The 17th Annual Meeting

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European Society for Philosophy and Psychology

Central European University, Budapest

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Venue:
Central European University
Nádor u. 9.
1051 Budapest, Hungary

Registration open:
Wednesday, 26 August, from 16:00 to 21:00
Thursday, 27 August, from 7:30 to 14:00
Friday to Sunday, 28-30 August, from 8:00 to 9:00

Social program:
Welcome Reception: 27 August, 19:00, Popper and Gellner Rooms, CEU
Conference Dinner: 29 August, 20:00-24:00, Columbus Pub and Restaurant, Pier 4, Vigadó tér

Program Overview

THURSDAY

9:00 - 10:15	*Auditorium* Invited Lecture 1: **Dare Baldwin**				
10:15 - 10:45	Coffee break				
10:45 - 13:00	*Auditorium* Invited Symposium 1: ***Rational imitation: Human infants, dogs and apes*** **• Louise Röska-Hardy • György Gergely and Ildikó Király • Ludwig Huber • David Buttelmann**				
13:00 - 14:30	Lunch break				
14:30 - 16:00	*Room 309*: Paper Session 1 ***Conditionals and countefactuals*** • **Nicholas Allott and Hiroyuki Uchida** • **Eva Rafetseder and Josef Perner** • **Patrick Burns, Sarah Beck and Kevin Riggs**	*Room 409*: Paper Session 2 ***Memory*** • **Shin Sakuragi** • **Elizabeth Irvine** • **Silja Freudenberger**	*Room 509*: Paper Session 3 ***Perception and experience*** • **Stuart Crutchfield** • **Richard Gray** • **Işık Sarıhan**	*Room 809*: Paper Session 4 ***Self-deception*** • **Josep Lluís Prades** • **Jordi Fernandez** • **Gunnar Björnsson and Karl Persson**	*Room 909*: Paper Session 5 ***Thinking*** • **Jiaxi Liu and Stefan Kaufmann** • **Emily S. Cross, Jens Brauer and Derek van Ott** • **David Papo**
16:00 - 16:30	*Laptop Area:* Coffee break and Poster Session 1 **1. Yin Wang and Antonia Hamilton; 2. Anika Fiebich; 3. Yuiko Sakuta, Hanae Ishi, Shigeru Akamatsu and Jiro Gyoba;** **4. Tomohiro Kumagai; 5. Wouter Voorspoels and Gert Storms; 6. Gabriella Felhősi, Rozalia Ivady and Csaba Pléh**				
16:30 - 18:30	*Room 309*: Symposium 1 ***Climate change*** • **J. Richard Eiser** • **Annette Hohenberger** • **Ayhan Sol** • **Rafaela Hillerbrand**	*Room 409*: Paper Session 6 ***Communication*** • **Hanna Marno, Eddy J. Davelaar and Gergely Csibra** • **Margaret Friend, Amy Pace and Tamara Headley** • **Ingrid Lossius Falkum** • **Georg Kjoll**	*Room 509*: Paper Session 7 ***Sensory modalities*** • **Louise Richardson** • **Verena Gottschling** • **Matthew Nudds** • **Barry C. Smith**	*Room 809*: Paper Session 8 ***Emotions*** • **Matteo Colombo** • **Marieke Schouwstra** • **Sophie Rietti** • **María José Alcaraz León**	*Room 909*: Paper Session 9 ***Phenomenology and experience*** • **Alberto Rubio** • **Martina Fuerst** • **Eyja Brynjarsdottir** • **Alberto Voltolini**
19:00 -	*Popper and Gellner Rooms:* **Welcome Reception**, sponsored by 				

