```
(IL:RPAQQ IL:ROOMS-INTROCOMS
          ((IL:FILES (IL:SYSLOAD)
                 IL:ROOMS IL:ROOMS-NOTES)
           (FILE-ENVIRONMENTS IL:ROOMS-INTRO)
           (IL:VARIABLES *INTRO-NOTE-FONT*)
           (IL:FUNCTIONS SET-INTRO-NOTE-FONT)
           (EVAL-WHEN (LOAD)
                 (IL:P ;; create both fonts when we're loaded

                       (IL:FONTCREATE 'IL:MODERN 24)
                       (IL:FONTCREATE 'IL:HELVETICA 14)

                       ;; initialize variable

                       (SET-INTRO-NOTE-FONT)

                       ;; make sure variable will get reset when screen size changes

                       (PUSHNEW 'SET-INTRO-NOTE-FONT *SCREEN-CHANGED-FUNCTIONS*)))
           (IL:SUITES "ROOMS-INTRO")
           (IL:P (EVAL-WHEN (LOAD)
                       (LET ((BUTTON (MAKE-BUTTON :TEXT "Enter Introduction" :FONT '(IL:HELVETICAD 24)
                                         :SHADOWS T :TYPE :STRETCHY-ARK :ACTION '(
                                                                          INTERACTIVE-GO-TO-ROOM-NAMED
                                                                          "Intro")
                                         :HELP "Enter the Rooms Introduction suite")))
                           (MAKE-BUTTON-WINDOW BUTTON (MAKE-POSITION (FLOOR (- IL:SCREENWIDTH (BUTTON-WIDTH
                                                                                     BUTTON))
                                                                 2)
                                         (FLOOR (- IL:SCREENHEIGHT (BUTTON-HEIGHT BUTTON))
                                                 2)))))))))


(IL:FILESLOAD (IL:SYSLOAD)
       IL:ROOMS IL:ROOMS-NOTES)


(DEFINE-FILE-ENVIRONMENT IL:ROOMS-INTRO :PACKAGE (DEFPACKAGE "ROOMS" (:USE "LISP" "XCL")
                                                             (:SHADOW CL:ROOM))
    :READTABLE "XCL"
    :COMPILER :COMPILE-FILE)


(DEFGLOBALVAR *INTRO-NOTE-FONT*

;;; font for note windows in the Intro suite

    )


(DEFUN SET-INTRO-NOTE-FONT ()
    (DECLARE (GLOBAL IL:SCREENWIDTH))
    ;; use a larger font when on a larger screen
    (SETQ *INTRO-NOTE-FONT* (IF (> IL:SCREENWIDTH SMALL-SCREEN-WIDTH)
                                (IL:FONTCREATE 'IL:MODERN 24)
                                (IL:FONTCREATE 'IL:HELVETICA 14))))


(EVAL-WHEN (LOAD)

;; create both fonts when we're loaded

(IL:FONTCREATE 'IL:MODERN 24)

(IL:FONTCREATE 'IL:HELVETICA 14)

;; initialize variable

(SET-INTRO-NOTE-FONT)

;; make sure variable will get reset when screen size changes

(PUSHNEW 'SET-INTRO-NOTE-FONT *SCREEN-CHANGED-FUNCTIONS*)
)
```

```
(DEFSUITE "ROOMS-INTRO"
    (:VERSION 1)
    (:FILES)
    (:WINDOW 0 :TYPE :BUTTON :TEXT "Next >" :ACTION (INTERACTIVE-GO-TO-ROOM-NAMED "Intro Model")
        :HELP "Go to the next room in the Introduction" :SHADOWS T :TYPE :STRETCHY-ARK)
    (:WINDOW 1 :TYPE :BUTTON :TEXT-FORM (SYMBOL-VALUE '*BACK-DOOR-ROOM-NAME*)
        :ACTION
        (INTERACTIVE-GO-TO-ROOM-NAMED *BACK-DOOR-ROOM-NAME*)
        :HELP "Go to the previous room." :TYPE :STRETCHY-ARK :INVERTED? T)
    (:WINDOW 2 :TYPE :NOTE-WINDOW :REGION (33/1024 355/808 231/512 181/404)
        :TITLE "Welcome" :STRING "

        Welcome to the Rooms Introduction.

        This is a suite of rooms which describe the Rooms system itself. Each room introduces certain topics,
        and where appropriate provides exercises to let you experience the things described (\"put some meat
        on the bones\").

        The collection of buttons at the right can be used to move through the exhibits. Following the screen
        buttons labelled \"Next\" in each room will provide a step-by-step introduction to the basics of
        Rooms. This is recommended as the best way to get started. Start by selecting the Next screen button
        with the left mouse button.

        " :FONT *INTRO-NOTE-FONT* :READ-ONLY? NIL)
    (:WINDOW 3 :TYPE :BUTTON :TEXT "Next >" :ACTION (INTERACTIVE-GO-TO-ROOM-NAMED "Intro Doors")
