

Proceedings of FG-MoL 2005:
The 10th conference on Formal
Grammar
and
The 9th Meeting on
Mathematics of Language
Edinburgh

James Rogers (ed.)

5-7 August, 2005

CENTER FOR THE STUDY
OF LANGUAGE
AND INFORMATION

Welcome

Welcome to FG/MoL05, the tenth conference on Formal Grammar and the ninth Meeting on Mathematics of Language. This year's conference includes nineteen papers covering, as usual, a wide range of areas of formal grammar and mathematical linguistics. In addition to the papers included in this volume there will be invited talks by

- Nicholas Asher, Department of Philosophy, University of Texas at Austin,
- Uwe Mönnich, Seminar für Sprachwissenschaft, Universität Tübingen,
- and Mark Steedman, School of Informatics, University of Edinburgh.

We are grateful to the Association for Computational Linguistics, the Natural Science and Engineering Research Council of Canada, The Institute for Research in Cognitive Science, University of Pennsylvania and Earlham College for financially supporting the conference. We are extremely grateful to ICCS/HCRC at University of Edinburgh for making this conference possible through local organization.

We are also all indebted to the Program Committee and outside referees for their labors in reviewing and ranking the submitted papers: Anne Abeille (Paris 7), Tilman Becker (DFKI), Pierre Boullier (INRIA), Gosse Bouma (Groningen), Chris Brew (Ohio State University), Wojciech Buszkowski (Poznan), Miriam Butt (Universitaet Konstanz), Tim Fernando (Trinity College, Dublin), Christophe Fougere (Paris 13), Nissim Francez (Haifa), Philippe de Groote (LORIA, Nancy), Aravind Joshi (UPenn), Makoto Kanazawa (National Institute of Informatics, Tokyo), Ruth Kempson (London), Andras Kornai (Metacarta), Uli Krieger (DFKI), Geert-Jan Kruijff (DFKI), Jonas Kuhn (University of Texas at Austin), Shalom Lappin (King's College, London), Alain Lecomte (Grenoble), Carlos Martin-Vide (Tarrag-

ona), Jens Michaelis (Universitaet Potsdam), Guido Minnen (Daimler-Chrysler AG), Mehryar Mohri (AT&T), Uwe Moennich (Universitaet Tuebingen), Michael Moortgat (Utrecht), Drew Moshier (Chapman), Larry Moss (Indiana), Stefan Mueller (Universitaet Bremen), Mark-Jan Nederhof (Rijksuniversiteit Groningen), Richard Oehrle (Berkeley, CA), Owen Rambow (Columbia), Christian Retore (INRIA & LaBRI, Bordeaux), Robert van Rooij (Amsterdam), Giorgio Satta (University of Padua), Ed Stabler (UCLA), Mark Steedman (Edinburgh), and Hans Joerg Tiede (Illinois Wesleyan).

And we are, of course, indebted to all of the authors who submitted papers to the meeting, both those that were accepted and those we could not fit, and to all of you, the participants in the meeting.

Enjoy the conference and enjoy Edinburgh.

Gerhard Jaeger, University of Bielefeld

Paola Monachesi, OTS Utrecht

Gerald Penn, University of Toronto

James Rogers, Earlham College

Shuly Wintner, University of Haifa

Contents

Welcome iii

Contributors ix

- 1 **Underspecification and Neutrality: a unified approach to syncretism** 1
BERTHOLD CRYSMANN
- 2 **From Semantic Restrictions to Reciprocal Meanings** 13
SIVAN SABATO AND YOAD WINTER
- 3 **Events from temporal logic to regular languages with branching** 27
TIM FERNANDO
- 4 **On the formal semantics of begin and end of states in a model theory for temporal DRT** 39
PETRA DÜNGES
- 5 **How to Define Simulated Annealing for Optimality Theory?** 49
TAMÁS BÍRÓ
- 6 **Finite Presentations of Pregroups and the Identity Problem** 61
ALEXA H. MATER AND JAMES D. FIX

- 7 On rigid NL Lambek grammars inference from
generalized functor-argument data 71**
DENIS BÉCHET AND ANNIE FORET
- 8 Two Type 0-Variants of Minimalist Grammars 81**
GREGORY M. KOBELE AND JENS MICHAELIS
- 9 Learnability of Some Classes of Optimal Categorical
Grammars 93**
JACEK MARCINIEC
- 10 An Additional Observation on Strict Derivational
Minimalism 101**
JENS MICHAELIS
- 11 Modular Grammar Design with Typed Parametric
Principles 113**
RALPH DEBUSMANN, DENYS DUCHIER AND ANDREAS
ROSSBERG
- 12 What feature co-occurrence restrictions have to do
with type signatures 123**
WIEBKE PETERSEN AND JAMES KILBURY
- 13 Bias decreases in proportion to the number of
annotators 139**
RON ARTSTEIN AND MASSIMO POESIO
- 14 The Proper Treatment of Coordination in Peirce
Grammar 149**
HANS LEISS
- 15 Strong connectivity hypothesis and generative
power in TAG 167**
ALESSANDRO MAZZEI, VINCENZO LOMBARDO AND
PATRICK STURT
- 16 Inessential Features, Ineliminable Features, and
Modal Logics for Model Theoretic Syntax 183**
HANS-JÖRG TIEDE

