Connecting ACT-R to off-the-shelf software

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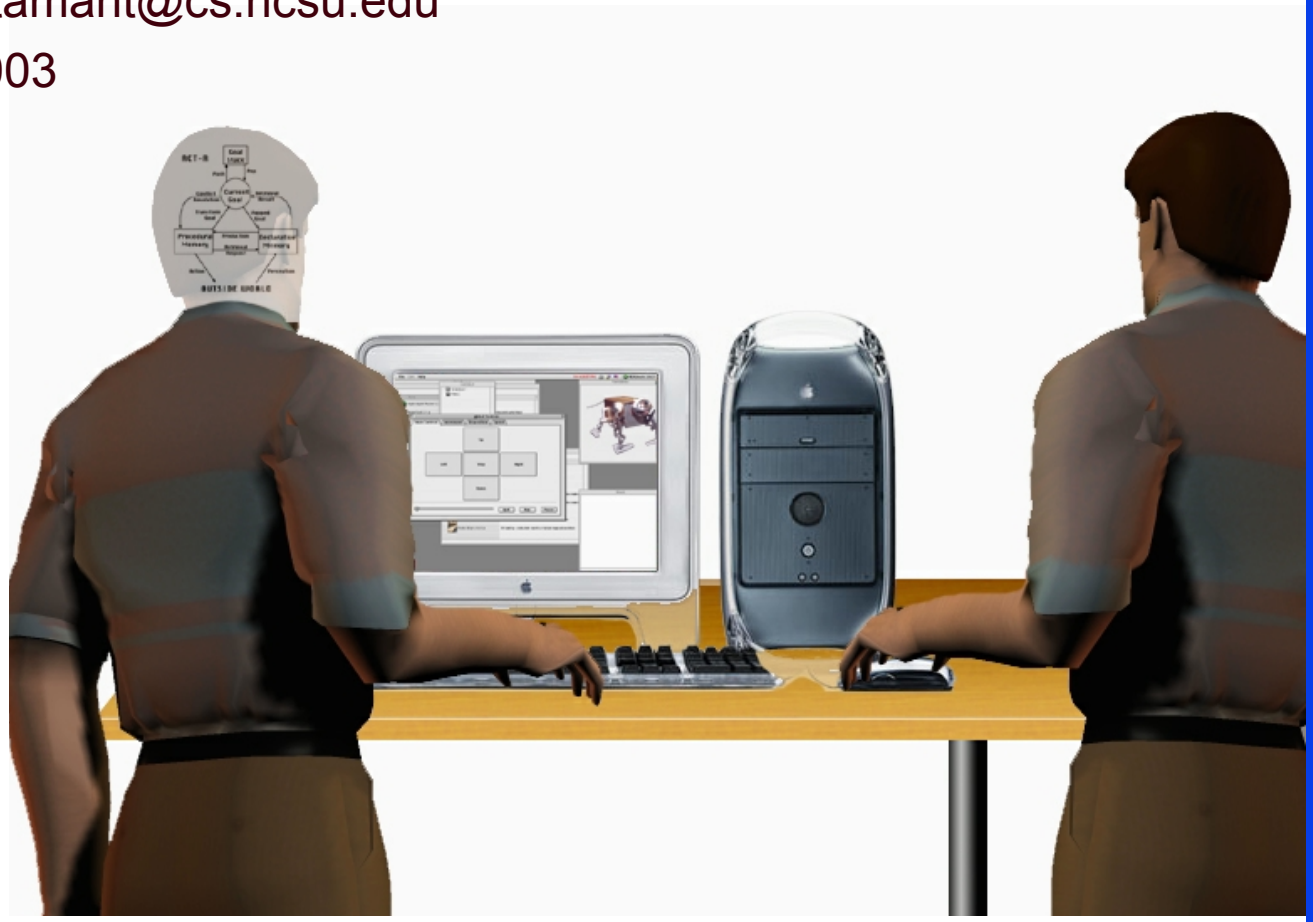

