

Tutorial Title:

Multilingual FrameNet: Linguistic Insights, Computational Challenges, and Applications

Workshop Description:

The FrameNet Project (<http://framenet.icsi.berkeley.edu>) at the International Computer Science Institute in Berkeley, California, has been building an English lexical resource based on the theory of Frame Semantics (Fillmore 1982, 1985, *inter alia*; Fillmore and Baker 2010). Interest in this theory and methodology has led other research groups to establish related projects, creating Frame Semantics-based lexical resources for ten other languages, some of them quite substantial. As these FrameNet resources in languages other than English have reached critical mass, the time is right for a serious effort to study the cross-linguistic relations between and among these typologically diverse languages. While no one expects perfect cross-linguistic uniformity, the development of such resources has reached the point where determining the degree of similarity of Fillmore's semantic frames across these languages in a wide variety of domains is both possible and instructive.

The tutorial will cover the following topics:

- Background to FrameNet
 - Frame Semantics theory
 - FrameNet practice
- Progress on FrameNet (or FrameNet-like) resources for numerous languages, including English, German, Swedish, Brazilian Portuguese, French, Italian, Spanish, Japanese, Chinese, and Hebrew (with work under way for Korean and Arabic), as well as a several specialized FN resources, including Soccer FrameNet, and Copa 2014.
- Computational and linguistic issues in developing alignments across resources
 - Evaluating alignments
- Implications of crosslingual alignments for Frame Semantics
 - Universality of linguistic frames
 - Language typology
- Possible applications of Multilingual FrameNet
 - Exploiting results of ongoing projects to build resources for new FNs
 - Sharing software (across FN projects)
 - Human and Machine Translation
 - Multilingual Sentiment Analysis
 - Computer Assisted Language Learning (via frames)

Summary of the call:

With significant progress on FrameNet (or FrameNet-like) resources for ten typologically diverse languages, and new efforts for other such resources underway, the time is right to study the cross-linguistic relations among these languages. Focusing on the semantic frame as a theoretical construct in linguistics and lexical resource development, this workshop considers the degree of similarity across these languages in a wide range of domains for the purpose of developing Multilingual FrameNet. The workshop brings together linguists and computational linguists involved with the development of FrameNet (or FrameNet-like) resources to address the challenges of building a Multilingual FrameNet, both in terms of linguistic theory and computational infrastructure. We are especially interested in papers that address those challenges, as well as the benefits from the new resources for the larger natural language processing community.

Estimated Audience: 50-75**Duration of the workshop:** 1 day (full day)**Tentative Schedule:**

Welcome-Three papers-Break-Three papers-Lunch-Break-Poster-Session-Panel Discussion

Technical Requirements: VGA compatible connection; strong and stable internet access**Contact Person:** Collin F. BakerEmail address of the Contact Person: collinb@icsi.berkeley.edu**Organizing Committee** (confirmed):

Collin F. Baker, Miriam R. L. Petruck, Gerard de Melo, Russell Lee-Goldberg

Program Committee (if available):

Hans Boas, Michael Ellsworth, Christiane Fellbaum, Jan Hajic, Richard Johansson, Lori Levin, Kyoko Ohara, Martha Palmer, Sebastian Pado, Josef Ruppenhofer, Nathan Schneider, Noah Smith.

This workshop will explore the theoretical linguistic implications of the cross-linguistic differences and similarities of Frame Semantic resources for different languages, and the challenges, both theoretical and practical, of creating alignments among them. Preliminary results suggest that some of the differences accord with observations of traditional linguists (e.g. Talmy 2000, Slobin 2005), and others are surprising.

We are especially interested in work that addresses the challenges of creating a MLFN, as well as the benefits to the NLP community from the new infrastructure.

Topics of Interest include (but are not limited to) the following:

- Frames as Interlingual Semantic Representations
- Accelerating the Development of a new FrameNet
- Frames and (Machine) Translation
- Frames and (Computer Assisted) Language Learning
- FrameNet(s) and Constructicon Development
- Conceptual and Computational Requirements for Multilingual FrameNet
- Data Alignment and/or Integration for Multilingual FrameNet
- Evaluating Alignments across Resources
- Evaluating Multilingual FrameNet