        :HELP "Go to the next room in the Introduction" :SHADOWS T :TYPE :STRETCHY-ARK)
    (:WINDOW 4 :TYPE :NOTE-WINDOW :REGION (33/1024 137/808 31/64 145/202)
        :TITLE "The Rooms Model" :STRING "

        Rooms provides many screens worth of working space for the Xerox LISP user.

        Each space is called a \"room\", has a name, and contains a collection of windows.

        Windows can be in one or more rooms. A window in more than one room is referred to as \"shared\".

        A window may have a different position and shape in each room. The collection of this information is
        called the \"placement\" of the window in that room.

        In certain situations, it is desirable to use the same configuration of windows in more than one room.
        For example, in these introductory rooms, the navigation buttons, the promptwindow, and the EXEC
        window act as a common framework for each room's  specific information windows. In these situations, a
        room containing only the common windows is created (here it is called \"Intro Panel\") and this room
        is \"included\" in the other rooms.

        Exercise: The \"Intro Panel\" button is an easy way to go to the \"Intro Panel\". Use it to go to that
        room, and notice the set of windows which is common. Then return to this room, using the inverted
        button at the center of the screeen below (a \"back door\").

        So a room has (at least):
            a name
            a set of placements for various windows
            a set of inclusions of other rooms.
        " :FONT *INTRO-NOTE-FONT* :READ-ONLY? NIL)
    (:WINDOW 5 :TYPE :BUTTON :TEXT "Intro Panel" :ACTION (INTERACTIVE-GO-TO-ROOM-NAMED "Intro Panel")
        :HELP "Go to the room named \"Intro Panel\"" :SHADOWS T :TYPE :STRETCHY-ARK)
    (:WINDOW 6 :TYPE :BUTTON :TEXT "Next >" :ACTION (INTERACTIVE-GO-TO-ROOM-NAMED "Intro Overview")
        :HELP "Go to the next room in the Introduction" :SHADOWS T :TYPE :STRETCHY-ARK)
    (:WINDOW 7 :TYPE :NOTE-WINDOW :REGION (1/32 249/808 505/1024 461/808)
        :TITLE "Doors" :STRING "


        The various buttons which you have been using to move about in this exploratorium are called
        \"doors\".

        Doors can be of various different shapes. To the right you will find a number of those shapes, all of
        which will take you to this very room.

        Doors can be created using the background menu: select the \"Rooms>Make Door\" command. (This X>Y
        notation is used to denote the Y subcommand of the X command of a menu.)  You will be prompted with a
        menu of room names to select a destination for the door; then you will be prompted with a menu of door
        shapes for the shape of the door. A door will be created, and you will be permitted to move it into
        the position you would like.

        Exercise: Create a door to this room, looking like a porthole. Then go through it to this room.

        Doors are windows. You can therefore get rid of them by closing the window.

        Exercise: Close the doors you just created.
        " :FONT *INTRO-NOTE-FONT* :READ-ONLY? NIL)
    (:WINDOW 8 :TYPE :BUTTON :TEXT "Doors" :ACTION (INTERACTIVE-GO-TO-ROOM-NAMED "Intro Doors")
        :HELP "Go to room named \"Intro Doors\"" :TYPE :DOOR)
    (:WINDOW 9 :TYPE :BUTTON :TEXT "Intro Doors" :ACTION (INTERACTIVE-GO-TO-ROOM-NAMED "Intro Doors")
        :HELP "Go to room named \"Intro Doors\"" :FONT (IL:HELVETICA 18 (IL:BOLD IL:REGULAR IL:REGULAR))
        :SHADOWS T)
    (:WINDOW 10 :TYPE :BUTTON :TEXT "Doors" :ACTION (INTERACTIVE-GO-TO-ROOM-NAMED "Intro Doors")
        :HELP "Go to room named \"Intro Doors\"" :TYPE :PORTHOLE)
```

```
(:WINDOW 11 :TYPE :BUTTON :TEXT "Next >" :ACTION (INTERACTIVE-GO-TO-ROOM-NAMED "Intro Menus")
        :HELP "Go to the next room in the Introduction" :SHADOWS T :TYPE :STRETCHY-ARK)
(:WINDOW 12 :TYPE :NOTE-WINDOW :REGION (59/1024 39/202 263/512 555/808)
        :TITLE "The Overview" :STRING "
```