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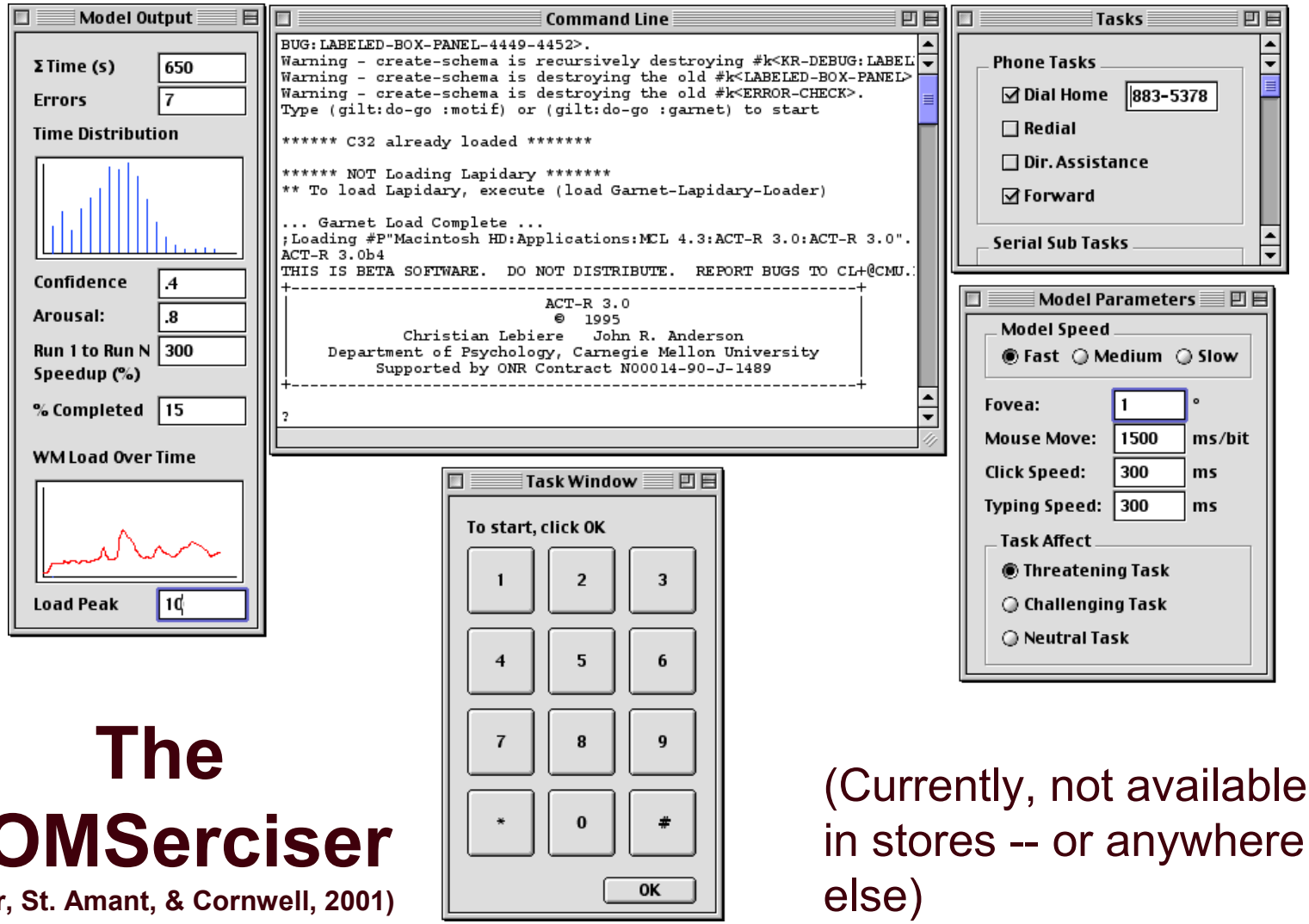
A cognitive model in a box

- User interface evaluation is often ad hoc, difficult, and time-consuming.
- Cognitive modeling within a UTC answers one of these complaints—what about the others?
- We need easier ways to connect cognitive models to existing systems, and more comprehensive tools for model development and analysis.

