Statement of Interest: Scott Farrar

1049 N. Jacobus Ave
Tucson AZ 85705
farrar@u.arizona.edu
http://emeld.douglass.arizona.edu

I am part of a research group at the University of Arizona developing an expert system for linguistic analysis (Langendoen, Farrar, Lewis to appear). The core of the expert system is an ontology of linguistic concepts (Farrar, Lewis, and Langendoen 2002). The immediate goal for the expert system is to provide cross-linguistic search capabilities for endangered languages data. Our group is a part of a larger effort called Electronic Metastructure for Endangered Languages Data (EMELD) whose mandate is to bring together the endangered languages community and promote data interoperability in this community of practice.

The linguistic ontology is based on the Suggested Upper Merged Ontology (SUMO). In our work we extend the SUMO to fit the needs of our domain. We are also trying to show that the concepts and relations associated with linguistic analysis are definable in terms of existing concepts in the SUMO. Particularly useful have been the spatio-temporal concepts as well as the basic semiotic predicates provided in the SUMO.

For evaluating our ontology, we have followed the SUO model of peer review. We encourage linguists to evaluate our on-going work. Our ontology is also data-driven. Also, we also consider coverage of the various data sets an evaluation tactic. As we consider new data from endangered languages, we are able to iteratively refine the content of the linguistic ontology. Furthermore, as linguists for a community of practice, we envision that the ontology of linguistic concepts will serve as the community's central resource on Semantic Web. To this end, we are pursuing an RDF encoding of the ontology and are encouraging the use of XML by the community.

References

Farrar, S., Lewis, W., and Langendoen T. (2002) A common ontology for linguistic concepts. In *Proceedings of the Knowledge Technologies Conference 2002*, Seattle, WA, March 11-13, http://www.knowledgetechnologies.org.

Langendoen, T., Farrar, S., Lewis, W. (to appear) "Bridging the Markup Gap: Smart Search Engines for Language Researchers" International Workshop on Resources and Tools in Field Linguistics, prior to 3rd annual Language Resources and Evaluation Conference, May 26-27, Las Palmas, Canary Islands, Spain.