

EuroUnderstanding Launch Meeting

14-16 October 2011

Malmö, Sweden

Programme booklet



Welcome

It is our great pleasure to welcome you at the Launch meeting of the EUROCORES programme "Understanding and Misunderstanding: Cognition, Communication and Culture" (EuroUnderstanding).

This programme is concerned with the phenomena of Understanding and Misunderstanding - phenomena which can, and should, be investigated at vastly differing levels of analysis; from neural processes (within an individual brain) to cultural processes (across societies). However, a comprehensive explanatory account of these phenomena requires the integration of these different levels of analyses in a non-reductionist framework. The Humanities disciplines, with their focus on meaning, are crucial to this explanatory integration. The EuroUnderstanding programme aims to provide opportunities for Humanities-based researchers to work towards such integration, in collaboration with each other and with researchers from life and social science disciplines.

The first such opportunity presents itself this weekend, at the scientific "EuroUnderstanding Launch Meeting". This meeting - attended by representatives from all 15 EuroUnderstanding projects, as well as by most of the Associated Partners - is designed to give the programme a head start by actively promoting the exchange and cooperation between the various EuroUnderstanding projects. It will be the perfect occasion to explore possible networking opportunities for your team at an early stage. And to plant the seeds for follow-up activities, across and beyond the EuroUnderstanding programme.

The outcome and impact of this conference rely on your contribution. We therefore encourage you to make the most of these three days.

The organising team

Programme

Friday 14 October	
15:00 – 19:00	Internal CRP meetings
19:00	Registration desk opens
20:00	Welcome dinner

Saturday 15 October	
	<i>Introducing the EUROCORES Programme EuroUnderstanding</i>
8:30	Registration desk opens
9.00 – 9.45	<p><i>Welcome by</i></p> <p>Prof. Milena Žic-Fuchs, Chair of the ESF Standing Committee for the Humanities</p> <p>and</p> <p>Prof. Arne Jarrick, Secretary General for the Humanities and Social Sciences at the Swedish Research Council (VR)</p> <p><i>Introduction to the EUROCORES programme EuroUnderstanding</i></p> <p>Dr. Eva Hoogland, programme coordinator EuroUnderstanding</p>
	<i>Presentation and discussion of EuroUnderstanding projects</i>
9:45 – 10:05	<p><i>Communication in Context: Shared Understanding in a Complex World (CCCOM)</i></p> <p>Chair: Prof. Åsa Wikforss, Stockholm University</p> <p><i>Introduction to the CRP 'Communication in Context'</i></p> <p>Prof. Åsa Wikforss, Stockholm University</p>
10:05 – 10:40	<p><i>Communicative Success</i></p> <p>Prof. Peter Pagin, Stockholm University</p>
10:40 – 11:15	<p><i>Concepts and Conceptions</i></p> <p>Prof. Sören Häggqvist, Stockholm University</p>

11:15 - 11:45	<i>Coffee break</i>
11:45 - 12:30	<i>Vagueness and successful enough communication</i> Dr. Robert van Rooij, University of Amsterdam
12:30 - 13:15	<i>The empirical testability of theories of reference and their role in the explanation of communication</i> Prof. Daniel Cohnitz, University of Tartu & Prof. Jussi Haukioja, Norwegian University of Science and Technology
13.15 - 14.45	Lunch
	<i>Digging for the roots of understanding (DRUST)</i> Chair: Prof. Guenther Knoblich, Central European University Budapest / Radboud University Nijmegen
14.45 - 14:55	<i>Digging deeper to uncover the roots of understanding</i> Prof. Guenther Knoblich, CEU / Radboud University Nijmegen
14:55 - 15:25	<i>Building common ground, experimental approaches</i> Dr. Riccardo Fusaroli & Dr. Andreas Roepstorff, University of Aarhus
15:25 - 15:45	<i>A cognitive architecture for communicative repair strategies</i> Ms. Katrien Beuls, Vrije Universiteit Brussel
15:45 - 16:00	<i>Statistical physics of language dynamics</i> Prof. Vittorio Loreto, Sapienza University of Rome / ISI, Torino
16:00 - 16:15	<i>The statistical physics approach to social dynamics</i> Prof. Claudio Castellano, ISC-CNR, Rome / Sapienza University of Rome
16:15 - 16:45	<i>Coffee break</i>
16:45 - 17:05	<i>Interaction as coordinative structure</i> Dr. Joanna Raczaszek-Leonardi & Dr. Franciszek Rakowski, University of Warsaw
17:05 - 17:25	<i>The predictive brain and the extended mind</i> Dr. Julian Kiverstein, University of Amsterdam/University of Edinburgh
17:25 - 17:40	<i>How basic is empathy? Direct and indirect ways of knowing others</i> Prof. Dan Zahavi, University of Copenhagen
17:40 - 17:55	<i>Seeing Minds: Exploring an action-oriented account of social perception</i> Dr. Nivedita Gangopadhyay, University of Copenhagen
17:55 - 18.15	<i>Group mimicry</i> Dr. Verónica C. Ramenzoni, Radboud University Nijmegen
20:00	Dinner

