

ACT-R Updates

2022 ACT-R Workshop

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Outline

- Additions & Changes
- Bug fixes
- Tutorial
- Performance
- Software Distribution

Additions & Changes

- Added option to monitor some internal vision commands with new parameter :force-visual-commands
- Added a command for written-for-act-r-version
- Goal-focus can take a list of slot-value pairs to avoid creating a dummy chunk
(goal-focus (step start value 3))
- Add/create image item commands have a new keyword parameter :clickable

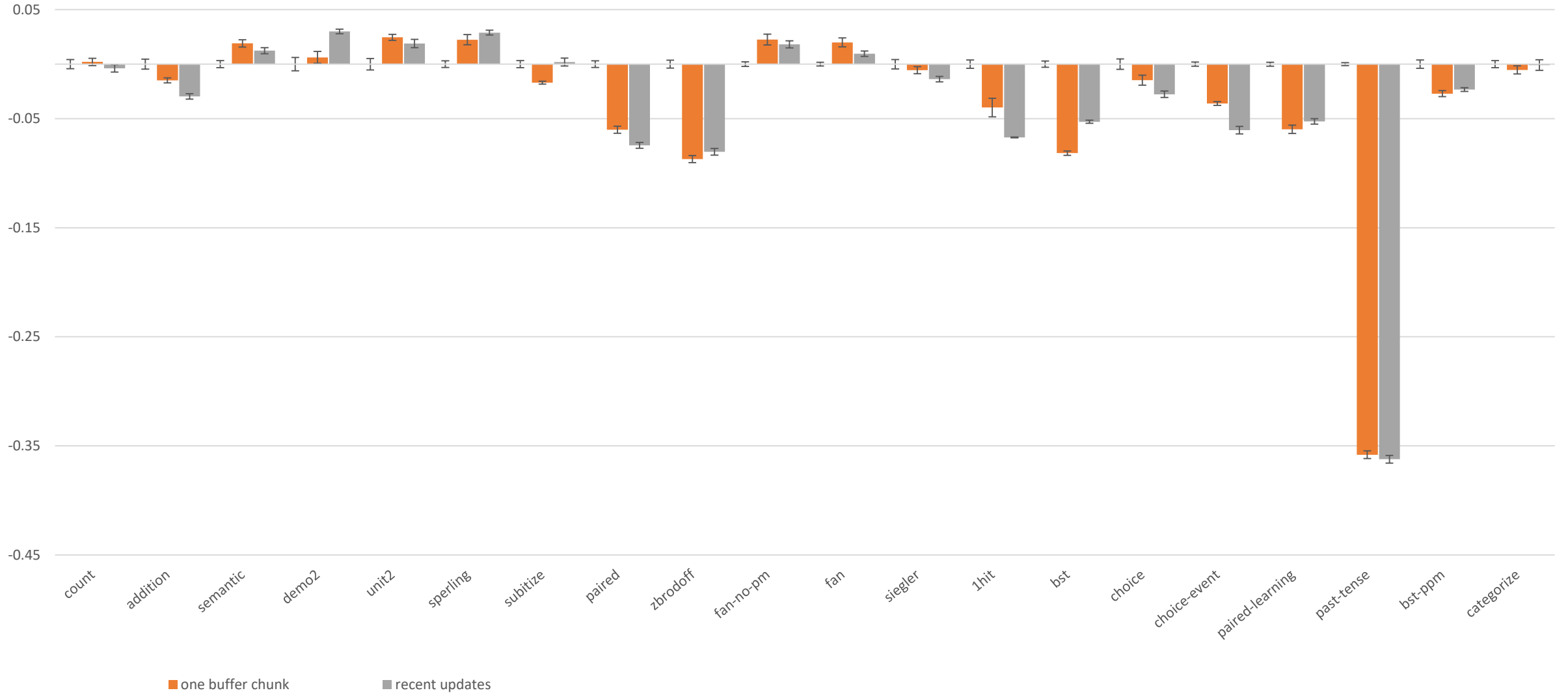
Bug Fixes

- Changing :v doesn't result in a new conflict-resolution event
- Fixed some incorrect failure reasons in the production-history
- Remote buffer-slot-value command now encodes string values correctly
- Some motor movement code fixed to handle z coordinates
 - Affected move-cursor actions interacting with some visual features

Tutorial

- Model output consistency
 - Most traces and other model output now spliced in from test output
 - ~470 new test files added to test-models/
- General editing
 - Overall 578 pages -> 458 pages
 - unit# (-36) unit#_code (-76) unit#_modeling (-8)
- Adjusted units 2&3 models to not use slot named state in goal chunks
 - Was introduced the same time as “state free” queries
- New Stepper tutor mode actions used in unit 1
 - Pick the production that matches
 - Select the chunk to retrieve

