## APPENDIX A—TEDIT PROGRAMMING EXAMPLE

The example below is a generally complete file that demonstrates how to use many of the functions and variables found in Chapter 8, Programmer's Interface to TEdit. In general what this program, called XPSEDIT, does is to permit a user to edit text in TEdit windows using various combinations in the form of META-<key>. For example, selecting a paragraph and then holding down the META key and pressing the space bar will format the paragraph to have seven points of paragraph leading, zero points line leading, a left margin of 17 picas, and a right margin of 42 picas.

In general, XPSEDIT operates only on the current selection.

```
(DEFINE-FILE-INFO $READTABLE "INTERLISP" $PACKAGE "INTERLISP")
(FILECREATED "12-Dec-86 17:45:34"
```

## {ERIS} < DOC > UTILITIES > XPSEDIT.;12 64503

```
(PRETTYCOMPRINT XPSEDITCOMS)
(RPAQQ XPSEDITCOMS [(COMS (* * Utility functions)
                          (FNS XPS.HEADING-KEEP.ON XPS.HEADING-KEEP.OFF XPS.COVER.PARA))
                    (COMS (* * Entry points from the keyboard commands, for generic
                               operations.)
                          (FNS XPS.LEVEL1HEAD XPS.LEVEL2HEAD XPS.LEVEL3HEAD XPS.LEVEL4HEAD
                               XPS.RUNNINGHEADS XPS.PAGELAYOUT XPS.DEFAULTPARA XPS.FIRSTPARA
                               XPS.FUNCTIONTITLE))
                    (COMS (* * Formatting specific to the |8-1/2x11| XPS format)
                          (FNS XPS.LARGE-FORMAT.LEVEL1HEAD XPS.LARGE-FORMAT.LEVEL2HEAD
                               XPS.LARGE-FORMAT.LEVEL3HEAD XPS.LARGE-FORMAT.LEVEL4HEAD
                               XPS.LARGE-FORMAT.RUNNINGHEADS XPS.LARGE-FORMAT.PAGELAYOUT
                               XPS.LARGE-FORMAT.DEFAULTPARA XPS.LARGE-FORMAT.FIRSTPARA
                               XPS.LARGE-FORMAT.FUNCTIONTITLE))
                    (COMS (* * DE-BOLDING PARENS IN CERTAIN PARAGRAPHS FOR ROSIE | 12/12/86|)
                          (FNS XPS.DEBOLD.PARENS))
                    (GLOBALVARS XPS.CURRENT.FORMAT)
                    (INITVARS (XPS.CURRENT.FORMAT 'LARGE))
                                                              (* Set up kbd commands)
                    (P (COND ((IEQP \KEYBOARD.META 256)
                              (TEDIT.SETFUNCTION (CHARCODE %##1)
                                     'XPS.LEVEL1HEAD)
                              (TEDIT.SETFUNCTION (CHARCODE %##2)
                                     'XPS.LEVEL2HEAD)
                              (TEDIT.SETFUNCTION (CHARCODE %##3)
                                     'XPS.LEVEL3HEAD)
                              (TEDIT.SETFUNCTION (CHARCODE %##4)
                                     'XPS.LEVEL4HEAD)
                              (TEDIT.SETFUNCTION (CHARCODE %##0)
                                     'XPS.PAGELAYOUT)
                              (TEDIT.SETFUNCTION (CHARCODE %##-)
                                     'XPS.RUNNINGHEADS)
                              (TEDIT.SETFUNCTION (CHARCODE |## |)
                                     'XPS.DEFAULTPARA)
                              (TEDIT.SETFUNCTION (CHARCODE %##=)
                                     'XPS.FIRSTPARA)
                              (TEDIT.SETFUNCTION (CHARCODE %##6)
                                     'XPS.HEADING-KEEP.ON)
                              (TEDIT.SETFUNCTION (CHARCODE %##↑)
                                     'XPS.HEADING-KEEP.OFF)
                              (TEDIT.SETFUNCTION (CHARCODE %##7)
```

'XPS.FUNCTIONTITLE)

```
(TEDIT.SETFUNCTION (CHARCODE %##9)
                                    'XPS.DEBOLD.PARENS)
                              (TEDIT.SETFUNCTION (CHARCODE | ##(|)
                                    'XPS.DEBOLD.PARENS])
(* * Utility functions)
(DEFINEQ
(XPS.HEADING-KEEP.ON
  [LAMBDA (TEXTSTREAM TEXTOBJ SEL)
                                                            (* jds "31-Oct-85 10:50")
          (* Turn heading-keep ON for a paragraph (or paragraphs)%.