Sunday 16 October	
	<i>Understanding the Normative Dimensions of Human Conduct: Conceptual and Developmental Issues (NormCon)</i>
	Chair: Prof. Josef Perner, University of Salzburg
9:00 - 9:15	<i>Introduction</i>
	<i>The agenda of NormCon from an empirical point of view</i> Prof. Josef Perner, University of Salzburg
	<i>The agenda of NormCon from a philosophical point of view</i> Dr. Frank Esken, University of Salzburg
9:15 - 9:30	<i>Understanding norms and social cognition: Some developmental and philosophical issues</i> Prof. Ingar Brinck, Lund University
	Q&A
9:35 - 9:50	<i>How children begin to understand social norms: Some questions.</i> Prof. Johannes Brandl & Dr. Frank Esken, University of Salzburg
	Q&A
9:55 - 10:10	<i>Self and other in shame</i> Prof. Dan Zahavi, University of Copenhagen
10:10 - 10:25	<i>Normativity, affect, and social interaction</i> Dr. Joel Krueger, University of Copenhagen
	Q&A
10:30 - 11:00	<i>Coffee break</i>
11:00 - 11:15	<i>Rule-understanding and subjective perspectives</i> Prof. Josef Perner, University of Salzburg
	Q&A
11:20 - 11:35	<i>Exploring children's experience of adult authority across cultures</i> Prof. Philippe Rochat, Emory University
	Q&A
11:40 - 11:55	<i>The emergence of reason-understanding</i> Dr. Johannes Rössler, University of Warwick
	Q&A
12:00 - 12:30	<i>General Discussion</i>

12.30 – 13.00	<p><i>Closing session</i></p> <p>Prof. Anne-Marie Bülow, Chair of the EuroUnderstanding Review Panel</p> <p>Prof. Milena Žic-Fuchs, Chair of the ESF Standing Committee for the Humanities</p>
13.00 – 14.00	Farewell lunch
	End of meeting
14.00 – 16.00	<p>Meeting EuroUnderstanding Scientific Committee</p> <p><i>(Closed session - members Scientific Committee only)</i></p>

Abstracts

COMMUNICATION IN CONTEXT: SHARED UNDERSTANDING IN A COMPLEX WORLD (CCCOM)

Communicative Success

Prof. Peter Pagin, Stockholm University

I shall offer some considerations concerning the relation of communicative success, both with respect to relata and with respect to conditions for the relation holding.

Concepts and Conceptions

Prof. Sören Häggqvist, Stockholm University

I will give a brief overview of a general problem for theories of communicative success. This problem is due to the tension between three plausible claims: (1) Successful communication requires at least similarity in contents; (2) contents -- in particular, concepts -- are to some extent connected to speakers' beliefs and conceptions; (3) conceptions may vary, both across individual speakers simultaneously and across historical and cultural contexts.

Vagueness and successful enough communication

Dr. Robert van Rooij, University of Amsterdam

Vagueness is a pervasive feature of natural languages that is challenging semantic theories and theories of language evolution alike. We focus here on the latter, addressing the challenge of how to account for the emergence of vague meanings in signaling game models of language evolution. We suggest that vagueness is a natural property of meaning that evolves when 'boundedly rational' agents repeatedly engage in cooperative signaling.

The empirical testability of theories of reference and their role in the explanation of communication

Prof. Daniel Cohnitz, University of Tartu and Prof. Jussi Haukioja, Norwegian University of Science and technology

Experimental philosophers have recently argued that the practice by which theories about reference are developed and selected in contemporary analytic philosophy of language is deeply flawed.

