

**Main Area:**  
**Language and Semantics**

**Examiner**

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**Description**

The main area of this exam covers work in cognitive linguistics that puts forward mentalistic theories of semantics, covering many phenomena in language such as causal language patterns, language about events, metaphoric mappings in language, spatial language and semantic compositionality. It also includes work on computational versions of such theories, including computational semantics for spatial terms, motion verbs and metaphoric mapping.

Signature\_\_\_\_\_ Date\_\_\_\_\_

**Written Requirement**

The written requirement will consist of a publishable quality paper to be graded by Professor Roy.

**Reading List**

- Bailey, D., Feldman, J., Narayanan, S. and Lakoff, G.: 1997, Modeling embodied lexical development, *Proceedings of the Nineteenth Annual Meeting of the Cognitive Science Society*.
- Baker, C. F., Fillmore, C. J. and Lowe, J. B.: 1998, The Berkeley frameNet project, *Proceeding of COLING-ACL*, Montreal, Canada.
- Bergen, B. and Chang, N.: 1999, Spatial schematicity of prepositions in neural grammar, *Proceedings of the Fifth International Conference on Conceptual Structure, Discourse and Language*, Stockholm.
- Busa, F., Calzolari, N. and Lenci, A.: 2001, Generative lexicon and the SIMPLE model: Developing semantic resources for nlp, *The Syntax of Word Meaning*, Cambridge University Press.

- Chang, N., Narayanan, S. and Petruck, M. R.: 2002, Putting frames in perspective, *COLING*.
- Clark, H.: 1996, *Using Language*, Cambridge University Press.
- Fauconnier, G.: 1997, *Mappings in Thought and Language*, Cambridge University Press, Cambridge, MA.
- Fox, B., Jurafsky, D. and Michaelis, L. (eds): 1999, *Cognition and Function in Language*, CSLI Publications.
- Gärdenfors, P.: 2000, *Conceptual Spaces*, Bradford Books, MIT Press.
- Goldberg, A. E.: 1995, Constructions: A construction grammar approach to argument structure.
- Gorin, A. L., Riccardi, G. and Wright, J.: 1998, How may i help you?, *Speech Communication*.
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- Hobbs, J. R., Croft, W., Davies, T. R., Edwards, D. and Laws, K. I.: 1987, Commonsense metaphysics and lexical semantics, *Computational Linguistics* **13**(3-4), 241–250.
- Jackendoff, R.: 2002, *Foundations of Language: Brain, Meaning, Grammar, Evolution*, Oxford University Press, Oxford, UK.
- Langacker, R. W.: 1987, Foundations of cognitive grammar, vol. 1, theoretical prerequisites.
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- Miller, G. A., Beckwith, R., Fellbaum, C., Gross, D. and Miller, K.: 1993, Five papers on wordnet, *Technical report*, Cognitive Science Laboratory, Princeton University.
- Narayanan, S.: 1997, *KARMA: Knowledge-based Action Representations for Metaphor and Aspect*, PhD thesis, Univesity of California, Berkeley.
- Pustejovsky, J.: 1995, *The Generative Lexicon*, MIT Press, Cambridge, MA, USA.

- Regier, T.: 1996, *The Human Semantic Potential*, MIT Press.
- Siskind, J. M.: 2001, Grounding the lexical semantics of verbs in visual perception using force dynamics and event logic, *Journal of Artificial Intelligence Research* **15**, 31–90.
- Siskind, J. M.: 2002, Specific-to-general learning for temporal events with applicatio to learning event definitions from video, *Journal of Artificial Intelligence Research* **17**, 379–449.
- Talmy, L.: 2000, *Concept Structuring Systems (Towards a Cognitive Semantics v1) Parts 2 and 4*, MIT Press.
- Winograd, T.: 1970, *Procedures as a representation for data in a computer program for understanding natural language*, PhD thesis, Massachusetts Institute of Technology.