          This will keep that paragraph with the text that follows it.)
    (PROG* ((TEXTOBJ (TEXTOBJ TEXTSTREAM))
           (CH# (fetch CH# of SEL))
            (CHLIM (fetch CHLIM of SEL)))
          (TEDIT.PARALOOKS TEXTOBJ '(HEADINGKEEP ON) CH# (fetch DCH of SEL])
(XPS.HEADING-KEEP.OFF
  [LAMBDA (TEXTSTREAM TEXTOBJ SEL)
                                                            (* jds "31-Oct-85 10:50")
          (* Turn heading-keeping OFF for a paragraph.
          This lets it be separate from any following text.)
    (PROG* ((TEXTOBJ (TEXTOBJ TEXTSTREAM))
            (CH# (fetch CH# of SEL))
            (CHLIM (fetch CHLIM of SEL)))
          (TEDIT.PARALOOKS TEXTOBJ '(HEADINGKEEP OFF) CH# (fetch DCH of SEL])
(XPS.COVER.PARA
                                                            (* jds "20-Nov-85 15:20")
  [LAMBDA (TEXTOBJ SEL)
          (* Assure that SEL covers a span of WHOLE paragraphs.
         Expand it to do so, if need be.)
    (PROG [[CH1 (CAR (\TEDIT.PARABOUNDS TEXTOBJ (fetch CH# of SEL]
          (CHLIM (CDR (\TEDIT.PARABOUNDS TEXTOBJ (SUB1 (fetch CHLIM of SEL]
          (TEDIT.SETSEL TEXTOBJ CH1 (ADD1 (IDIFFERENCE CHLIM CH1]))
(* * Entry points from the keyboard commands, for generic operations.)
(DEFINEQ
(XPS.LEVEL1HEAD
  [LAMBDA (TEXTSTREAM TEXTOBJ SEL)
                                                            (* jds "20-Aug-86 11:45")
         (* * Impose the styling for a level-1 heading in the current format.)
    (SELECTQ XPS.CURRENT.FORMAT
        (LARGE (XPS.LARGE-FORMAT.LEVEL1HEAD TEXTSTREAM TEXTOBJ SEL))
        (SMALL (XPS.SMALL-FORMAT.LEVEL1HEAD TEXTSTREAM TEXTOBJ SEL))
        (LIBRARY (XPS.LIBRARY-FORMAT.LEVEL1HEAD TEXTSTREAM TEXTOBJ SEL))
        (LISPUSERS (XPS.LISPUSERS-FORMAT.LEVEL1HEAD TEXTSTREAM TEXTOBJ SEL))
        (ERROR "Please set a valid format using the STYLING menu."])
```

```
(XPS.LEVEL2HEAD
 [LAMBDA (TEXTSTREAM TEXTOBJ SEL)
                                                           (* jds "20-Aug-86 11:47")
         (* * Impose the styling for a level-2 heading in the current format.)
    (SELECTQ XPS.CURRENT.FORMAT
       (LARGE (XPS.LARGE-FORMAT.LEVEL2HEAD TEXTSTREAM TEXTOBJ SEL))
       (SMALL (XPS.SMALL-FORMAT.LEVEL2HEAD TEXTSTREAM TEXTOBJ SEL))
       (LIBRARY (XPS.LIBRARY-FORMAT.LEVEL2HEAD TEXTSTREAM TEXTOBJ SEL))
        (LISPUSERS (XPS.LISPUSERS-FORMAT.LEVEL2HEAD TEXTSTREAM TEXTOBJ SEL))
       (ERROR "Please set a valid format using the STYLING menu."])
(XPS.LEVEL3HEAD
 [LAMBDA (TEXTSTREAM TEXTOBJ SEL)
                                                           (* jds "20-Aug-86 11:47")
         (* * Impose the styling for a level-3 heading in the current format.)
