### **Demos:**

# Wheelscroll Clipboard Modernize windows Running online

D

## nstrate features (this talk)

Applications built in Interlisp

- Notecards
- Rooms
- Loops
- Spin-Pro
- ... algebra ...
- others? Dendral STRGEN
- Improve maintainability
- Gather documentation bibliography, software archive; produce updated documentation

2

#### Residential Environment

- Define, edit, debug in the live environment
- write out to files to save for future session.

(DEFINEQ (FOO (X) (PLUSS X X]

PP FOO

(FOO 6]

PP FOO

FILES?)

(CLEANUP) SEE BAR

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- Common Lisp developers <u>Â</u>	_ Á É
+Á ÈHRULE.GETFNÁ Ò ÃOPTIMA and expectations + Ã Â À Û Å + Â Ä Â Ä Á À Â+Ä Á À ÂÁ   Á ' +	
+ $\hat{A}$ (30 year gap) D $\hat{A}$ (recursive	
revivers) Á ÂÔ Kz"	
++	
- System tracks what changed	
Demo:	
?? <pre><change (+="" (foo="" 6)="" p)="" pre="" retry<="" to="" x=""></change></pre>	ARAM) >
interactive	
searche	
"TTY" editor: original structure editor: powerful, p ble, short commands (BO 3) P Q. Easy to get into unrea	programma adable state

because reading the code isn't necessary to edit it. Use: EDITMODE(TELETYPE)

- DEDIT: Like TTY editor with menu and showing code. EDITMODE(DEDIT)
- SEDIT: (maintains illusion that) you are editing structure. Parenth eses are balanced at all times, but you can just type and backspace "commands" per se. Careful use of placeholeders. EDITMODE(SEDIT:SEDIT)

Common to all: User never counts parentheses, modify whitespace, decide on line breaks or indentation

Correlary: diff tools are

awkward\_\_\_\_\_

## **Modernization**

- I excuses , there werew no other tools. UIs established before Macintosh, before Windows, before Apple UI guidelines. Xerox Star diff from PARC systems

ize on corner. Warning: Exec wir ll with menus. Reduction: some menus are invoked by "middle " mouse button which on some mice is hard to press.

- Keyboard: Desired state: compatible keystrokes. A "help wanted" i ssue. Subtasks: decide what keystrokes do what; slash through 7 la yers of keyboard re-iterpretation.

# **Reduce Barriers to Entry**

- Running Online

Demo:

```
OPEN-URL("https://online.interlisp.org")
```

- Installation instructions

Demo:

```
OPEN-URL("https://interlisp.org/running/")
```