FRIDAY

9:00 - 10:15	*Auditorium* Invited Lecture 2: **Leonard Talmy** - sponsored by Mind & Language				
10:15 - 10:45	Coffee break				
10:45 - 13:00	*Auditorium* Invited Symposium 2: ***Consciousness in vegetative state patients*** **• Nicholas Shea • Tim Bayne • Adrian Owen • Anil Seth**				
13:00 - 14:30	Lunch break				
14:30 - 16:00	*Room 309*: Paper Session 10 ***Experiences*** • **Mario Santos-Sousa** • **Valtteri Arstila** • **Paloma Atencia-Linares**	*Room 409*: Paper Session 11 ***Visual perception and points of view*** • **Henrike Moll and Andrew Meltzoff** • **Elisabeth Stoettinger and Josef Perner** • **Manuel Liz, David Pérez Chico, María Ponte Azcárate and Margarita Vázquez**	*Room 509*: Paper Session 12 ***Self-knowledge*** • **Kristina Musholt** • **Gottfried Vosgerau** • **Johannes Roessler**	*Room 809*: Paper Session 13 ***Atypical cognition*** • **Lisa Bortolotti, Rochelle Cox and Amanda Barnier** • **Miklós Győri** • **Heidi Maibom**	*Room 909*: Paper Session 14 ***Philosophy of mind*** • **Zoltán Jakab** • **Benedicte Veillet** • **David Pineda**
16:00 - 16:30	*Laptop Area:* Coffee break and Poster Session 2 **7. Richard Ramsey and Antonia Hamilton; 8. Rozalia Ivady, Gabriella Felhősi and Csaba Pléh;** **9. Letizia Palumbo, Daniel Walters, Søren Overgaard and Tjeerd Jellema; 10. Andrei Dumbrava, Mihaela Rusu and Cristina Balut;** **11. Outi Horne and Emese Csipke; 12. Marian Chen and Sandra Waxman**				
16:30 - 18:30	*Room 309*: Paper Session 15 ***Emotion*** • **Judit Szalai** • **Raffaella Pocobello and Cristiano Castelfranchi** • **Mog Stapleton** • **Somogy Varga**	*Room 409*: Symposium 2 ***Reference in the first few years of life*** • **Melissa Allen** • **Ulf Liszkowski** • **Erika Nurmsoo** • **Danielle Matthews**	*Room 509*: Symposium 3 ***Human nature and morality*** • **Adrian Jäggi and Claudia Rudolf von Rohr** • **Amrisha Vaish** • **Jelle De Schrijver** • **Katinka Quintelier**	*Room 809*: Paper Session 16 ***Context/relativism/ semantics*** • **Dan Zeman** • **Josep Macia** • **Alison Hall** • **Philippe Journeau**	*Room 909*: Paper Session 17 ***Consciousness and memory*** • **Naomi Eilan** • **Tobias Schlicht** • **Ian Phillips** • **Sid Kouider**

SATURDAY

9:00 - 10:15	*Auditorium* Invited Lecture 3: **Alex Byrne**				
10:15 - 10:45	Coffee break				
10:45 - 13:00	*Auditorium* Invited Symposium 3: ***Representations of space*** **• Leonard Talmy • Joost Zwarts • Jean Mark Gawron • Peter Svenonius**				
13:00 - 14:30	Lunch break				
14:30 - 16:00	*Room 309*: Paper Session 18 ***Rationality*** • **Konrad Talmont-Kaminski** • **Kerry McColgan, Liz Robinson, Sarah Beck and Martin Rowley** • **Andrew J. B. Fugard, Mary E. Stewart and Keith Stenning**	*Room 409*: Paper Session 19 ***Vision and action*** • **Thor Grünbaum** • **Ophelia Deroy** • **Valeria Giardino**	*Room 509*: Paper Session 20 ***Placement*** • **Elena Zinchenko and Jesse Snedeker** • **Anne-Katharina Ochsenbauer** • **María Ponte Azcárate and Margarita Vázquez**	*Room 809*: Paper Session 21 ***Vagueness*** • **Richard Breheny, Heather Ferguson and Napoleon Katsos** • **Gottfried Vosgerau** • **Elia Zardini and Paula Sweeney**	*Room 909*: Paper Session 22 ***Action*** • **Antonia Hamilton** • **Hong Yu Wong** • **Nicholas Shea**
16:00 - 16:30	*Laptop Area:* Coffee break and Poster Session 3 **13. Zeynep Emine Okur, Nilay Senturk, Hande Sungur and Munir Gunes Kutlu; 14. Nancy Mcquaid and Jeremy Carpendale;** **15. Birgit Knudsen and Ulf Liszkowski; 16. Mikolaj Hernik; 17. Péter Bodor; 18. Erika Marchetto and Luca L. Bonatti**				
16:30 - 18:30	*Room 309*: Symposium 4 ***Communicative intentions in infancy*** • **Gerlind Grosse** • **Gergely Csibra** • **Vasudevy Reddy** • **Richard Moore**	*Room 409*: Paper Session 23 ***Direct perception*** • **Hemdat Lerman** • **Michael Sollberger** • **Keith Allen** • **Tom Stoneham**	*Room 509*: Paper Session 24 ***Social information*** • **Fabrice Clément and Laurence Kaufmann** • **Elena Hoicka** • **Maria Graefenhain, Malinda Carpenter, Tanya Behne and Mike Tomasello** • **Olivier Morin**	*Room 809*: Paper Session 25 ***Folk psychology and poverty of stimulus*** • **Delphine Blitman** • **Marion Godman** • **Claire Hewson** • **Carlos Mauro and Susana Cadilha**	*Room 909*: Paper Session 26 ***Cognition, concepts, misidentification*** • **Olle Blomberg** • **Peter Fazekas** • **John Lumsden** • **Krisztina Orban**
20:00 - 24:00	*Columbus Pub and Restaurant*: **Conference Dinner**				

