
                                M-<f7> M-=
                                                         (sp-backward-copy-sexp
                                                        &optional ARG)
                   *
                                                                                         arguments work the same way.
clone current block
                                M-<f7> c
                                                         (sp-clone-sexp)
                                                                                         Clone sexp after or around point.
                                                                                          If the form immediately after point is a sexp, clone it below the current one and put the point in
                                                                                           front of it.
                                                                                          Otherwise get the enclosing sexp and clone it below the current enclosing sexp.
Transform
                                                                                           foo |bar baz
                                                                                                                  -> bar foo| baz
Transpose block elements
                                M-<f7>t
                                                        (sp-transpose-sexp
                                                         &optional ARG)
                                                                                           foo |bar baz
                                                                                                                 -> bar baz foo| ;; 2
                                                                                           (foo) | (bar baz) -> (bar baz) (foo) |
                                                                                                                        (foo bar)
                                                                                               (baz quux)
                                                                                           foo bar bazl
                                                                                                                 -> foo baz| bar ;; -1
                                                                                                                    baz (quux
quack)
Transpose block elements
                                                                                           foo bar
                                M-<f7> T
                                                         (sp-transpose-hybrid-sexp
                                                                                           |baz (quux
|quack)
                                                         &optional ARG)
                                                                                                                    foo bar\n
                                                                                           [(foo) (bar) -> [(baz)
|(baz)] (foo) (bar)|]
                                                                                           |x = big_function_call(a,
b)
                                                                                                                               |(a,
| b) = read_user_input()
Push current block after
                                M-<f7> s
                                                         (sp-push-hybrid-sexp)
                                                                                                                                x = big_function_call(a,
b)
Like lispy s
                                                                                            b) = read_user_input()
Transform - slurp
                                                        (sp-forward-slurp-sexp & optional ARG)
Enclose next outside
                                M-<f7> >
                                                                                           (foo |bar) baz
                                                                                                                        -> (foo |bar baz)
element into current block
                                                                                           [(foo |bar)] baz
                                                                                                                        -> [(foo |bar) baz]
                                                                                           [(foo |bar) baz]
                                                                                                                        -> [(foo |bar baz)]
                                                                                           ((|foo) bar baz quux) -> ((|foo bar baz quux)) ;; with C-u
                                                                                           "foo| bar" "baz quux" -> "foo| bar baz quux"
                                                                                         Add hybrid sexp following the current list in it by moving the closing delimiter.
Enclose next outside
                                M-<f7> M->
                                                         (sp-slurp-hybrid-sexp)
element into current block
                                                                                           This is conceptually similar to 'sp-forward-slurp-sexp' but works better in "line-based" languages
                                                                                           Because the structure is much looser in these languages, this command currently does not
                                                                                           support all the prefix argument triggers that 'sp-forward-slurp-sexp' does
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Description
                                     Key
                                                           Function
                                                                                                                        Note
                                                                                                           -> (foo bar| baz)
Enclose previous outside
                                                  (sp-backward-slurp-sexp
                                                                                 foo (bar| baz)
                            M-<f7> <
element(s) into next block
                                                  &optional ARG)
                                                                                 foo [(bar| baz)]
                                                                                                          -> [foo (bar| baz)]
                                                                                 [foo (bar| baz)]
                                                                                                          -> [(foo bar| baz)]
                                                                                 (foo bar baz (|quux)) -> ((foo bar baz |quux)) ;; with C-u
                                                                                 "foo bar" "baz |quux" -> "foo bar baz |quux"
                                                                                 (foo bar) |baz quux
                                                                                                                -> (foo bar |baz) quux
                                                  (sp-add-to-previous-sexp
Enclose next outside
                            M-<f7> }
element(s) into previous
                                                  &optional ARG)
block
                                                                                 (foo bar) |baz quux
                                                                                                                -> (foo bar |baz quux) ;; 2
                                                                                 (blab (foo bar) |baz quux) -> (blab (foo bar |baz quux)) ;; C-u
                                                                                 (foo bar) (baz |quux)
                                                                                                                -> (foo bar (baz |quux)) ;; C-u C-u
Enclose previous outside
                                                                                 foo bar| (baz quux)
                                                                                                                -> foo (bar| baz quux)
                             M-<f7> {
                                                  (sp-add-to-next-sexp
element(s) into next block
                                                  &optional ARG)
                                                                                 foo bar| (baz quux)
                                                                                                                -> (foo bar| baz quux) ;; 2
                                                                                 (foo bar | (bar quux) blab) -> ((foo bar | bar quux) blab) ;; C-u