The Overview provides a number of different operations. Roughly these can be grouped into: room
selection, room manipulation, room structure viewing.

All operations in the Overview are invoked in same way:
. the operation is selected by depressing and holding down a mode key on the keyboard,
. the object to be operated on selected by pointing and clicking:
                  a room: middle mouse button; or
                  a placement: left mouse button.

The various operations are represented by screen buttons at the bottom of the screen. These are
inverted to indicate the operation which is currently selected.

Exercise: Use the GO TO operation to return to this room:
          goto the overview;
          select the GO TO operation (space bar);
          return to this room by selecting its pictogram with the middle mouse button.

Exercise: Use the Move operation on a placement:
          goto the overview;
          find the placement for this window;
          select the MOVE operation (MOVE key);
          move this placement around in this room;
          return to this room when you are done.

Exercise: Explore the other Overview commands. Return to this room when you are done.

```
        " :FONT *INTRO-NOTE-FONT* :READ-ONLY? NIL)
(:WINDOW 13 :TYPE :BUTTON :TEXT "Next >" :ACTION (INTERACTIVE-GO-TO-ROOM-NAMED "Intro Backgrounds")
        :HELP "Go to the next room in the Introduction" :SHADOWS T :TYPE :STRETCHY-ARK)
(:WINDOW 14 :TYPE :NOTE-WINDOW :REGION (1/32 227/808 261/512 503/808)
        :TITLE "Background Menu" :STRING "
```

So that commands to manipulate the Rooms system are always ready-at-hand, they are made available on
the background menu, under the \"Rooms\" item.

Menus are used for prompting in the interactions invoked by some of these commands. Selecting outside
any of these menus indicates that you do not want to issue the command after all (you are
\"cancelling\" or \"aborting\" the command).

Exercise: Go to the \"Intro Doors\" room using the \"Rooms>Go to Room\" background command. Return
here.

Exercise: Go to the Overview using the \"Rooms\" background command. Return here.

To make it quicker to issue these commands , Rooms provides a way of getting a screen button (an
accelerator) for any command appearing on the background menu. Hold down the COPY (or SHIFT) key when
selecting the command from the menu. Instead of the command being invoked, a button which will invoke
the command will be created.

Exercise: Create an accelerator for the \"Rooms>Go to Room\" background command. (It will be labelled
\"Go to Room\", like the one you see at right.)

```
        " :FONT *INTRO-NOTE-FONT* :READ-ONLY? NIL)
(:WINDOW 15 :TYPE :BUTTON :TEXT "Next >" :ACTION (INTERACTIVE-GO-TO-ROOM-NAMED "Intro End")
        :HELP "Go to the next room in the Introduction" :SHADOWS T :TYPE :STRETCHY-ARK)
(:WINDOW 16 :TYPE :NOTE-WINDOW :REGION (1/64 49/808 379/1024 691/808)
        :TITLE "Backgrounds" :STRING "
```

Each room has a background specification telling how to paint its background. The specification is an
ordered list of commands.

The three commands available are:

(:TEXT <string> &KEY :FONT :SHADOWS :POSITION :ALIGNMENT)

(:REGION <region> &KEY :SHADE :BORDER :BORDER-SHADE)

(:WHOLE-SCREEN <shade> &KEY :BORDER :BORDER-SHADE)

The use of these commands is best illustrated by example.

Exercise: Select the \"Edit This Room\" button in the top middle of the screen using the left or
middle button. This opens an SEdit window with this room's description.

As you can see, the background specification for a room can be very complex allowing great flexibility
in customizing the way the background is painted.