One vision of the future



The GOMSerciser

(Ritter, St. Amant, & Cornwell, 2001)

(Currently, not available in stores -- or anywhere else)

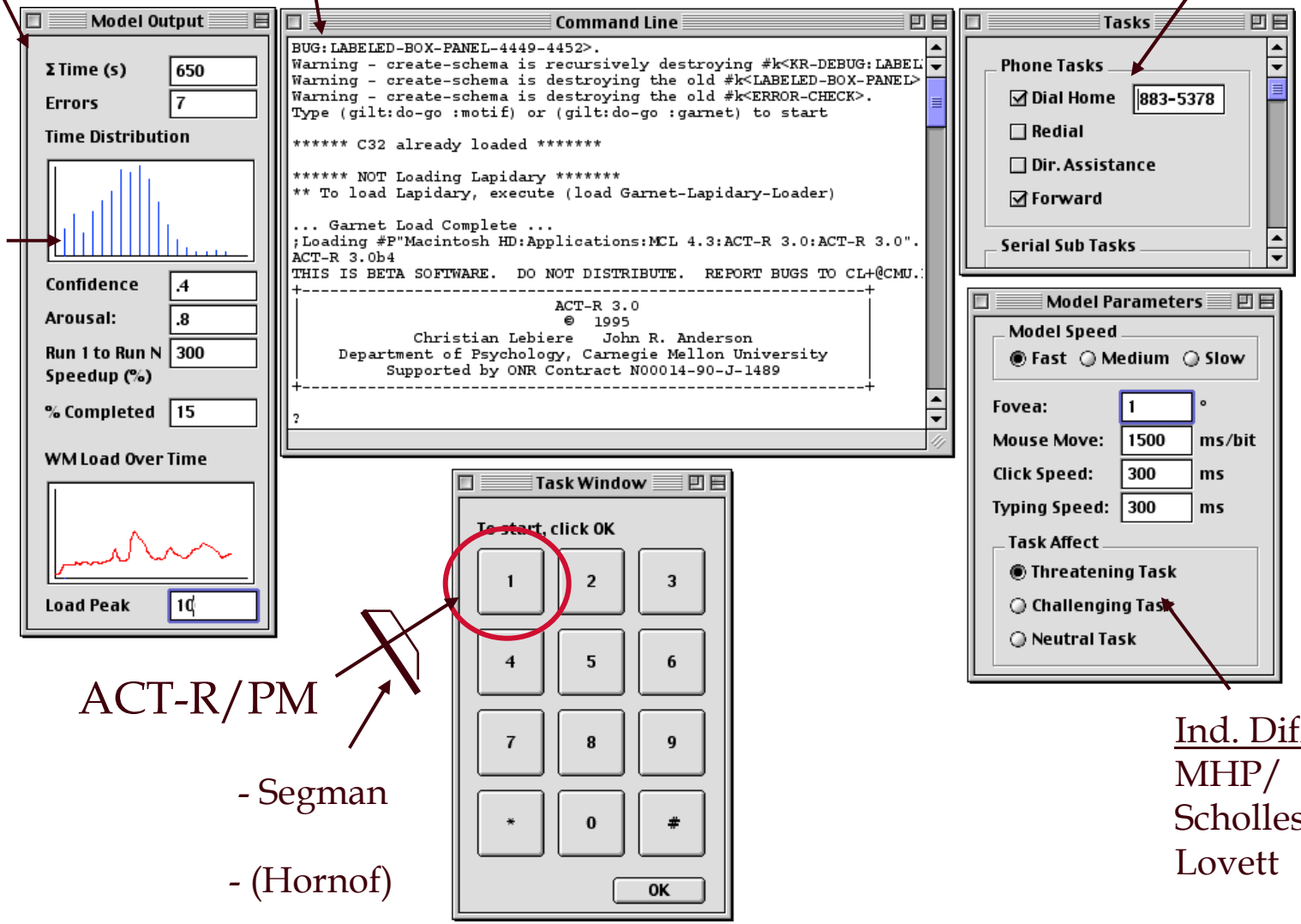
ACT-R

Displays
(R. Jones)
Belavkin
Councill
Harrison
Bothell

Models: Anderson/Young/Howes/ Taatgen/Fleetwood/Gunzelmann/RPI/Salvucci/ Peebles/….