Typically, so the experimentalists argue, theories of reference are "tested" by comparing what a particular theory of reference would predict to be the referent of an expression in a certain hypothetical utterance-context, with what we intuitively take the referent in that context to be. I will argue that the experimentalists are right when criticizing the exclusively a priori methodology of some philosophers of language. However, the results of the experimentalists don't establish that theorizing about reference is futile, but rather that theorizing about reference should take some psychological evidence into account.

What I want to discuss in my talk is which evidence in particular is relevant here. The debate so far has concentrated on the role of intuitions, but, as I hope to show, should also take into account other psychological evidence about the usage of proper names in production and comprehension.

DIGGING FOR THE ROOTS OF UNDERSTANDING (DRUST)

Digging deeper to uncover the roots of understanding

Guenther Knoblich, Central European University Budapest and Radboud University Nijmegen

DRUST sets out to investigate four types of psychological and cultural mechanisms that, if successful, establish different forms of understanding between individuals and, if not successful, provide sources for different forms of misunderstanding and conflict. These mechanisms include (1) rhythmicity in interaction patterns, (2) shared cognitive and neural representations of perceptions, actions, and emotion, (3) predictive mechanisms and repair in verbal communication, and (4) shared cultural environments and artifacts. DRUST will investigate how these mechanisms work together in enabling understanding and which kinds of misunderstandings each mechanism may give rise to.

Building Common Ground: experimental approaches

Riccardo Fusaroli and Andreas Roepstorff, University of Aarhus

When humans interact and communicate, they do not only use words. A defining feature of human activity is the widespread use of objects, material as well as virtual. Sharing of outer worlds, both in a physical, mental, and semantic sense supports coordinating actions and establishing joint understanding. We have previously argued that language may be conceived of as a tool for human interaction and that the material objects, like words, may act as proxies for communication. In our part of DRUST, we will examine how shared material worlds may enable and facilitate communication in experimental settings. We have planned two lines of investigation. The first uses a novel visual psychophysics paradigm where we may quantify the degree of successful communication between two interacting individuals. The second will use LEGO Serious Play, an open source platform for people to literally "build" shared understanding through a structured set of interactions. We hope to use this to examine whether and how sharing and co-constructing a physical world may help to establish and stabilize common ground. At the EuroUnderstanding opening workshop, we will introduce recent pilot results from both scenarios.

A Cognitive Architecture for Communicative Repair Strategies

Katrien Beuls, Vrije Universiteit Brussel

Grounded deep language processing on robotic agents is notoriously difficult because it requires the language to be adaptive to the communicative needs of the agents, which keeps changing as they encounter new experiences in their dynamic real-world environments. Moreover, language processing needs to be robust in order to overcome noise or variation in perception, differences in embodiment, and other problems that inevitably occur in linguistic interactions. My talk will illustrate how robustness and open-endedness can be achieved in Fluid Construction Grammar through a double-layered architecture. On one level, there is a 'routine layer' for habitual parsing and production. On another level, a 'meta-layer' monitors (and sometimes steers) routine processing through diagnostics (for detecting problems) and repair strategies (for solving those problems).

Statistical physics of language dynamics

Vittorio Loreto, Sapienza University of Rome and Institute for Scientific Interchange (ISI), Torino

Language dynamics is an emerging field that focuses on all processes related to the emergence, evolution and extinction of languages. Recently the study of the self-organization and evolution of language and meaning has recently led to the idea that a community of language users can be seen as a complex dynamical system that collectively solves the problem of developing a shared communication framework through the back-and-forth signaling between people. In this talk I'll briefly review some of the progresses made in the

last few years and highlight potential future directions for the research in this area. I'll discuss in particular several examples corresponding to the early stages of the emergence of a language, namely the emergence of a common lexicon and the emergence of a shared set of linguistics categories. The comparison with empirical data will allow to point out how synthetic modeling has nowadays reached sufficient maturity to contribute significantly to the ongoing debate in cognitive science.

The statistical physics approach to social dynamics

Claudio Castellano, Istituto dei Sistemi Complessi (ISC-CNR), Rome and Sapienza University of Rome

Traditional statistical physics aims at understanding the macroscopic behavior emerging out of the interaction of a large number of simple elements (atoms, molecules). Its concepts and methods have started to be applied in the recent years to several socio-economic contexts, where the nontrivial collective behavior emerges out of the interaction of individuals. I will briefly discuss motivations, features and goals of this approach and present some examples, which are close to the theme of the DRUST project (spreading of norms and behavior, dynamics of opinions and culture, emergence of cooperation).

