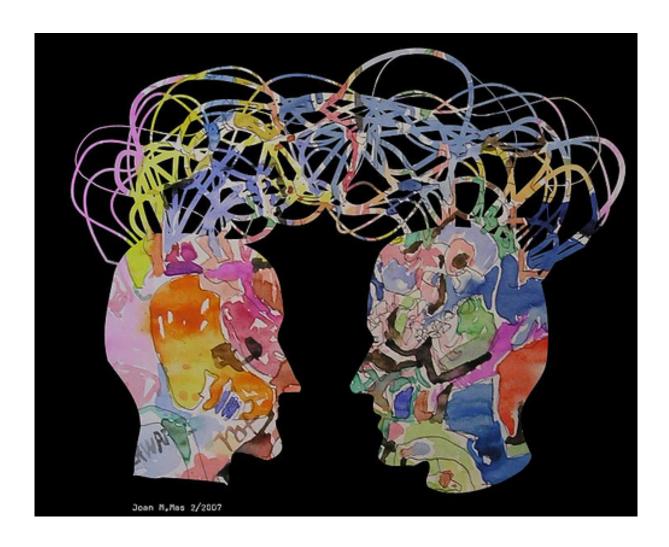
## DialWatt — Semdial 2014

The 18th Workshop on the Semantics and Pragmatics of Dialogue

Edinburgh, September 1-3, 2014



### ISSN 2308-2275

Serial title: Proceedings (SemDial)

# **SemDial Workshop Series**

http://www.illc.uva.nl/semdial/

### **DialWatt Website**

http://www.macs.hw.ac.uk/InteractionLab/Semdial/

### **Gold Sponsors**







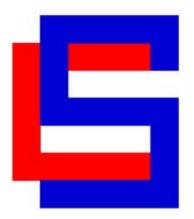
### **Silver Sponsors**



**Computer Science Alliance** 

#### **Endorsements**









#### **Preface**

DialWatt brings the SemDial Workshop on the Semantics and Pragmatics of Dialogue back to Edinburgh, where the sixth meeting - EDILOG - took place in 2002. The current edition of SemDial is hosted by Heriot-Watt University. The return to Edinburgh has given us opportunity to colocate SemDial with a number of other events, including RO-MAN 2014, the IEEE International Symposium on Robot and Human Interactive Communication, the RefNet summer school and workshop in Psychological and Computational Models of Language Production, and AMLaP 2014, the annual conference on Architectures and Mechansims for Language Processing.

We received a total of 31 full paper submissions, 17 of which were accepted after a peer-review process, during which each submission was reviewed by a panel of three experts. We are extremely grateful to the Programme Committee members for their very detailed and helpful reviews. In response to the call for abstracts, we received a total of 34 abstract submissions describing ongoing projects or system demonstrations, of which 32 were accepted for poster presentation.

All accepted full papers and poster abstracts are included in this volume. The DialWatt programme features four keynote presentations by Holly Branigan, Jon Oberlander, Matthew Purver and Michael Schober. We thank them for participating in SemDial and are honoured to have them at the workshop. Abstracts of their contributions are also included in this volume.

DialWatt has received generous financial support from the EU FP7 PARLANCE project, the Scottish Informatics & Computer Science Alliance, and the School of Mathematical and Computer Sciences (MACS) at Heriot-Watt University which hosts the event, we are very grateful for this sponsorship. We have also been given endorsements by the ACL Special Interest Groups: SIGdial and SIGSEM.

Last but not least we would like to thank the following people for their tireless work, Arash Eshghi who helped with all aspects of the local organisation, Mary Ellen Foster our local events organiser, and Andy Taylor for developing and maintaining the website, as well as Christine McBride from the MACS school office.

August 2014 Edinburgh & Toulouse Philippe Muller Verena Rieser

#### **Program Committee**

Nicholas Asher IRIT, CNRS

Timo Baumann Universität Hamburg

Luciana Benotti Universidad Nacional de Cordoba

Nate Blaylock Nuance Communications
Holly Branigan University of Edinburgh
Heriberto Cuayahuitl Heriot-Watt University
Valeria De Paiva University of Birmingham

Paul Dekker ILLC, University of Amsterdam

David Devault USC Institute for Creative Technologies

Arash Eshghi Heriot-Watt University
Raquel Fernández University of Amsterdam

Victor Ferreira UC San Diego

Kallirroi Georgila University of Southern California Jonathan Ginzburg Université Paris-Diderot (Paris 7)

Eleni Gregoromichelaki King's College London Markus Guhe University of Edinburgh

Pat Healey Queen Mary, University of London Anna Hjalmarsson Centre for Speech Technology, KTH

Amy Isard

Simon Keizer

Ruth Kempson

Alexander Koller

Staffan Larsson

Alex Lascarides

Pierre Lison

University of Edinburgh

Heriot-Watt University

Kings College London

University of Potsdam

University of Gothenburg

University of Edinburgh

University of Oslo

Pierre Lison University of Oslo
Colin Matheson University of Edinburgh
Gregory Mills University of Edinburgh
Philippe Muller (chair) IRIT, Toulouse University

Chris Potts Stanford University

Laurent Prévot Laboratoire Parole et Langage
Matthew Purver Queen Mary University of London