   (SELECTO XPS.CURRENT.FORMAT
       (LARGE (XPS.LARGE-FORMAT.LEVEL3HEAD TEXTSTREAM TEXTOBJ SEL))
       (SMALL (XPS.SMALL-FORMAT.LEVEL3HEAD TEXTSTREAM TEXTOBJ SEL))
       (LIBRARY (XPS.LIBRARY-FORMAT.LEVEL3HEAD TEXTSTREAM TEXTOBJ SEL))
       (LISPUSERS (XPS.LISPUSERS-FORMAT.LEVEL3HEAD TEXTSTREAM TEXTOBJ SEL))
       (ERROR "Please set a valid format using the STYLING menu."])
(XPS.LEVEL4HEAD
 [LAMBDA (TEXTSTREAM TEXTOBJ SEL)
                                                           (* jds "20-Aug-86 11:47")
         (* * Impose the styling for a level-4 heading in the current format.)
   (SELECTQ XPS.CURRENT.FORMAT
       (LARGE (XPS.LARGE-FORMAT.LEVEL4HEAD TEXTSTREAM TEXTOBJ SEL))
       (SMALL (XPS.SMALL-FORMAT.LEVEL4HEAD TEXTSTREAM TEXTOBJ SEL))
       (LIBRARY (XPS.LIBRARY-FORMAT.LEVEL4HEAD TEXTSTREAM TEXTOBJ SEL))
       (LISPUSERS (XPS.LISPUSERS-FORMAT.LEVEL4HEAD TEXTSTREAM TEXTOBJ SEL))
       (ERROR "Please set a valid format using the STYLING menu."])
(XPS.RUNNINGHEADS
 [LAMBDA (TEXTSTREAM TEXTOBJ SEL)
                                                           (* jds "20-Aug-86 11:48")
         (* * Set up skeleton running heads for the current format.)
   (SELECTQ XPS.CURRENT.FORMAT
       (LARGE (XPS.LARGE-FORMAT.RUNNINGHEADS TEXTSTREAM TEXTOBJ SEL))
       (SMALL (XPS.SMALL-FORMAT.RUNNINGHEADS TEXTSTREAM TEXTOBJ SEL))
       (LIBRARY (XPS.LIBRARY-FORMAT.RUNNINGHEADS TEXTSTREAM TEXTOBJ SEL))
       (LISPUSERS (XPS.LISPUSERS-FORMAT.RUNNINGHEADS TEXTSTREAM TEXTOBJ SEL))
       (ERROR "Please set a valid format using the STYLING menu."])
(XPS.PAGELAYOUT
 [LAMBDA (TEXTSTREAM TEXTOBJ SEL)
                                                           (* jds "20-Aug-86 11:48")
         (* * Set up the page layout for the current format.)
   (SELECTQ XPS.CURRENT.FORMAT
       (LARGE (XPS.LARGE-FORMAT.PAGELAYOUT TEXTSTREAM TEXTOBJ SEL))
       (SMALL (XPS.SMALL-FORMAT.PAGELAYOUT TEXTSTREAM TEXTOBJ SEL))
       (LIBRARY (XPS.LIBRARY-FORMAT.PAGELAYOUT TEXTSTREAM TEXTOBJ SEL))
       (LISPUSERS (XPS.LISPUSERS-FORMAT.PAGELAYOUT TEXTSTREAM TEXTOBJ SEL))
       (ERROR "Please set a valid format using the STYLING menu."])
```

```
(XPS.DEFAULTPARA
  [LAMBDA (TEXTSTREAM TEXTOBJ SEL)
                                                            (* jds "20-Aug-86 11:48")
         (* * Impose the styling for a normal text paragraph in the current format.)
    (SELECTQ XPS.CURRENT.FORMAT
       (LARGE (XPS.LARGE-FORMAT.DEFAULTPARA TEXTSTREAM TEXTOBJ SEL))
       (SMALL (XPS.SMALL-FORMAT.DEFAULTPARA TEXTSTREAM TEXTOBJ SEL))
       (LIBRARY (XPS.LIBRARY-FORMAT.DEFAULTPARA TEXTSTREAM TEXTOBJ SEL))
       (LISPUSERS (XPS.LISPUSERS-FORMAT.DEFAULTPARA TEXTSTREAM TEXTOBJ SEL))
       (ERROR "Please set a valid format using the STYLING menu."])
