# LG-Soar and (X)NL-Soar revisited

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# LG-Soar vs. \*NL-Soar

- Shallow syntactic processing
  - Link Grammar parse
- Shallow semantic processing
  - Predicate logic
- Discourse modeling
  - Discourse Representation Theory
- Parsing only
- Use: info extraction

- Deep syntactic processing
  - Standard generative theory
- More involved semantic processing
  - Lexical Conceptual Structure
- Discourse modeling
  - Discourse recipes
- Parsing (and generation)
- Use: cognitive modeling

# NL-Soar vs. XNL-Soar

- GB/PBP for syntax
- Lexical info: sp's, WordNet
- Long history, much code
- Complex learning
- Interesting processing at all levels, integrations
- Task integrations

- Minimalism for syntax
- Lex info: WordNet, FrameNet, PropBank
- Fairly recent, prototype
- (Overly) simplistic goal stacks (for now)
- Doesn't go beyond lex/morph/syntax (yet)
- Standalone only (so far)

# Status of each system

- LG-Soar
  - Updated to 8.6.3 (!)
  - Some processing issues on long sentences
- NL-Soar
  - Pre-8.0 operators (still)
  - Hasn't progressed beyond Tcl/Tk
  - Conversion is difficult, painful and slow
- XNL-Soar
  - 8.0 operators
  - Implemented in 8.6.2

# Conclusion

#### Coals

- Development is slow
- Keeping up to date is challenging
- Support resources are limited

### Nuggets

- Interest in CM and NLP is growing
- We're receiving ongoing expressions of interest
- Progress is monotonically increasing on all three systems