The functions il:getregion, il:getposition, and il:editshade can be used to get regions, positions and
shades interactively. For example, to insert a region in SEdit, type (il:getregion) followed by M-Z
EVAL (mutate selection by EVAL).

Exercise: change some of the regions, positions and shades in this rooms background specification.
```
        " :FONT *INTRO-NOTE-FONT* :READ-ONLY? NIL)
```

```
(:WINDOW 17 :TYPE :BUTTON :TEXT "Edit This Room" :ACTION (EDIT-ROOM *CURRENT-ROOM*)
        :HELP "Edit the current room.")
(:WINDOW 18 :TYPE :NOTE-WINDOW :REGION (129/1024 37/101 471/1024 381/808)
        :TITLE "Good Bye" :STRING "

        This is the end of the Rooms Introduction.

        For more information please refer to the Rooms documentation.



        Enjoy!
        " :FONT *INTRO-NOTE-FONT* :READ-ONLY? NIL)
(:WINDOW 19 :TYPE :BUTTON :TEXT "Intro Backgrounds" :ACTION (INTERACTIVE-GO-TO-ROOM-NAMED "Intro
                                              Backgrounds")
        :HELP "Go to the room which introduces Rooms' menus" :SHADOWS T :TYPE :STRETCHY-ARK)
(:WINDOW 20 :TYPE :BUTTON :TEXT "< Start" :ACTION (INTERACTIVE-GO-TO-ROOM-NAMED "Intro")
        :HELP "Go back to the begining of the Introduction" :SHADOWS T :TYPE :STRETCHY-ARK)
(:WINDOW 21 :TYPE :BUTTON :TEXT "Overview" :ACTION (GO-TO-OVERVIEW)
        :HELP "Enter the overview" :SHADOWS T :TYPE :STRETCHY-ARK)
(:WINDOW 22 :TYPE :PROMPT-WINDOW)
(:WINDOW 23 :TYPE :BUTTON :TEXT "Intro Overview" :ACTION (INTERACTIVE-GO-TO-ROOM-NAMED "Intro Overview")
        :HELP "Go to the room which introduces the Overview" :SHADOWS T :TYPE :STRETCHY-ARK)
(:WINDOW 24 :TYPE :BUTTON :TEXT "Intro Menus" :ACTION (INTERACTIVE-GO-TO-ROOM-NAMED "Intro Menus")
        :HELP "Go to the room which introduces Rooms' menus" :SHADOWS T :TYPE :STRETCHY-ARK)
(:WINDOW 25 :TYPE :BUTTON :TEXT "Intro Doors" :ACTION (INTERACTIVE-GO-TO-ROOM-NAMED "Intro Doors")
        :HELP "Go to the room which introduces doors" :SHADOWS T :TYPE :STRETCHY-ARK)
(:WINDOW 26 :TYPE :BUTTON :TEXT "Intro Model" :ACTION (INTERACTIVE-GO-TO-ROOM-NAMED "Intro Model")
        :HELP "Go to the room which introduces the Rooms model" :SHADOWS T :TYPE :STRETCHY-ARK)
(:WINDOW 27 :TYPE :BUTTON :TEXT "Go to Room" :ACTION (INTERACTIVE-GO-TO-ROOM)
        :HELP "Go to an existing room" :SHADOWS T :TYPE :STRETCHY-ARK)
(:WINDOW 28 :TYPE :EXEC :REGION (653/1024 15/808 11/32 85/404)
        :PACKAGE "XCL-USER" :READTABLE "XCL")
(:ROOM "Intro" :PLACEMENTS ((0 :REGION (13/16 109/404 31/512 15/404))
                            (1 :REGION (221/512 5/202 33/512 15/404))
                            (2 :REGION (33/1024 355/808 231/512 181/404)))
        :INCLUSIONS
        ("Intro Panel")
        :BACKGROUND
        ((:TEXT "Intro" :POSITION (10 . 10)
                :FONT
                (IL:HELVETICAD 24)))
        :FILE-WATCH-ON? NIL)
(:ROOM "Intro Model" :PLACEMENTS ((3 :REGION (13/16 219/808 31/512 15/404))
                                  (4 :REGION (33/1024 137/808 31/64 145/202))
                                  (1 :REGION (221/512 5/202 23/512 15/404))
                                  (5 :REGION (605/1024 267/404 45/512 15/404)))
        :INCLUSIONS
        ("Intro Panel")
        :BACKGROUND
        ((:TEXT "Intro Model" :POSITION (10 . 10)
                :FONT
                (IL:HELVETICAD 24 IL:BOLD)))
        :FILE-WATCH-ON? NIL)