(XPS.FIRSTPARA
 [LAMBDA (TEXTSTREAM TEXTOBJ SEL)
                                                           (* jds "20-Aug-86 11:49")
         (* * Impose the styling for the first paragraph of a section.)
   (SELECTO XPS.CURRENT.FORMAT
       (LARGE (XPS.LARGE-FORMAT.FIRSTPARA TEXTSTREAM TEXTOBJ SEL))
       (SMALL (XPS.SMALL-FORMAT.FIRSTPARA TEXTSTREAM TEXTOBJ SEL))
       (LIBRARY (XPS.LIBRARY-FORMAT.FIRSTPARA TEXTSTREAM TEXTOBJ SEL))
       (LISPUSERS (XPS.LISPUSERS-FORMAT.FIRSTPARA TEXTSTREAM TEXTOBJ SEL))
       (ERROR "Please set a valid format using the STYLING menu."])
(XPS.FUNCTIONTITLE
 [LAMBDA (TEXTSTREAM TEXTOBJ SEL)
                                                           (* jds "20-Aug-86 11:49")
         (* * Impose the styling for a function-description heading.)
   (SELECTQ XPS.CURRENT.FORMAT
       (LARGE (XPS.LARGE-FORMAT.FUNCTIONTITLE TEXTSTREAM TEXTOBJ SEL))
       (SMALL (XPS.SMALL-FORMAT.FUNCTIONTITLE TEXTSTREAM TEXTOBJ SEL))
       (LIBRARY (XPS.LIBRARY-FORMAT.FUNCTIONTITLE TEXTSTREAM TEXTOBJ SEL))
       (LISPUSERS (XPS.LISPUSERS-FORMAT.FUNCTIONTITLE TEXTSTREAM TEXTOBJ SEL))
       (ERROR "Please set a valid format using the STYLING menu."])
```

## (\* \* Formatting specific to the |8-1/2x11| XPS format)

(DEFINEO

```
(XPS.LARGE-FORMAT.LEVEL1HEAD
  [LAMBDA (TEXTSTREAM TEXTOBJ SEL)
                                                             (* jds "20-Nov-85 15:24")
          (* * Impose the styling for a Level-1 heading in the lisp-library
          documentation%: 18-point Modern bold, all-upper-case, set flush right over a
          6pt rule.)
    (XPS.COVER.PARA TEXTOBJ SEL)
                                                              (* Make sure the whole paragraph
                                                                 is selected.)
    (PROG* ((TEXTOBJ (TEXTOBJ TEXTSTREAM))
            (CH# (fetch CH# of SEL))
            (CHLIM (fetch CHLIM of SEL)))
           (\TEDIT.UCASE.SEL TEXTSTREAM TEXTOBJ SEL)
                                                             (* Make the heading be Helvetica
                                                                14 bold)
           (TEDIT, LOOKS TEXTSTREAM '(FAMILY MODERN SIZE 18 WEIGHT BOLD SLOPE REGULAR) SEL)
           (TEDIT.PARALOOKS TEXTOBJ
                  '(QUAD RIGHT PARALEADING 0 LINELEADING 0 1STLEFTMARGIN 204 LEFTMARGIN 204
                        RIGHTMARGIN 504 HEADINGKEEP ON BASETOBASE NIL) CH# 1)
           (TEDIT.INSERT.OBJECT (HRULE.CREATE 6)
                  TEXTSTREAM
                  (SUB1 CHLIM))
           (TEDIT.INSERT TEXTSTREAM (CHARCODE CR)
                  (SUB1 CHLIM))
           (TEDIT.PARALOOKS TEXTOBJ
                  '(QUAD LEFT 1STLEFTMARGIN 204 LEFTMARGIN 204 RIGHTMARGIN 504 HEADINGKEEP ON
                         PARALEADING O BASETOBASE NIL LINELEADING 0) CHLIM 1])
(XPS.LARGE-FORMAT.LEVEL2HEAD
                                                             (* jds "20-Nov-85 15:22")
  [LAMBDA (TEXTSTREAM TEXTOBJ SEL)
   (XPS.COVER.PARA TEXTOBJ SEL)
                                                              (* Make sure the whole paragraph
                                                                 is selected.)