SUNDAY

9:00 - 10:15	*Auditorium* Invited Lecture 4: **Giacomo Rizzolatti**				
10:15 - 10:45	Coffee break				
10:45 - 13:00	*Auditorium* Invited Symposium 4: ***Action and perception: Associations and dissociations*** **• Melvyn Goodale • Jessica Sommerville • Josef Perner • Pierre Jacob**				
13:00 - 14:30	Lunch break				
14:30 - 16:30	*Room 309*: Paper Session 27 ***Theory of mind*** • **Daniel Acquah, Fenja Ziegler and Peter Mitchell** • **Judith Bek and Suzanne Lock** • **Szabolcs Kiss and Zoltán Jakab** • **Giulia Piredda**	*Room 409*: Paper Session 28 ***Knowledge/propositions*** • **R Geary-Griffin** • **Tahir Wood** • **Elia Zardini** • **Manuel García-Carpintero and Teresa Marques**	*Room 509*: Paper Session 29 ***Learning and acquisition*** • **Zoltan Dienes** • **Víctor Verdejo** • **Tevfik Aytekin** • **Jussi Jylkkä**	*Room 809*: Paper Session 30 ***Explanation*** • **Ferenc Huoranszki** • **Panu Raatikainen** • **Albert Newen and Tobias Schlicht**	*Room 909*: Symposium 5 ***Thought disorders*** • **Katalin Farkas** • **Peter Fonagy** • **George Tudorie** • **György Gergely and Ágnes Kovács** • **Csaba Pléh**

Program and Abstracts

Dare Baldwin
University of Oregon

Action on action:
Understanding how humans discern meaning in motion

In *2001: A Space Odyssey*, Arthur C. Clarke foretold the advent of HAL, a computer system who could interpret our actions and, not liking their import, chose to eliminate us. Yet in the reality of 2009, we know relatively little about how any device—whether organic or inorganic—can be assembled to redescribe human motion in meaningful terms. What machines currently do is to religiously record motion itself; they can't yet make sense of it. Only humans seem able to do that, at least to any appreciable level of subtlety. And this seems to begin at a remarkably early age: infants as young as 3-5 months already inject meaning into motion. As well, parents take steps to help them do so, producing a special form of motion for infants—"motionese"—with exaggerated structure that is riddled with clues to meaning. When things go wrong with the unfolding of this crucial human cognitive skill for action processing—as appears to be the case in autism, for example—developmental havoc ensues. Deficits in action processing compromise development in a profound way, from social functioning to language acquisition. In this talk, I will report on efforts within cognitive science to flesh out, in detail, how humans acquire the skills enabling them to accomplish the everyday interpretive feat that is human action processing.

Rational imitation: Human infants, apes and dogs

Organizer: **Louise Röska-Hardy**
Universität Witten

The ability to selectively imitate others' actions is thought to play a critical role in typically human development, social learning and cultural transmission. Using an imitation paradigm,

Gergely, Bekkering and Király (2002) found that 14-month-old infants engage in selective imitation when re-enacting a goal-directed action, in which a model demonstrated a novel head action, instead of a more efficient hand action. Infants who observed a demonstrator switch on a light-box with her head, even though her hands were free, were more likely to copy that action than infants who observed a demonstrator who used this novel means due to some constraint, e.g. her hands were occupied. Gergely and collaborators interpreted this finding as evidence for infants' understanding of "rational" or efficient action, i.e. in re-enacting infants evaluate the rationality of the means in relation to the goal and the situational constraints of the actor. Other researchers adopt a cognitively richer explanation of the finding in terms of infants' understanding of others' intentions as rational choices of action plans. In this interpretation infants' ability to engage in "rational" imitation is taken to show that they not only understand the actor's goal, but also her intention, the plan of action she chooses to achieve the goal, including the rational basis, the reasons, for this choice.