(:ROOM "Intro Doors" :PLACEMENTS ((6 :REGION (13/16 219/808 31/512 15/404))
                                  (7 :REGION (1/32 249/808 505/1024 461/808))
                                  (1 :REGION (221/512 5/202 47/512 15/404))
                                  (8 :REGION (145/256 473/808 59/1024 99/808))
                                  (9 :REGION (655/1024 237/404 7/64 4/101))
                                  (10 :REGION (165/256 529/808 87/1024 9/101)))
        :INCLUSIONS
        ("Intro Panel")
        :BACKGROUND
        ((:TEXT "Intro Doors" :POSITION (10 . 10)
                :FONT
                (IL:HELVETICAD 24)))
        :FILE-WATCH-ON? NIL)
(:ROOM "Intro Overview" :PLACEMENTS ((11 :REGION (13/16 55/202 31/512 15/404))
                                     (12 :REGION (59/1024 39/202 263/512 555/808))
                                     (1 :REGION (221/512 5/202 45/512 15/404)))
        :INCLUSIONS
        ("Intro Panel")
        :BACKGROUND
        ((:TEXT "Intro Overview" :POSITION (10 . 10)
                :FONT
                (IL:HELVETICAD 24)))
        :FILE-WATCH-ON? NIL)
(:ROOM "Intro Menus" :PLACEMENTS ((13 :REGION (415/512 55/202 31/512 15/404))
                                  (14 :REGION (1/32 227/808 261/512 503/808))
                                  (1 :REGION (221/512 5/202 59/512 15/404)))
        :INCLUSIONS
        ("Intro Panel")
        :BACKGROUND
        ((:TEXT "Intro Menus" :POSITION (10 . 10)
                :FONT
                (IL:HELVETICAD 24)))
        :FILE-WATCH-ON? NIL)
```
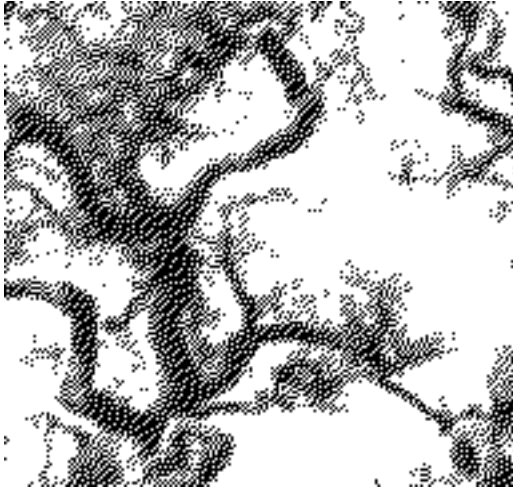
```
   (:ROOM "Intro Backgrounds" :PLACEMENTS ((15 :REGION (831/1024 55/202 31/512 15/404))
                                           (16 :REGION (1/64 49/808 379/1024 691/808))
                                           (1 :REGION (221/512 5/202 49/512 15/404))
                                           (17 :REGION (437/1024 677/808 57/512 3/101)))
          :INCLUSIONS
          ("Intro Panel")
          :BACKGROUND
          ((:TEXT "Intro Backgrounds" :POSITION (10 . 10)
                  :FONT
                  (IL:HELVETICAD 24))
           (:REGION (0.4 0.28 0.35 0.5)
                  :SHADE 42405 :BORDER 8 :BORDER-SHADE 63903)
           (:REGION (0.42 0.55 0.15 0.18)
                  :SHADE
```



```
                  :BORDER 2)
           (:TEXT "A bitmap" :POSITION (0.42 . 0.525)
                  :FONT
                  (IL:HELVETICA 10 IL:BOLD)
                  :SHADOWS :ARK)
           (:REGION (0.62 0.62 0.1 0.1)
                  :SHADE 52428)
           (:REGION (0.58 0.58 0.1 0.1)
                  :SHADE 52224)
           (:TEXT "Some shades" :POSITION (0.58 . 0.525)
                  :FONT
                  (IL:HELVETICA 10 IL:BOLD)
                  :SHADOWS :ARK)
           (:TEXT "Text with shadows..." :POSITION (0.43 . 0.47)
                  :FONT
                  (IL:HELVETICA 18 IL:BOLD)
                  :SHADOWS T)
           (:TEXT "Erasing text..." :POSITION (0.43 . 0.44)
                  :FONT
                  (IL:HELVETICA 18 IL:BOLD)
                  :SHADOWS
                  ((:OPERATION IL:ERASE)))
           (:TEXT "Outlined letters..." :POSITION (0.43 . 0.41)
                  :FONT
                  (IL:HELVETICA 18 IL:BOLD)
                  :SHADOWS
                  ((:DX 1)
                   (:DY 1)
                   (:DX -1)