   (PROG* ((TEXTOBJ (TEXTOBJ TEXTSTREAM))
            (CH# (fetch CH# of SEL))
           (CHLIM (fetch CHLIM of SEL)))
           (TEDIT.LOOKS TEXTSTREAM '(FAMILY MODERN SIZE 14 WEIGHT BOLD SLOPE REGULAR) SEL)
           (TEDIT.PARALOOKS TEXTOBJ
                  '(OUAD LEFT PARALEADING O 1STLEFTMARGIN O LEFTMARGIN O RIGHTMARGIN 504
                        HEADINGKEEP ON BASETOBASE NIL LINELEADING 0) CH# 1)
           (TEDIT.INSERT.OBJECT (HRULE.CREATE 1)
                 TEXTSTREAM
                  (SUB1 CHLIM))
           (TEDIT.INSERT TEXTSTREAM (CHARCODE CR)
                 (SUB1 CHLIM))
           (TEDIT.PARALOOKS TEXTOBJ
                 '(QUAD LEFT 1STLEFTMARGIN O LEFTMARGIN O RIGHTMARGIN 504 HEADINGKEEP ON
                        PARALEADING O LINELEADING O) CHLIM 1)
          (TEDIT.INSERT.OBJECT (HRULE.CREATE 2)
                 TEXTSTREAM CH#)
          (TEDIT.INSERT TEXTSTREAM (CHARCODE CR)
                  (ADD1 CH#))
          (TEDIT.PARALOOKS TEXTOBJ
                  '(QUAD LEFT 1STLEFTMARGIN O LEFTMARGIN O RIGHTMARGIN 504 PARALEADING 50
                        HEADINGKEEP ON LINELEADING 0) CH# 1])
```

```
(XPS.LARGE-FORMAT.LEVEL3HEAD
  [LAMBDA (TEXTSTREAM TEXTOBJ SEL)
                                                            (* jds "20-Nov-85 15:22")
    (XPS.COVER.PARA TEXTOBJ SEL)
                                                              (* Make sure the whole paragraph
                                                                is selected.)
    (PROG* ((TEXTOBJ (TEXTOBJ TEXTSTREAM))
           (CH# (fetch CH# of SEL))
            (CHLIM (fetch CHLIM of SEL)))
           (TEDIT.LOOKS TEXTSTREAM '(FAMILY MODERN SIZE 12 WEIGHT BOLD SLOPE REGULAR) SEL)
                                                            (* Make the heading be Modern 12
                                                               bold)
           (TEDIT.PARALOOKS TEXTOBJ
                  '(QUAD LEFT PARALEADING 14 LINELEADING 0 1STLEFTMARGIN 0 LEFTMARGIN 0
                        RIGHTMARGIN 504 HEADINGKEEP ON BASETOBASE NIL) CH# 1)
          (TEDIT.INSERT.OBJECT (HRULE.CREATE 1)
                 TEXTSTREAM
                 (SUB1 CHLIM))
          (TEDIT.INSERT TEXTSTREAM (CHARCODE CR)
                 (SUB1 CHLIM))
          (TEDIT.PARALOOKS TEXTOBJ
                  '(QUAD LEFT 1STLEFTMARGIN O LEFTMARGIN O RIGHTMARGIN 504 HEADINGKEEP ON
                        PARALEADING O BASETOBASE NIL LINELEADING O) CHLIM 1])
(XPS.LARGE-FORMAT.LEVEL4HEAD
  [LAMBDA (TEXTSTREAM TEXTOBJ SEL)
                                                            (* jds "20-Nov-85 15:23")
    (XPS.COVER.PARA TEXTOBJ SEL)
                                                             (* Make sure the whole paragraph
                                                                is selected.)