                                                                                 (foo Ibar) (baz guux)
                                                                                                                -> ((foo |bar) baz quux) ;; C-u C-u
Transform - barf
Eject next element(s) out of
                                                  (sp-forward-barf-sexp
                                                                                 (foo bar| baz) -> (foo bar|) baz
                                                                                                                           ;; nil (defaults to 1)
                            M-<f7> /
current block
                                                  &optional ARG)
                                                                                 (foo| [bar baz]) -> (foo|) [bar baz] ;; 1
                                                                                 (1 2 3 4 5 6)
                                                                                                    -> (1 2 3|) 4 5 6 ;; C-u (or numeric prefix 3)
                                                                                                                            ;; -1
                                                                                 (foo bar| baz)
                                                                                                    -> foo (bar| baz)
                                                  (sp-backward-barf-sexp
                                                                                 (foo bar| baz)
                                                                                                    -> foo (bar| baz)
Eject previous element(s)
                             M-<f7> M-/
out of current block
                                                  &optional ARG)
                                                                                 ([foo bar] |baz) -> [foo bar] (|baz)
                                                                                 (1 2 3 14 5 6)
                                                                                                   -> 1 2 3 (|4 5 6) ;; C-u (or 3)
Re-wrap block
                                                  (sp-rewrap-sexp PAIR &optional KEEP-OLD)
Re-wrap current block
                             M-<f7> r
                                                                              Re-wrap current block using another block character.
                                                                                 (foo |bar baz) -> [foo |bar baz] ;; [
                                                                                 (foo |bar baz) -> [(foo |bar baz)] ;; C-u [
Swap wrapping characters
                                                  (sp-swap-enclosing-sexp
                                                                              Swap the wrapping of blocks
                            M-<f7> w
between current block and parent block
                                                  &optional ARG)
                                                                                                                    -> [foo (|bar) baz] ;; 1
                                                                                 (foo [|bar] baz)
                                                                                 (foo {bar [|baz] quux} quack) -> [foo {bar (|baz) quux} quack] ;; 2
Un-wrap block
Extract all elements from
                            M-<f7> U
                                                  (sp-unwrap-sexp &optional
                                                                              Un-wrap current or next block.
                                                                                 (foo bar baz)
                                                                                                      -> |foo bar baz
                                                                                 (foo bar| baz)
                                                                                                       -> foo bar| baz
                                                                                 |(foo) (bar) (baz) -> |(foo) bar (baz) ;; 2
Extract all elements from
                            M-<f7> W
                                                  (sp-backward-unwrap-sexp
                                                                              Un-wrap previous block.
previous block
                                                  &optional ARG)
                                                                                 (foo bar baz)|
                                                                                                       -> foo bar baz
                                                                                 (foo bar)| (baz)
                                                                                                      -> foo bar| (baz)
                                                                                 (foo) (bar) (baz) | -> foo (bar) (baz) ;; 3
Transformation
Convolute
                                                  (sp-convolute-sexp & optional | Exchange the order of application of the two closest outer forms.
                            M-<f7> C
                                                                              In the following, we want to move the 'while' before the 'let'.
                                                                                                                  (while (we-are-good)
  (let ((stuff 1)
                                                                                  (otner 2))
(while (we-are-good) ->
  |(do-thing 1)
  (do-thing 2)
  (do-thing 3)))
                                                                                                                            (other \overline{2})
                                                                                                                      |(do-thing 1)
                                                                                                                       (do-thing 1)
(do-thing 2)
(do-thing 3)))
                                                                               (forward-char (sp-get env |:op-l)) -> (sp-get env (forward-char |:op-l))
Absorb previous element
                             M-<f7> A
                                                  (sp-absorb-sexp &optional
                                                                              Absorb the outer item into the current block and move point before the absorbed item(s).
into current block
                                                  ARG)
                                                                                  (do-stuff 1)
                                                                                                           (save-excursion
                                                                                  (save-excursion ->
|(do-stuff 2))
                                                                                                           (do-stuff 1)
(do-stuff 2))
                                                                                 foo bar (concat |baz quux) -> (concat |foo bar baz quux) ;; 2
Expel previous items from
                            M-<f7> E
                                                  (sp-emit-sexp &optional
                                                                              Expel previous items from current block out of the block.
                                                  ARG)
block
                                                                                  (save-excursion
                                                                                                           (do-stuff 1)
                                                                                                        (do-stuff 1)
(do-stuff 2)
(save-excursion
  |(do-stuff 3))
                                                                                   (do-stuff 1)
(do-stuff 2) ->
|(do-stuff 3))
                                                                                  ;; arg = 2
                                                                                                                 |(execute-in-loop))
                                                                              Move the expression after point before the enclosing balanced expression.
                             M-<f7>
                                                  (sp-extract-before-sexp
                                                                                The point moves with the extracted expression.
                                                  &optional ARG
                                                                                With ARG positive N, extract N expressions after point.
                                                                                With ARG negative -N, extract N expressions before point.
                                                                                With ARG being raw prefix argument C-u, extract all the expressions up until the end of enclosing