Task Descr.
ACT-R Tut. 9
iGen

BehMod
Belavkin
Quigley
Klein
(PSI)



ACT-R/PM

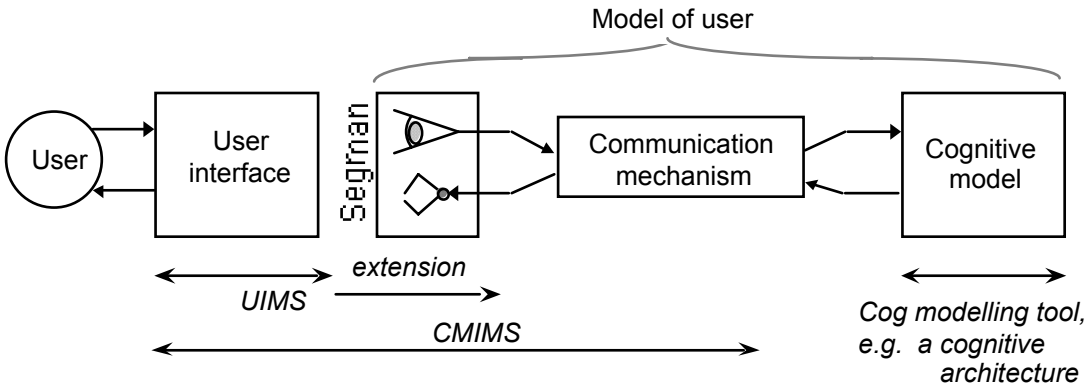
- Segman

- (Hornof)