    (PROG* ((TEXTOBJ (TEXTOBJ TEXTSTREAM))
           (CH# (fetch CH# of SEL))
            (CHLIM (fetch CHLIM of SEL)))
          (TEDIT.LOOKS TEXTSTREAM '(FAMILY MODERN SIZE 10 WEIGHT BOLD SLOPE REGULAR) SEL)
                                                            (* Make the heading be Modern 10
                                                            bold)
          (TEDIT.PARALOOKS TEXTOBJ
                 '(QUAD LEFT PARALEADING 10 LINELEADING 0 1STLEFTMARGIN 0 LEFTMARGIN 0
                        RIGHTMARGIN 504 HEADINGKEEP ON BASETOBASE NIL) CH# 1)
          (TEDIT.INSERT.OBJECT (HRULE.CREATE 1)
                 TEXTSTREAM
                 (SUB1 CHLIM))
          (TEDIT.INSERT TEXTSTREAM (CHARCODE CR)
                 (SUB1 CHLIM))
          (TEDIT. PARALOOKS TEXTOBJ
                 '(QUAD LEFT 1STLEFTMARGIN O LEFTMARGIN O RIGHTMARGIN 504 HEADINGKEEP ON
                         PARALEADING O BASETOBASE NIL LINELEADING 0) CHLIM 1])
(XPS.LARGE-FORMAT.RUNNINGHEADS
 [LAMBDA (TEXTSTREAM TEXTOBJ SEL)
                                                            (* jds " 2-Oct-85 15:13")
   (TEDIT.SETSEL TEXTSTREAM 1 0 'LEFT NIL NIL 'NORMAL)
                                                            (* Set the selection to the front
                                                               of the document)
   (TEDIT.INCLUDE TEXTSTREAM
                  '{ERIS}<DOC>UTILITIES>XPS-LARGE-FORMAT-RUNNING-HEAD-TEMPLATE.TEDIT])
```

```
(XPS.LARGE-FORMAT.PAGELAYOUT
  [LAMBDA (TEXTSTREAM TEXTOBJ SEL)
                                                             (* jds " 2-Oct-85 15:01")
                                                             (* Set up page formatting for an
                                                               XPS formatted document.)
    (PROG ((PAGENUM.FONT (FONTCREATE 'MODERN 10 'MRR 0 'DISPLAY))
           PAGENUM)
          (SETQ PAGENUM (OR (NUMBERP (MKATOM (TEDIT.GETINPUT TEXTSTREAM
                                                    "Starting pg # (default is 1): " "1")))
                            1))
          (TEDIT.PAGEFORMAT TEXTSTREAM (LIST [TEDIT.SINGLE.PAGEFORMAT T 46.5 1.25 PAGENUM.FONT
                                                    'RIGHT 4.5 4.5 1.25 4.5 1 42.0 NIL
                                                    '((FOOTINGR 4.5 2.25))
                                                    'PICAS
                                                    (LIST 'STARTINGPAGE# (COND
                                                                           ((NUMBERP PAGENUM)
                                                                            PAGENUM)
                                                                            (T1]
                                             (TEDIT.SINGLE.PAGEFORMAT T 4.5 1.25 PAGENUM.FONT
                                                    'LEFT 4.5 4.5 4.5 4.5 1 42.0 NIL
                                                    '((FOOTINGV 4.5 2.25)
                                                      (VERSOHEAD 4.5 63.5))
                                                    'PICAS)
                                             (TEDIT.SINGLE.PAGEFORMAT T 46.5 1.25 PAGENUM.FONT
                                                    'RIGHT 4.5 4.5 4.5 4.5 1 42.0 NIL
                                                    '((FOOTINGR 4.5 2.25)
                                                      (RECTOHEAD 4.5 63.5))
                                                    'PICAS])
(XPS.LARGE-FORMAT.DEFAULTPARA
  [LAMBDA (TEXTSTREAM TEXTOBJ SEL)
                                                             (* jds "20-Nov-85 15:23")
          (* Impose the style for a regular paragraph.)
                                                             (* Make sure the whole paragraph
    (XPS.COVER.PARA TEXTOBJ SEL)
                                                                 is selected.)
    (PROG* ((TEXTOBJ (TEXTOBJ TEXTSTREAM))
            (CH# (fetch CH# of SEL))
            (CHLIM (fetch CHLIM of SEL)))
           (TEDIT.PARALOOKS TEXTOBJ
                  '(QUAD JUSTIFIED PARALEADING 7 LINELEADING 0 1STLEFTMARGIN 204 LEFTMARGIN
                        204 RIGHTMARGIN 504 HEADINGKEEP OFF BASETOBASE NIL PAGEHEADING NIL)
                 (fetch DCH of SEL))
           (TEDIT.LOOKS TEXTOBJ '(FAMILY MODERN SIZE 10])
(XPS.LARGE-FORMAT.FIRSTPARA
  [LAMBDA (TEXTSTREAM TEXTOBJ SEL)
                                                            (* jds "20-Nov-85 15:24")
    (XPS.COVER.PARA TEXTOBJ SEL)
                                                             (* Make sure the whole paragraph
                                                                is selected.)
