
Update on NL-Soar and XNL-Soar

Deryle Lonsdale
BYU Linguistics
lonz@byu.edu

NL-Soar

- Syntax, semantics, discourse
- Comprehension (parsing), generation (production)
- Other resources
 - WordNet
 - Clig grapher
- Architectural account of language cognition, use, resources

NL-Soar developments

- Ongoing work
 - Trying to update to Soar 8.6.2
 - Programming issues
 - Trying to update to Soar 8 operators
 - Conceptual and programming issues
- Some interest (HRI, HCI)
- Converted website to wiki

Link-Grammar Soar

- Implements syntactic, shallow semantic processing
- Used for information extraction
- Components
 - Soar architecture
 - Link Grammar parser
 - Discourse Representation Theory for discourse modeling
- Discussed in Soar 21, Soar 22

LG-Soar developments

- Converted to Soar 8.5.2
- Converted to Soar 8
 - A few lingering bugs
- Some interest from medical informatics
 - NLDB 2006 → DKE paper

XNL-Soar

- Replace NL-Soar syntax with MP
- Language/task-integrations using the MP
- Test cross-linguistic implementation possibilities with the MP
- Ultimately, determine whether the MP supports incremental, operator-based processing

XNL-Soar developments

- Implemented from start in Soar 8
- Implemented in Soar 8.6.2
 - But only rudimentary i/o

Conclusion

■ Coals

- Still issues with integrating code (Tcl, C)
- Soar 8 is different
 - Learning/chunking
- Graphing is more complicated

■ Nuggets

- New start in Soar8
- Still interest
- Lots more data to experiment with
- More time in 2008