Ind. Diffs.
MHP/
Scholles
Lovett

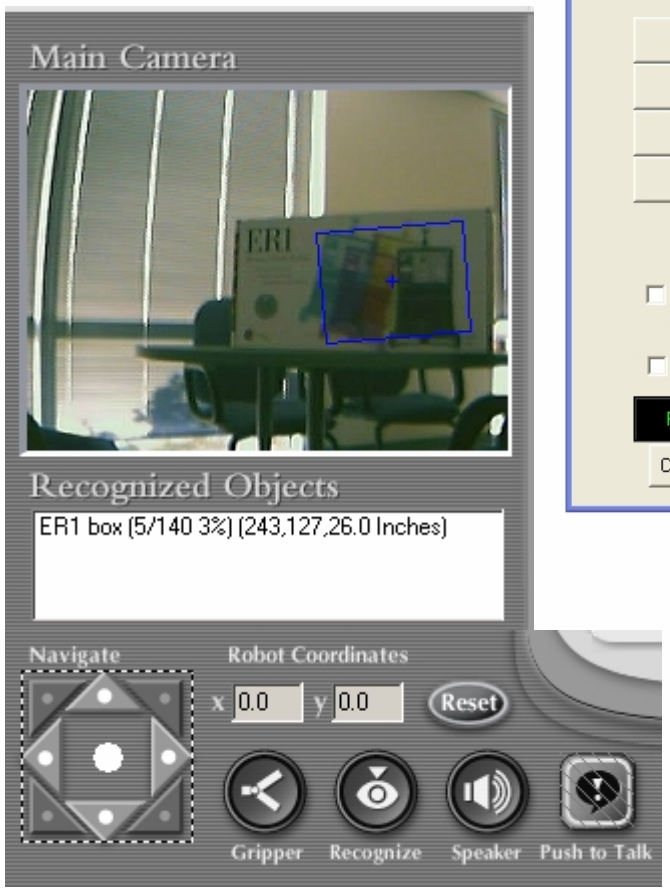
Doing our part

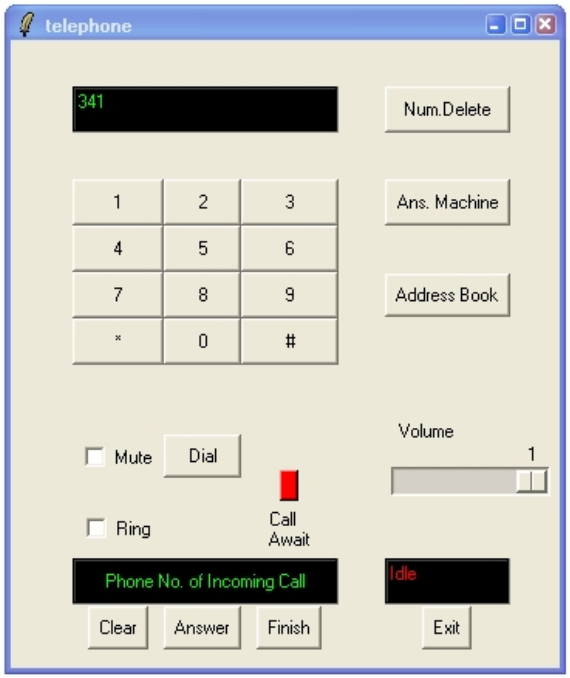
- We are building ACT-R models that interact with off-the-shelf-applications

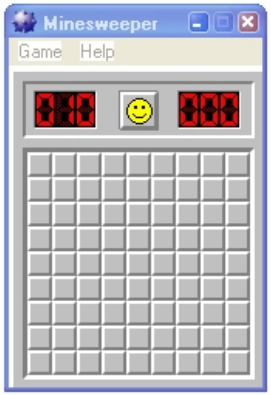


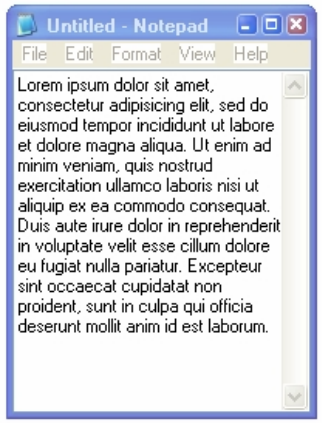
- We are designing integrated tools for model development, model execution, and analysis of model execution traces