    (PROG* ((TEXTOBJ (TEXTOBJ TEXTSTREAM))
           (CH# (fetch CH# of SEL))
           (CHLIM (fetch CHLIM of SEL)))
           (TEDIT.LOOKS TEXTOBJ '(FAMILY MODERN SIZE 10))
           (TEDIT. PARALOOKS TEXTOBJ
                  '(QUAD JUSTIFIED PARALEADING 11 LINELEADING 0 1STLEFTMARGIN 204 LEFTMARGIN
                        204 RIGHTMARGIN 504 HEADINGKEEP OFF BASETOBASE NIL PAGEHEADING NIL)
                 (fetch DCH of SEL])
```

CH#

```
(XPS.LARGE-FORMAT.FUNCTIONTITLE
                                                            (* jds "20-Nov-85 16:55")
  [LAMBDA (TEXTSTREAM TEXTOBJ SEL)
    (XPS.COVER.PARA TEXTOBJ SEL)
                                                             (* Make sure the whole paragraph
                                                            is selected.)
    (PROG* ((TEXTOBJ (TEXTOBJ TEXTSTREAM))
            (CH# (fetch CH# of SEL))
            (CHLIM (fetch CHLIM of SEL)))
           (TEDIT.PARALOOKS TEXTOBJ
                  '(QUAD JUSTIFIED PARALEADING 7 LINELEADING 0 1STLEFTMARGIN 204 LEFTMARGIN
                        288 RIGHTMARGIN 504 HEADINGKEEP ON BASETOBASE NIL PAGEHEADING NIL
                        TABS (NIL (504 . RIGHT))) CH# (fetch DCH of SEL))
           (TEDIT.LOOKS TEXTOBJ '(FAMILY MODERN SIZE 10])
(* * DE-BOLDING PARENS IN CERTAIN PARAGRAPHS)
(DEFINEQ
(XPS.DEBOLD.PARENS
 [LAMBDA (TEXTSTREAM TEXTOBJ SEL)
                                                        (*; "Edited 12-Dec-86 17:44 by jds")
    (XPS.COVER.PARA TEXTOBJ SEL)
                                           (*; "Make sure the whole paragraph is selected.")
    (PROG* ((TEXTOBJ (TEXTOBJ TEXTSTREAM))
            (CH# (fetch CH# of SEL))
            (CHLIM (fetch CHLIM of SEL))
            [PARALOOKS (fetch PPARALOOKS of (\CHTOPC CH# (fetch PCTB of TEXTOBJ]
            (PARENCH# CH#))
          (COND
             ((IEQP 72 (fetch (FMTSPEC LEFTMAR) of PARALOOKS))
                                (* ; "This is a paragraph that starts way out to the left.")
              (while (AND (ILESSP PARENCH# CHLIM)
                          (SETQ PARENCH# (TEDIT.FIND TEXTOBJ "(" PARENCH# CHLIM NIL)))
                 do
                    (* ;; "Run thru the paragraph turning left parens non-bold")
                    (TEDIT.LOOKS TEXTOBJ '(WEIGHT MEDIUM) PARENCH# 1)
                    (SETQ PARENCH# (CL:1+ PARENCH#)))
              (SETQ PARENCH# CH#)
              (while (AND (ILESSP PARENCH# CHLIM)
                          (SETQ PARENCH# (TEDIT.FIND TEXTOBJ ")" PARENCH# CHLIM NIL)))
                    (*;; "Run thru the paragraph turning right parens non-bold")
                    (TEDIT.LOOKS TEXTSTREAM '(WEIGHT MEDIUM) PARENCH# 1)
                    (SETQ PARENCH# (CL:1+ PARENCH#])
```

As you can see there are many ways to use the programmer's interface to make your everyday text editing tasks simpler and, where desirable, more automated.