                   (:DY -1)
                   (:TEXTURE 65535 :OPERATION IL:INVERT :SOURCE-TYPE IL:MERGE)))
           (:TEXT "Some text" :POSITION (0.42 . 0.37)
                  :FONT
                  (IL:HELVETICA 10 IL:BOLD)
                  :SHADOWS :ARK))
          :FILE-WATCH-ON? NIL)
   (:ROOM "Intro End" :PLACEMENTS ((1 :REGION (221/512 5/202 69/512 15/404))
                                   (18 :REGION (129/1024 37/101 471/1024 381/808)))
          :INCLUSIONS
          ("Intro Panel")
          :BACKGROUND
          ((:TEXT "Intro End" :POSITION (10 . 10)
                  :FONT
                  (IL:HELVETICAD 24)))
          :FILE-WATCH-ON? NIL)
   (:ROOM "Intro Panel" :PLACEMENTS ((19 :REGION (793/1024 379/808 71/512 15/404))
                                     (1 :REGION (221/512 5/202 33/512 15/404))
                                     (20 :REGION (207/256 65/202 33/512 15/404))
                                     (21 :REGION (409/512 661/808 41/512 15/404))
                                     (22 :REGION (7/1024 94/101 63/64 6/101)
                                            :FONT
```

```
                                                    (IL:HELVETICA 12 (IL:BOLD IL:REGULAR IL:REGULAR))
                                                    :BORDER 2 :SHADE 65535 :TITLE NIL :OPERATION IL:ERASE)
                                    (23 :REGION (401/512 231/404 61/512 15/404))
                                    (24 :REGION (407/512 105/202 49/512 15/404))
                                    (25 :REGION (815/1024 251/404 47/512 15/404))
                                    (26 :REGION (815/1024 271/404 47/512 15/404))
                                    (27 :REGION (811/1024 619/808 49/512 15/404))
                                    (28 :REGION (653/1024 15/808 11/32 85/404)))
            :INCLUSIONS NIL :BACKGROUND ((:WHOLE-SCREEN 33825 :BORDER 2)
                                    (:REGION (49/64 1/4 5/32 21/32)
                                            :SHADE 50745)
                                    (:REGION (5/8 7/8 340 40)
                                            :SHADE 50745)
                                    (:TEXT "Rooms Introduction" :POSITION
                                            (:EVAL (CONS (+ (INTERNALIZE-COORDINATE 5/8 IL:SCREENWIDTH)
                                                            10)
                                                        (+ (INTERNALIZE-COORDINATE 7/8 IL:SCREENHEIGHT)
                                                            3)))
                                            :FONT
                                            (IL:HELVETICAD 24)))))


(EVAL-WHEN (LOAD)

(LET ((BUTTON (MAKE-BUTTON :TEXT "Enter Introduction" :FONT '(IL:HELVETICAD 24)
                        :SHADOWS T :TYPE :STRETCHY-ARK :ACTION '(INTERACTIVE-GO-TO-ROOM-NAMED "Intro")
                        :HELP "Enter the Rooms Introduction suite")))
        (MAKE-BUTTON-WINDOW BUTTON (MAKE-POSITION (FLOOR (- IL:SCREENWIDTH (BUTTON-WIDTH BUTTON))
                                                        2)
                                                (FLOOR (- IL:SCREENHEIGHT (BUTTON-HEIGHT BUTTON))
                                                        2))))
)

(IL:PUTPROPS IL:ROOMS-INTRO IL:COPYRIGHT ("Venue & Xerox Corporation" 1987 1988 1990))
```

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