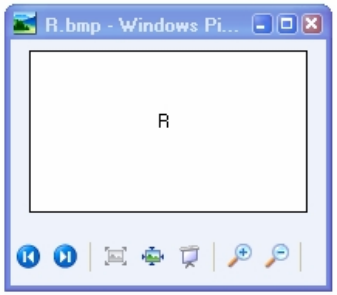
Interfaces we have known

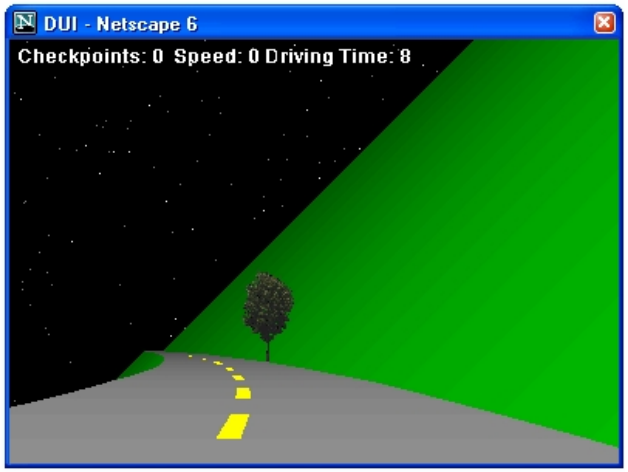




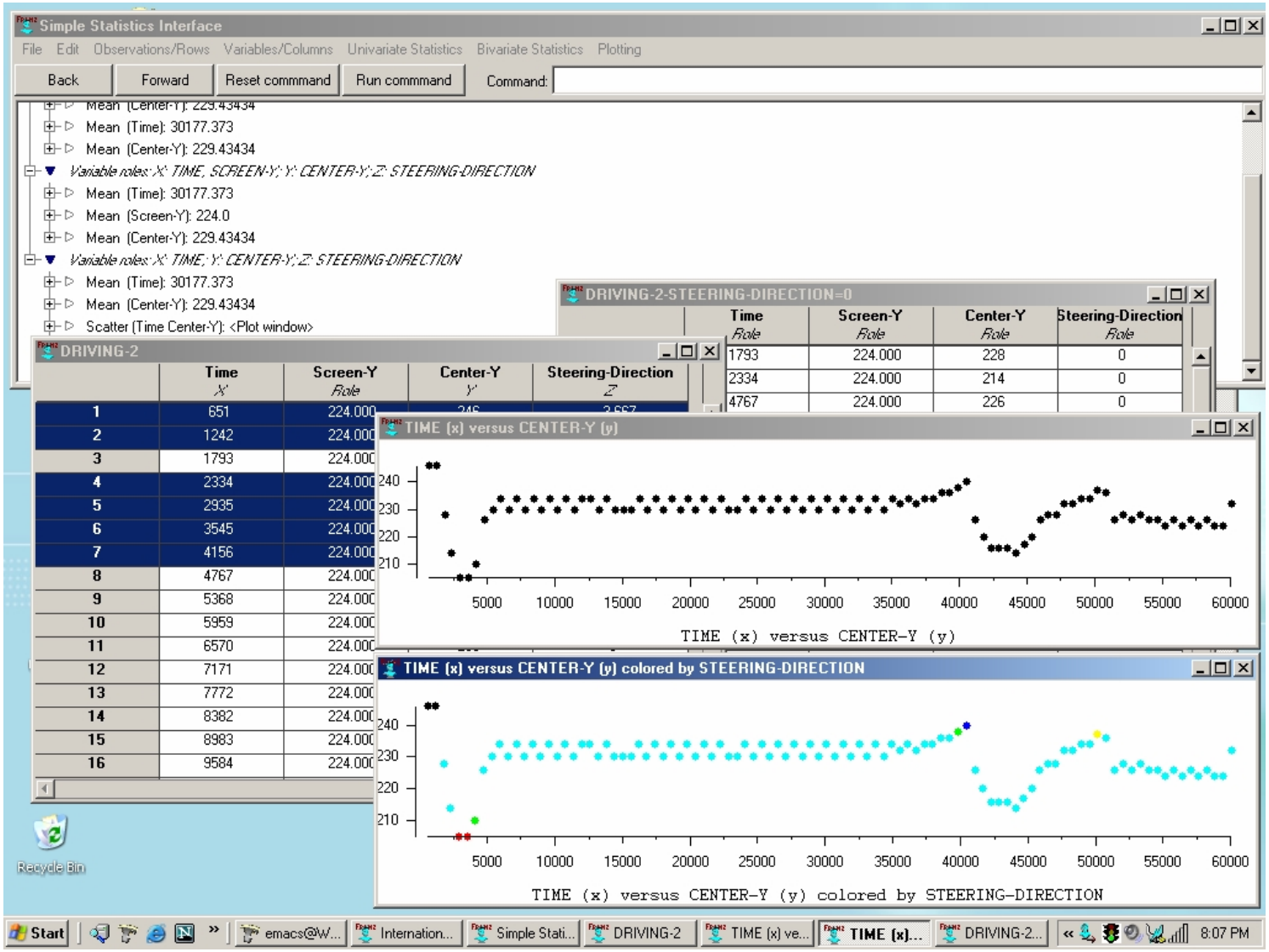








Analysis of model execution traces



Where do we go from here?

- More sharing
  - Language for ACT-R/EPIC + tasks + environment + . . .
  - Help from authors, keep models as theories public
  - Help from ACT-R central?
  - More sharing with us!
- Steal our Zeitgeist!