    If the raw prefix is negative, this behaves as C-u 'sp-backward-barf-sexp'.
```

```
Description
                                            Key
                                                                                                                                                Note
                                                                       Function
                                                                                              Move the expression after point after the enclosing balanced expression.
                                  M-<f7>
                                                            (sp-extract-after-sexp
                                                                                                The point moves with the extracted expression.
With ARG positive N, extract N expressions after point.
                                                            &optional ARG)
                                                                                                 With ARG negative -N. extract N expressions before point.
                                                                                                 With ARG being raw prefix argument C-u, extract all the expressions up until the end of enclosing
                                                                                                With ARG being negative raw prefix argument - C-u, extract all the expressions up until the start
                                                                                                 of enclosing list.
Split block
                                  M-<f7> |
                                                            (sp-split-sexp ARG)
                                                                                                 (foo bar | baz quux) -> (foo bar) | (baz quux)
                                                                                                 "foo bar |baz quux"
                                                                                                                               -> "foo bar" | "baz guux"
                                                                                                 ([foo |bar baz] quux) -> ([foo] |[bar baz] quux)
                                                                                                 (foo bar| baz quux) -> (foo) (bar|) (baz) (quux) ;; C-u
Join blocks
                                  M-<f7> J
                                                            (sp-join-sexp &optional ARG)
                                                                                                                                                    -> (foo bar |baz)
                                                                                                 (foo bar) |(baz)
                                                                                                 (foo) | (bar) (baz)
                                                                                                                                                    -> (foo | bar baz) ;; 2
                                                                                                 [foo] [bar] |[baz]
                                                                                                                                                    -> [foo bar |baz] ;; -2
                                                                                              (foo bar (baz) (quux) (blob blug)) -> (foo bar (baz| quux blob blug)) ::
                                  The table uses the 

and 

symbols to represent these 2 keys:
Kill Commands

    □ := "forward delete" := <deletechar> := Fn □ on € keyboards.
    □ := "backward delete" := <backspace> Often labelled "delete" on keyboards.

♠ C-

and C-

are not accessible in terminal mode.