Tutorial Model Performance

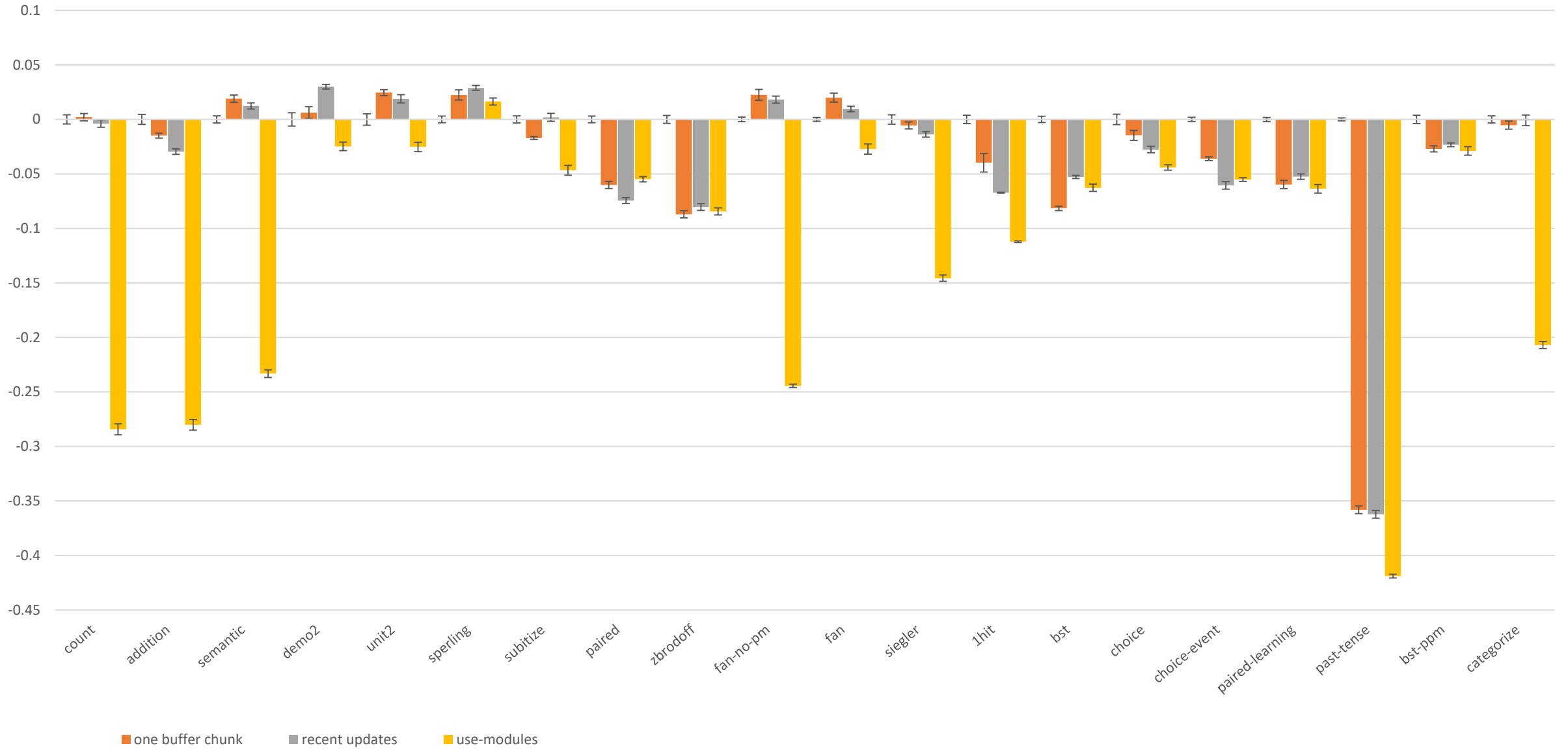


Optional performance improvement

- Only use the modules specified with the use-modules command
 - After clear-all (which restores all modules) but before model definition

(use-modules procedural declarative goal)
- When defining a module
 - Can indicate if always required
 - Can also specify any required modules
 - Example: procedural requires utility so only need to “use” procedural

Tutorial Model Performance



Software Distribution

- Prerelease versions on the site before changing current
 - Current moves to page with older versions
- Added a script/batch file in standalones for running only ACT-R
- Added an alternate environment application for macOS because of problems with running the current one on some machines
- Added a Python script that can run the Environment directly using the Tcl/Tk in Python (not as reliable as I'd hoped)
python envstarter.py