

# Statement of Purpose: Northwestern

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## 1 Personal

I am looking to study formal-computational semantics and pragmatics. I have a nice base in descriptive, typological-functional theories from study under Stephanie Robin Quizar and Lyle Campbell, as well as in minimalist syntax from Aniko Csirmaz and Ed Rubin. Now I want to study more formal techniques. One of my main interests is Evidentiality. This came from working with Tukanoan languages, and presently I am looking into how languages without grammatical evidentials may possibly encode evidential (or epistemic modal) interpretations. I am also interested in building ontologies and formal models of context for evidential reasoning, presupposition, and implicature.

## 2 Research

I am interested in applying various linguistic theories to solve real-world problems in scientific and industry related domains. I enjoy finding ways to use ideas from mathematical logic, computability theory, and abstract algebra to build rigorous models for natural languages. Presently I am focusing my energy on basic skills needed for computational linguists. This includes (i) basic command line usage (having recently switched to a Linux environment), (ii) natural language processing (including languages such as Python, Lisp, Prolog), and (iii) statistics and probability. These are life-long goals and I have no pretention to mastery in a few short months.

The following subsections list current and future research projects I would like to continue in my doctoral studies.

### 2.1 Current Projects: 2008–2009

. *English Corpus of Evidentiality Data* (goal of 1 million sentences/clauses; presently at about .02% of goal).

. *Evidentiality and the Human Mind: Language, Information, and Human Discourse* (Project under review for funding by the NEH Summer Stipend 2010).

- . *Some Syntax, Semantics, and Pragmatics of Evidentiality in English*. Ms., 29 pgs: version 1.3.
- . *Recursion for Computation's Sake*. Ms., 24 pgs: version 1.
- . *Ambiguous Merge, Symmetry, and Group Theory*. Ms., 27 pgs: version 2. 'Revision in progress for future squib submission. *A Note on Ideal Structure for a Hypothetical Operation*. 9 pgs: version 1.

## **2.2 Future Project Interests: Things that have been on my mind**

- . Computing Fixed Phrases and Idioms (related to work I did as a linguist intern at Attensity Corporation).
- . Statistical Patterns for Pragmatic Structures in English Evidentiality.
- . Formalizing Context.
- . Ontology and Knowledge Representation for Evidential Reasoning.

I am also considering studying a language with a large web presence: starting Mandarin, or continuing German or Spanish.