Computational Construction Grammar for Collaborative Open-Source Grammar Development

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Presenters:

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Tutorial Programme/Overview

Construction grammar is a family of linguistic theories that is rapidly gaining importance in all subfields of linguistics. The potential benefits of construction grammar for the development of computational language resources has not gone unnoticed. The goal of this tutorial is to offer its participants a hands-on experience with computational construction grammar; and to explore how construction grammar can be useful for collaborative open-source grammar development, with particular interest for multilingual grammars. The target grammars are models of deep language processing with rich semantics.

Tutorial overview:

- Introduction

- The representation and processing of constructions

- Design patterns for multilingual grammar development

- Joint challenge: the verb phrases of the world's languages

Tutorial Description/Outline/Contents

Participants can download all tutorial materials at http://www.fcg-net.org from Monday 12 May 2014 onwards.

The tutorial will use Fluid Construction Grammar (FCG; http://www.fcg-net.org), an open source grammar formalism that can be used for bidirectional language processing and learning. FCG is part of a larger open source software framework Babel2 that also includes language technologies for investigating cognitive semantics and agent-based modelling (http://emergent-languages.org/Babel2/). The software runs on any Common Lisp environment, and the installation website contains instructions on how to obtain all the necessary software for free.

Two weeks before the start of the tutorial, a new release of Babel2 and FCG will be made available online that contains concrete demonstrations and exercise files. Participants will be invited to pre-install and test all the software. As additional materials, the participants will receive hand-outs of the presenter's slides; and several copies of the book "Computational Issues in Fluid Construction Grammar" (ed. by Luc Steels) will be distributed.

After the tutorial, participants will be able to further develop their skills in computational construction grammar through an online video course, which will be made available for free at http://www.fcg-net.org.