

# Öffentlicher Gastvortrag

### Dr. Paul Buitelaar Digital Enterprise Research Institute (DERI), Galway, Irland

## zum Thema Ontologies and the Lexicon: Connecting World and Word Knowledge

- Zeit: Montag, 14.12.2009 um 11.00 Uhr (s.t.)
- Ort: Institut für Phonetik und Sprachverarbeitung, Schellingstr. 3, VG 2. Stock, Raum 226 (Institutsbibliothek)

### Abstract

Historically, the study of word meaning and of (world) knowledge representation have been first very closely aligned (60s until mid 80s) and then almost completely separated from each other (from mid 80s on). Over the last decades, both communities have developed relatively stable methods, enabling the construction of a significant amount of resources, i.e. ontologies that represent world knowledge on a foundational (DOLCE, BFO), general (SUMO) or domain level (biomedicine, business, government, etc.) vs. lexical semantic databases (wordnets, framenets, etc.) that represent word meaning in general or in specific domains. Although this is a major progression from before, when no such resources existed or only at a much smaller scale, the old question on the relation between word and world knowledge now comes back in a much more practical form, namely in requirements for the integration of ontologies with lexical (semantic) resources for practical applications in semantic (ontology-based) text analysis. Such an integration seems worthwhile as ontologies still mostly lack a representation of the linguistic realization of concepts (as provided by lexical resources) and lexical resources still mostly lack a deeper semantic representation (as provided by ontologies). We propose to organize the integration of ontologies and lexical resources through an ontology-based lexicon format (LexInfo) that tightly integrates linguistic (morphology, syntax) with semantic (ontological) knowledge. The talk will discuss above considerations as well as the basic ideas behind LexInfo, its implementation and possible applications.

#### **Zur Person**

Paul Buitelaar wurde 1998 mit dem Thema *CoreLex: Systematic Polysemy and Underspecification* an der Brandeis University, Waltham, USA promoviert. Bis 2008 war er Senior Researcher am Department für Sprachtechnologie des Deutschen Forschungszentrums für Künstliche Intelligenz (DFKI) in Saarbrücken. Seit Januar 2009 ist Paul Buitelaar Senior Research Fellow und Leiter der Abteilung für Natural Language Processing am Digital Enterprise Research Institute (DERI) in Galway, Irland. Seine Interessen liegen u.a. in den Bereichen Ontology Learning, Text Mining sowie Semantik.