Hannes Rieser Universität Bielefeld

Verena Rieser (**chair**) Heriot Watt University, Edinburgh

David Schlangen Bielefeld University

Gabriel Skantze KTH

Amanda Stent Yahoo! Labs
Matthew Stone Rutgers
David Traum ICT USC

Nigel Ward University of Texas at El Paso

# **Contents**

Invited Talks	
Say as I say: Alignment as a multi-componential phenomenon	2
Talking to animals and talking to things	3
Ask Not What Semantics Can Do For Dialogue - Ask What Dialogue Can Do For Semantics <i>Matthew Purver</i>	4
Dialogue, response quality and mode choice in iPhone surveys	5
Full Papers	
Referring Expressions in Discourse about Haptic Line Graphs	7
A dynamic minimal model of the listener for feedback-based dialogue coordination	17
Phrase structure rules as dialogue update rules	26
Numerical expressions, implicatures and imagined prior context	35
Priming and Alignment of Frame of Reference in Situated Conversation	43
How domain-general can we be? Learning incremental Dialogue Systems without Dialogue Acts . <i>Arash Eshghi and Oliver Lemon</i>	53
Persuasion in Complex Games	62
Signaling Non-speaker commitment in Transparent Free Relatives: A paired Speaker-Hearer judgment study	71
Helping, I mean assessing psychiatric communication: An application of incremental self-repair detection	80
Christine Howes, Julian Hough, Matthew Purver and Rose McCabe	

Diabetic Children	90
Ivana Kruijff-Korbayova, Stefania Racioppa, Bernd Kiefer, Elettra Oleari and Clara Pozzi	
Using subtitles to deal with Out-of-Domain interactions	98
Generating and Resolving Vague Color References	107
Learning to understand questions	116
Dynamic Intention Structures for Dialogue Processing	125
Revealing Resources in Strategic Contexts	135
Indirect answers as potential solutions to decision problems	145
Credibility and its Attacks	154
Poster Abstracts	
MILLA A Multimodal Interactive Language Learning Agent	164 <i>Ea</i> -
Dialogue Structure of Coaching Sessions	167
Getting to Know Users: Accounting for the Variability in User Ratings	170
Learning to manage risks in non-cooperative dialogues	173
The Disfluency, Exclamation, and Laughter in Dialogue (DUEL) Project	176
Hearer Engagement as a Variable in the Perceived Weight of a Face-Threatening Act	179
Assessing the Impact of Local Adaptation in Child-Adult Dialogue: A Recurrence-Quantificational Approach	182
First observations on a corpus of multi-modal trialogues	185
Towards Automatic Understanding of Virtual Pointing in Interaction	188

Evaluation In the Wild
Helen Hastie, Marie-Aude Aufaure, Panos Alexopoulos, Hugues Bouchard, Heriberto Cuayahuitl, Nind Dethlefs, Milica Gasic, Almudena Gonzalez-Guimerans, James Henderson, Oliver Lemon, Xingkun Liu, Peter Mika, Tim Potter, Verena Rieser, Pirros Tsiakoulis, Yves Vanrompay, Boris Villazon-Terrazas, Majid Yazdani, Steve Young and Yanchao Yu
Disentangling utterances and recovering coherent multi party distinct conversations
Large-scale Analysis of the Flight Booking Spoken Dialog System in a Commercial Travel Information Mobile App
A Multi-issue Negotiation Model of Trust Formation through Concern Alignment in Conversations 1999 Yasuhiro Katagiri, Katsuya Takanashi, Masato Ishizaki, Mika Enomoto, Yasuharu Den and Shogo Okada
Multimodal Dialogue Systems with InproTKs and Venice
Producing Verbal Descriptions for Haptic Line-Graph Explorations
Effects of Speech Cursor on Visual Distraction in In-vehicle Interaction: Preliminary Results 208 Staffan Larsson, Simon Dobnik and Sebastian Berlin
Common Ground and Joint Utterance Production: Evidence from the Word Chain Task 211  Jaroslaw Lelonkiewicz and Chiara Gambi
Language-bound Dialogic elements in Computer-Mediated and Face-to-Face Communication 214 Barbara Lewandowska-Tomaszczyk
Studying the Effects of Affective Feedback in Embodied Tutors
Towards Deep Learning for Dialogue State Tracking Using Restricted Bolzman Machines and Pretraining
Referential Grounding for Situated Human-Robot Communication
Laughter in mother-child interaction: from 12 to 36 months
Initiative Patterns in Dialogue Genres
Towards Generating Route Instructions Under Uncertainty: A Corpus Study
SpeechCity: A Conversational City Guide based on Open Data
Clarification Requests at the Level of Uptake

Julian Schlöder and Raquel Fernández	
Tailoring Object Orientation Descriptions to the Dialogue Context	240
Perception Based Misunderstandings in Human-Computer Dialogues	243
Sample Efficient Learning of Strategic Dialogue Policies	246
PDRT-SANDBOX: An implementation of Projective Discourse Representation Theory	249
Detecting Deception in Non-Cooperative Dialogue: A Smarter Adversary Cannot be Fooled That Easily	252
User Satisfaction without Task Completion	255