- 17 Well-Nested Drawings
as Models of Syntactic Structure 195**
MANUEL BODIRSKY, MARCO KUHLMANN AND
MATHIAS MÖHL
- 18 A Linearization-based approach to Gapping 205**
RUI P. CHAVES
- 19 Further Properties of Path-Controlled
Grammars 219**
CARLOS MARTÍN-VIDE AND VICTOR MITRANA
- 20 Scope-marking constructions in type-logical
grammar 231**
WILLEMIJN VERMAAT

Contributors

- BERTHOLD CRYSMANN DFKI GmbH and Saarland University
- SIVAN SABATO Technion - Israel Institute of Technology
Computer Science Department
- YOAD WINTER Technion - Israel Institute of Technology
Computer Science Department
- TIM FERNANDO Computer Science Department
Trinity College
Dublin 2, Ireland
- PETRA DÜNGES Computational Linguistics
University of the Saarland
duenges@mail.coli.uni-sb.de,
<http://www.coli.uni-saarland.de/~duenges/>
- TAMÁS BÍRÓ Humanities Computing, CLCG
University of Groningen
t.s.biro@rug.nl, birot@nytud.hu
<http://www.let.rug.nl/~birot>
- ALEXA H. MATER University of Pennsylvania
Department of Mathematics
matera@alumni.reed.edu
- JAMES D. FIX Reed College, Mathematics Department
jimfix@reed.edu
- DENIS BÉCHET LINA—CNRS and Université de Nantes
Denis.Bechet@univ-nantes.fr
- ANNIE FORET IRISA—Université de Rennes1
Annie.Foret@irisa.fr

x / FG-MoL 2005

- GREGORY M. KOBELE University of California Los Angeles
Department of Linguistics
kobele@humnet.ucla.edu
- JENS MICHAELIS Universität Potsdam, Institut für Linguistik
michaelis@ling.uni-potsdam.de
- JACEK MARCINIEC Faculty of Mathematics and Computer Science
Adam Mickiewicz University
Poznań, Poland
jacmar@amu.edu.pl
- RALPH DEBUSMANN Programming Systems Lab
Saarland University, Saarbrücken, Germany
- DENYS DUCHIER IRI and LIFL—CNRS, Lille, France
- ANDREAS ROSSBERG Programming Systems Lab
Saarland University, Saarbrücken, Germany
- WIEBKE PETERSEN Computational Linguistics
Institute of Language and Information
University of Düsseldorf, Germany
petersew@uni-duesseldorf.de
- JAMES KILBURY Computational Linguistics
Institute of Language and Information
University of Düsseldorf, Germany
kilbury@ling.uni-duesseldorf.de
- RON ARTSTEIN Department of Computer Science
University of Essex
artstein [at] essex.ac.uk
- MASSIMO POESIO Department of Computer Science
University of Essex
poesio [at] essex.ac.uk
- HANS LEISS Universität München
Centrum für Informations und Sprachverarbeitung
- ALESSANDRO MAZZEI Dip. Informatica, Università di Torino
mazzei@di.unito.it
- VINCENZO LOMBARDO Dip. Informatica, Università di Torino
vincenzo@di.unito.it
- PATRICK STURT Dep. of Psychology, University of Glasgow
patrick@psy.gla.ac.uk

- HANS-JÖRG TIEDE Dept. of Mathematics and Computer Science
Illinois Wesleyan University
Bloomington, IL, USA
`htiede@iwu.edu`
- MANUEL BODIRSKY Institut für Informatik
Humboldt-Universität zu Berlin
- MARCO KUHLMANN Department of Computer Science
Saarland University, Saarbrücken, Germany
- MATHIAS MÖHL Department of Computer Science
Saarland University, Saarbrücken, Germany
- RUI P. CHAVES Computation of Lexical and
Grammatical Knowledge Research Group
CLUL
Complexo Interdisciplinar da Universidade de Lisboa
Lisbon, Portugal
`ruichaves@clul.ul.pt`
- CARLOS MARTÍN-VIDE Research Group in Mathematical Linguistics
Rovira i Virgili University, Tarragona, Spain
`carlos.martin@urv.net`
- VICTOR MITRANA Faculty of Mathematics and Computer Science
University of Bucharest
and Research Group in Mathematical Linguistics
Rovira i Virgili University, Tarragona, Spain
`vmi@urv.net`
- WILLEMIJN VERMAAT UiL-OTS (Utrecht Institute of Linguistics)
Utrecht University, The Netherlands
`Willemijn.Vermaat@let.uu.nl`