                                  With PEL, the commands that are marked with 🝪 🕒 display the killed string when pel-show-copy-cut-text is t. Toggle this display with <f11> M-=
                                  The following commands kill the element(s) of a block.

    kill block

      elements
Kill content of next block
                                   • M-<f7> ▷
                                                                                            Change the inside of the next (or current) expression.
                                                           (sp-change-inner)
                                  • M-<f7> - n
                    #0
                                                            • First, kill the inside of the next (or current) balanced expression, then move point just after the opening delimiter.
                                                                        [bar] baz) -> (foo [|] baz)
                                                              ([f]oo] [bar] baz) \rightarrow ([] [bar] baz)
                                                               {|'foo': 'bar'}
                                                                                       -> {'|': 'bar'}
Kill content of current block
                                                                                            Change the inside of the enclosing expression.
                                                            (sp-change-enclosing)
                                  M-<f7>-.
                    #0

    Whitespace on both sides of the inner items is preserved if it contains newlines.

                                                              Invoking this function on a blank sexp will wipe out remaining whitespace (see 'sp-point-in-blank-sexp').

    Move the point to the beginning of the original content.

                                                               (f|oo [bar] baz) -> (|)
                                                               {'f|oo': 'bar'} -> {'|': 'bar'}
                                  M-<f7> - ]
                                                                                            Kill the balanced expression following point.
Kill block elements forward
                                                            (sp-kill-sexp &optional ARG
                     #0
                                  C-M-k
                                                              If point is inside an expression and there is no following expression, kill the topmost enclosing expression.
                                                              With ARG being positive number N, repeat that many times.
With ARG being Negative number -N, repeat that many times in backward direction.

    With ARG being raw prefix C-u, kill all the expressions from point up until the end of current list. With raw prefix C-_ C-u, kill all
the expressions from beginning of current list up until

                                                            · point. If point is inside a symbol, this is also killed. If there is no expression after/before the point, just delete the whitespace up
                                                               until the closing/opening delimiter.
                                                              With ARG being raw prefix C-u C-u, kill current list (the list point is inside).
                                                            • With ARG numeric prefix 0 (zero) kill the insides of the current list, that is everything from after the opening delimiter to before the
                                                              closing delimiter.

If ARG is nil, default to 1 (kill single expression forward)
If second optional argument DONT-KILL is non-nil, save the to be killed region in the kill ring, but do not kill the region from buffer.

                                                            · With 'sp-navigate-consider-symbols', symbols and strings are also considered balanced expression
                                                             (foo |(abc) bar) ->
(foo (bar) | baz) ->
(foo |(bar) baz) ->
(1 |2 3 4 5 6) ->
(1 |2 3 4 5 6) ->
(1 2 3 4 5 6) ->
(1 2 3 4 | 5 6) ->
(1 2 3 4 | 5 6) ->
                                                                                       \rightarrow (foo | bar) ;; nil, defaults to 1
                                                                                                                2
C–u C–u
                                                                                           (1|) ;; C-u C-u
(1|) ;; C-u
(1|5|6) ;; 3
(1|2|3|6) ;; -2
(|5|6) ;; -C-u
(1|2|) ;; C-u, kill useless whitespace
(|) ;; 0
                                                                         5 b,
5 6)
                                                               1 2 3 | 4 5 6)
Kill block elements
                                                            (sp-backward-kill-sexp
                                                                                              Kill the balanced expression preceding point.
                                  M-<f7> - [

This is exactly like calling 'sp-kill-sexp' with minus ARG.
In other words, the direction of all commands is reversed. For more information, see the

