

Final Stanford site report

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Nearly three decades of LinGO at CSLI

- English Resource Grammar implementation of HPSG
- LKB grammar development platform
- Minimal Recursion Semantics
- Co-founding of DELPH-IN



LinGO projects and applications

- Verbmobil machine translation: German, Japanese (1990s)
- Language generation as speech prosthesis (1990s)
- Commercial spin-off for automated email response (1990s-2002)
- Multi-word expressions (early 2000s)
- Analysis of dictionary definitions (early 2000s)
- LOGON machine translation: Norwegian (mid 2000s)
- EPGY grammar-checking for language learning (2010s)
- Commercial spin-off for native English language learning (2010s)
- Generation from logical forms for teaching logic (2010s)
- Grammar-checking for Mandarin-native ESL (ongoing)



Grammar Checking

- Grammar in commercial use for 2 1/2 years in China
- Current use still in middle schools and high schools
 - Sentence-a-day translation on devices (analysis ERG/ACE)
 - Short essays pen-on-paper then OCR before analysis
 - Hybrid essay analysis using transformers and ERG/ACE
- Still expecting use by university students writing online
- Ongoing consulting role for mal-rule extensions post-Stanford



Progress on game-theoretic approach to applying ERG

- Applying for NSF SBIR grant to improve enterprise search
- Analyzing user queries with ERG/ACE: syntactic cues for terms
- Developing dense-vector method to pre-index target documents
- Designing add-on for open-source commercial search software
- Planning to install system with a reference corporate client