Interaction as coordinative structure: dynamical landscape of a turn taking pattern

Joanna Rączaszek-Leonardi & Franciszek Rakowski, University of Warsaw

Recent trends in cognitive science and linguistics underscore the importance of supra-individual variables in the explanation of individual cognition and behaviour (Turvey 1990; Hutchins 1995; Shockley et al., 2003*; di Paolo 2008). Taken to the realm of linguistic interaction this means focusing on a system consisting of at least two participants, i.e., the dynamics of a conversing dyad (or group). The aim of this study is to develop and test measures of such system's dynamics based on the pattern of turn-taking. We explicate two possible theoretical approaches to the problem of assessing the stability of such a dyadic system. Then, in an explorative analysis performed on turn-taking patterns of dyads conversing in three different languages we identify measures that are informative of the nature and stability of the patterns. We test and compare such methods of analysis of the categorical time series data as: Recurrence Quantification Analysis, CRQ, Bayesian analysis, dimensionality analysis. We present conclusions regarding the utility of these methods, their interrelation and the values of parameters required for informative analyses, such as the length of conversations and window size.

The predictive brain and the extended mind

Julian Kiverstein, University of Amsterdam and University of Edinburgh

According to the extended mind hypothesis, the machinery of mind can sometimes include components that are located outside of the boundaries of the biological organism such as environmental structures, artefacts and technologies and even other people. In this short talk I'll briefly describe how predictive coding can help us to understand the brain's contribution to extended cognition. According to this framework the brain is organised hierarchically with each layer in the hierarchy producing models that predict inputs from lower layers. Through experience the brain learns to extract statistical regularities that enable it to generate models that minimise prediction error. We'll argue that structuring the environment (or what Clark has called "cognitive niche construction") can also be thought of as a strategy for minimising prediction error. Our contribution to DRUST will be to explore ways in which such environmental structures might contribute to the construction of common ground.

How basic is empathy? Direct and indirect ways of knowing others

Dan Zahavi, University of Copenhagen

Recent social cognition research and classical phenomenology converge in the claim that empathy may hold the key to important issues in the philosophy of mind and social cognition.

It is consequently not too surprising that some have argued that simulationists are today's equivalents of empathy theorists. When surveying the current debate it is, however, obvious that there is little agreement as to what the term "empathy" actually denotes, and it is also clear that the parties involved are to some extent talking at cross purposes. Not only are people using and understanding the term differently, but they might not even be addressing the same explanandum. In my presentation I will distinguish various accounts, and discuss to what extent empathy can be said to offer us a direct understanding of the minds of others.

Seeing Minds: Exploring an action-oriented account of social perception

Nivedita Gangopadhyay, University of Copenhagen

The interdisciplinary field of social cognition is currently witnessing the emergence of a number of embodied approaches. These approaches stress the importance of understanding the other's embodied intersubjective engagement prior to gaining a theoretical understanding of the other as a "minded" being. The talk addresses the issue of theoretically unmediated knowledge of other minds by exploring the empirical hypothesis that in some cases of social interaction we have an immediate perceptual access to others' minds in the perception of their embodied intentionality. Embodied intersubjective interaction may build on our ability of understanding other minds in an immediate perceptual way which is not adequately investigated by theory-theory and simulation theories of mind-reading. I shall explore an account of perceptual knowledge of other minds which builds on the notion of a robust perception-action coupling and present a conceptual framework for developing an "action-oriented account of social perception".

Group mimicry

Verónica C. Ramenzoni, Radboud University Nijmegen

Social interactions with other individuals make up the fabric of our lives. They allow us to establish relations with others and form groups that interact dynamically with other groups. Joint action research, however, has focused mainly on the study dyadic interactions and, while several perceptual, motor, and cognitive processes have been proposed to account for dyadic behavior (e.g., entrainment and simulation), little is known about their role in fostering inter-group interactions. Recent findings demonstrating that groups mimic other groups have started to fill this gap (Tsai, Sebanz, & Knoblich, 2011). The current project will explore the strength and stability of dynamic relations between group partners as they interact with other groups. Specifically, the goal is to identify whether stronger and more stable groups are better at cooperating/competing with other groups and whether individuals can modulate their behavior adaptively (e.g., compensate for changes in the partner's behavior) to support inter-group interactions.

UNDERSTANDING THE NORMATIVE DIMENSIONS OF HUMAN CONDUCT: CONCEPTUAL AND DEVELOPMENTAL ISSUES (NormCon)

Abstracts not available.

Participants

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