                                                            &optional ARG DONT-KILL)
backward
                    #0
                                                                                                 documentation of 'sp-kill-sexp'.
                                                                                                  (foo (abc)| bar)
                                                                                                                                       -> (foo | bar)
                                                                                                 blab (foo (bar baz) quux)| -> blab |
(1 2 3 |4 5 6) -> (|4 5 6) ;; C-u
Kill element after current
                                  M-<f7> - }
                                                            (sp-kill-hybrid-sexp ARG)
                                                                                              Kill a line as if with 'kill-line', but respecting delimiters.
                     *
                                                              With ARG being raw prefix C-u, kill the hybrid sexp the point is in (see 'sp-get-hybrid-sexp').
                                                              With ARG numeric prefix 0 (zero) just call 'kill-line
                                                            · You can customize the behaviour of this command by toggling 'sp-hybrid-kill-excessive-whitespace'.
                                                                                                                                       ;; nil
                                                               foo | bar baz
                                                               foo (bar | baz) quux
                                                                                                      -> foo (bar |) quux
                                                                                                                                      ;; nil
                                                               foo | bar (baz
                                                                                                      -> foo |
                                                                                                                                      ;; nil
                                                                              auux)
                                                                                                      -> foo "bar |" quack
                                                               foo "bar |baz quux" quack
                                                                                                                                      ;; nil
                                                               foo (bar
                                                                      baz) qu|ux (quack
                                                                                                      -> foo | hoo
                                                                                                                                       ;; C-u C-u
                                                                                       zaq) hoo
                                                                                                      -> foo | baz)
                                                               foo | (bar
                                                                                                                                       ;; C-0
                                                                         haz)
```

```
Description
                                                                         Function
                                             Key
                                                                                                                                                  Note
Kill whole line
                                   M-<f7> - 1
                                                             (sp-kill-whole-line)
                                                                                                Kill current line in sexp-aware manner.

    First, go to the beginning of current line and then try to kill as much as possible on the current
line but without breaking balance.

                                                                                                  If there is a hanging sexp at the end of line the it is killed as well.

If there is a closing delimiter for a sexp "up" current sexp, the kill is not extended after it. For
                                                                                                  more details see 'sp-kill-hybrid-sexp'.
                                                                                                   (progn
                                                                                                                                              (progn
                                                                                                       some [long sexp))

    Kill/splice

Un-wrap current block.
                                   M-<f7> 1 1
                                                             (sp-splice-sexp &optional
                                                                                                Un-wrap current block, splicing its content in enclosing block (if any).
splicing its elements in
                                                             ARG)
                                                                                                   (foo (bar| baz) quux) -> (foo bar| baz quux)
enclosing block
                                                                                                   (foo |(bar baz) quux) -> foo |(bar baz) quux
                                                                                                   (foo (bar| baz) quux) -> foo (bar| baz) quux ;; 2
                                                             (sp-splice-sexp-killing-
backward &optional ARG)
                                   M-<f7> 1 [
Kill block element(s) before
                                                                                                Note that to kill only the content and not the enclosing delimiters you can use C-u M-x sp-
point and splice remaining into outer block
                                                                                                backward-kill-sexp.See 'sp-backward-kill-sexp' for more information.
                                   C-M-<backspace>
                                                                                                   (foo (let ((x 5)) \mid (sqrt n)) bar) \rightarrow (foo \mid (sqrt n) bar)
                                                                                                                                                          (perform-operation-1)
(perform-operation-2)
                                                                                                    (when ok|
  (perform-operation-1)
                                                                                                       (perform-operation-2))
                                                                                                    (save-excursion
                                                                                                                                                      -> I(awesome-stuff-happens) :: 2
                                                                                                       (unless (test)
|(awesome-stuff-happens)))
Kill block element(s) forward
                                                             (sp-splice-sexp-killing-
                                                                                                Note that to kill only the content and not the enclosing delimiters you can use C-u M-x sp-kill-sexp.
                                   M-<f7> 1 ]
and splice remaining into
                                                             forward &optional ARG)
                                                                                                · See 'sp-kill-sexp' for more information.
outer block
                                   C-M-<delete>
                                                                                                   (a (b c d e) f) -> (a b c f)
                                                                                                   (+ (x | y z) w) -> (+ x| w)
Kill around element
                                                             (sp-splice-sexp-killing-
                                   M-<f7> 1 o
                                                                                                   (a b | (c d) e f)
                                                                                                                                  -> I(c d)
                                                                                                                                                      :: with arg = 1
                                                             around &optional ARG)
                                   C-S-<backspace>
                                                                                                   (a b | c d e f)
                                                                                                                                  -> | c d
                                                                                                                                                      ;; with arg = 2
                                                                                                   (- (car x) |a 3)
                                                                                                                                  -> (car x)|
                                                                                                                                                      ;; with arg = -1
                                                                                                   (foo (bar |baz) quux) \rightarrow |(bar baz) ;; with arg = C-u C-u
                                   The following commands delete marked regions as long as the deletion would not create unbalanced blocks

    Delete/Kill region

                                    These may be useful inside keyboard macros when deleting text in area where several balanced and nested blocks are present.
                                                                                                Delete the text between point and mark, like 'delete-region'.
Delete region
                                   M-<f7> DEL -
                                                             (sp-delete-region BEG END)
                                                                                                  BEG and END are the bounds of region to be deleted.
                                                                                                  If that text is unbalanced, signal an error instead,
                                                                                                · With a prefix argument, skip the balance check.
Kill region
                                   M-<f7> - -
                                                             (sp-kill-region BEG END)
                                                                                                Kill the text between point and mark, like 'kill-region

    BEG and END are the bounds of region to be killed.

                                                                                                   If that text is unbalanced, signal an error instead.
                                                                                                  With a prefix argument, skip the balance check.
                                   The following commands are long-winded key sequences that delete forward and backward without breaking blocks.

• The forward and backward delete keys do the same when smartparens-mode is active.

    Delete char

Delete char forward
                                                             (sp-delete-char &optional
                                                                                                Delete a character forward or move forward over a delimiter.
                                   M-<f7> DEL n

If on an opening delimiter, move forward into balanced expression.
If on a closing delimiter, refuse to delete unless the balanced expression is empty, in which case

                                                             ARG)
                                                                                                  delete the entire expression.
                                                                                                  If the delimiter does not form a balanced expression, it will be deleted normally.
                                                                                                  With a numeric prefix argument N>0, delete N characters forward. With a numeric prefix argument N<0, delete N characters backward. With a numeric prefix argument N=0, simply delete a character forward, without regard for
                                                                                                  delimiter balancing.

If ARG is raw prefix argument C-u, delete characters forward until a closing delimiter whose
                                                                                                  deletion would break the proper pairing is hit.
                                                                                                 (quu|x "zot") -> (quu| "zot")
                                                                                                 (quux |"zot") -> (quux "|zot") -> (quux "|ot")
                                                                                                 (foo (|) bar) -> (foo | bar)
                                                                                                 [(foo bar) -> ([foo bar)
                                                             (sp-backward-delete-char
                                                                                                Delete a character backward or move backward over a delimiter.
Delete char backward
                                   M-<f7> DEL p
                                                                                                  It has the same description as the above command but goes backward instead of forward. ("zot" q|uux) -> ("zot" |uux)
                                                             &optional ARG)
                                                                                                 ("zot" | quux) -> ("zot | " quux) -> ("zo | " quux)
                                                                                                 (foo (|) bar) -> (foo | bar)
                                                                                                 (foo bar) | -> (foo bar|)

    Delete/Kill word

                                                                                                (sp-backward-delete-word &optional ARG)
Delete word backward
                                   M-<f7> DEL v
                                                             (sp-backward-delete-word
                                                             &optional ARG)
                                                                                                   Delete a word backward, skipping over intervening delimiters.
                                                                                                  Deleted word does not go to the clipboard or kill ring.
With ARG being positive number N, repeat that many times.
                                                                                                  With ARG being Negative number -N, repeat that many times in backward direction.
                                                                                                Delete a word forward, skipping over intervening delimiters.

• Deleted word does not go to the clipboard or kill ring.
Delete word forward
                                   M-<f7> DEL w
                                                             (sp-delete-word &optional
                                                                                                  With ARG being positive number N, repeat that many times.

    With ARG being Negative number -N, repeat that many times in backward direction.

Kill word backward
                                                             (sp-backward-kill-word
                                                                                                Kill a word backward, skipping over intervening delimiters.
                                   M-<f7> - v
                                                             &optional ARG)
                                                                                                · With ARG being positive number N, repeat that many times.

    With ARG being Negative number -N, repeat that many times in backward direction.

Kill word forward
                                                             (sp-kill-word &optional ARG)
                                   M-<f7> - w
                                                                                                Kill a word forward, skipping over intervening delimiters.
                                                                                                  With ARG being positive number N, repeat that many times.
With ARG being Negative number -N, repeat that many times in backward direction.
```

Description	<u>Key</u>	Function	Note		
Delete/Kill symbol	See 'sp-backward-symbol' and 'sp-forward-symbol' for what constitutes a symbol for the backward and forward commands respectively.				
Delete symbol backward	M- <f7> DEL a</f7>	(sp-backward-delete- symbol &optional ARG WORD)	Delete a symbol backward, skipping over any intervening delimiters. Deleted symbol does not go to the clipboard or kill ring. With ARG being positive number N, repeat that many times. With ARG being Negative number -N, repeat that many times in forward direction.		
Delete symbol forward	M- <f7> DEL s</f7>	(sp-delete-symbol &optional ARG WORD)	Delete a symbol forward, skipping over any intervening delimiters. Deleted symbol does not go to the clipboard or kill ring. With ARG being positive number N, repeat that many times. With ARG being Negative number -N, repeat that many times in backward direction.		
Kill symbol backward	M- <f7> - a</f7>	(sp-backward-kill-symbol &optional ARG WORD)	 Kill a symbol backward, skipping over any intervening delimiters. With ARG being positive number N, repeat that many times. With ARG being Negative number -N, repeat that many times in forward direction. 		
Kill symbol forward	M- <f7> - s</f7>	(sp-kill-symbol &optional ARG WORD)	Kill a symbol forward, skipping over any intervening delimiters. • With ARG being positive number N, repeat that many times. • With ARG being Negative number -N, repeat that many times in backward direction.		
Indentation ##					
	<f11> p <tab> M-<f7> <tab></tab></f7></tab></f11>	(sp-indent-adjust-sexp)	Add the hybrid sexp at line into previous sexp. All forms between the two are also inserted. • Specifically, if the point is on empty line, move the closing delimiter there, so the next typed text will become the last item of the previous sexp. • This acts similarly to 'sp-add-to-previous-sexp' but with special handling of empty lines.		
	M- <f7> S-<tab></tab></f7>	(sp-dedent-adjust-sexp)	Remove the hybrid sexp at line from previous sexp. All sibling forms after it are also removed (not deleted, just placed outside of the enclosing list). Specifically, if the point is on empty line followed by closing delimiter of enclosing list, move the closing delimiter after the last item in the list. This acts similarly to 'sp-forward-barf-sexp' but with special handling of empty lines.		
Re-indent current defun ??in non lisp??		(sp-indent-defun & optional ARG)	Reindent the current defun. If point is inside a string or comment, fill the current paragraph instead, and with ARG, justify as well. Otherwise, reindent the current defun, and adjust the position of the point.		
Validation ##					
		(sp-region-ok-p START END)	Test if region between START and END is balanced. • A balanced region is one where all opening delimiters are matched by closing delimiters. • This function does *not* check that the delimiters are correctly ordered, that is [(]) is considered correct even though it is not logically properly balanced.		
		(sp-newline)	Insert a newline and indent it. This is like 'newline-and-indent', but it not only indents the line that the point is on but also the S-expression following the point, if there is one. If in a string, just insert a literal newline. If in a comment and if followed by invalid structure, call 'indent-new-comment-line' to keep the invalid structure in a comment.		
		(sp-comment)	Insert the comment character and adjust hanging sexps such that it doesn't break structure.		
		(sp-wrap-round)	Wrap following sexp in round parentheses.		
		(sp-wrap-square)	Wrap following sexp in square brackets.		
		(sp-wrap-curly)	Wrap following sexp in curly braces.		
Highlight ##					
		(sp-show-enclosing-pair)	Highlight the enclosing pair around point.		
		(sp-highlight-current-sexp ARG)	Highlight the expression returned by the next command, preserving point position.		