The ability to "rationally" or selectively imitate is, however, not limited to humans. Rational imitation has been demonstrated in nonhuman species using imitation tasks similar to those of Gergely et al. Buttelmann, Carpenter, Call and Tomasello (2007, 2008) found that encultured chimpanzees and orangutans engage in rational imitation, while Range, Virányi and Huber (2007) have found evidence of selective imitation in domestic dogs. These findings raise questions about humans' and nonhuman animals' understanding of goal-directed actions that bear on debates in developmental and comparative psychology, cognitive ethology and philosophy. What does the ability to engage in rational imitation reveal about human-specific social-cognitive abilities? Are the imitative abilities observed in human infants, great apes and dogs underwritten by different cognitive processes? How is the ability to selectively imitate to be characterized in the light of comparative findings?

The symposium convenes Gergely, Király, Buttelmann and Huber to present experimental data and to discuss the nature of rational imitation and its implications for understanding the social and cognitive abilities of humans and nonhuman animals.

Ildikó Király and György Gergely
Institute for Psychology, HAS, Budapest

Relevance or resonance?
Selective imitation in communicative context

Recent research has provided convergent evidence that early imitative learning is a selective, non-automatic, and inference-guided process (Gergely, Bekkering & Kiraly, 2002). According to natural pedagogy theory (Gergely & Csibra, 2006) infants' selection as to what to learn and reenact from novel actions they observe is a) sensitive to their evaluation of the rationality or efficiency of the action in relation to its outcome within the situational constraints, and b) sensitive to the presence of ostensive communicative cueing context and relevance-guided manifestations of cognitively 'opaque' contents by the demonstrator.

This view has been recently challenged by Paulus et al. (submitted) who argue that imitative learning is non-inferential and is mediated by motor resonance through automatic direct matching by the mirror neuron system. They reported a modified version of the classic head touch study (Gergely et al., 2002) to demonstrate that the selective imitation effect did not involve evaluation of the rationality of the modeled action, but could be accounted for in terms of whether the action could be mapped onto an already existing motor scheme that the infant could perform.

Here we defend the natural pedagogy view of selective imitation against this challenge on three grounds: 1. We discuss a number of other, structurally different replications of Gergely et al.'s selective rational imitation finding that the motor resonance hypothesis cannot account for; 2. We argue that the motor resonance model cannot account for recent data showing that selective imitation of the head-touch action disappears when it is observed in a non-communicative 'over-seeing' context; and 3. We present a new study that modifies Paulus et al.'s procedure in such a way that the motor resonance account and the natural pedagogy account generates contrary predictions. Our preliminary results provide strong support for the inferential relevance- and rationality-sensitive account of selective imitation.

Ludwig Huber
University of Vienna

Selective imitation and emulation in dogs

In this talk I would like to present some new empirical data from dogs that address the selectivity problem of imitation research. In a selective imitation study with dogs that followed the design and aim of the rational imitation study with human children (Gergely et al. 2002) we found both faithful copying (imitation) and selective non-imitation (emulation) of a conspecific model. This model showed a peculiar, non-default ('inefficient') action in two conditions. In the first trial after observation, dogs imitated the nonpreferred action only when they observed the model without constraints that could ex-

plain her choice. If the model's behavior was justified by constraints (the default action was impossible at the time of demonstration), observers used their own efficient action (thereby showing emulation rather than imitation). Consequently, dogs, like children, demonstrated inferential selective imitation. In a recent Do-as-I-do study, a dog was found to reproduce the results of demonstrated object manipulations at the expense of movement details. In so-called 'vacum trials', in which the human demonstrator showed non-sense actions or actions without the usual objects, the dog was sometimes trying to make sense of it by searching for the absent object (emulation). Only if shown pure body movements (gestures), behavioural matching comes to depend on the immediate conversion of visual input into motor output (imitation). The somehow surprising results of these studies have implications for the search for the neuronal mechanisms underlying imitation and its evolutionary origin(s).

David Buttelmann
Max Planck Institute for Evolutionary Anthropology

Rational imitation in great apes and human infants: The Leipzig view

In my talk I will shed light on rational imitation from different perspectives. First, to show that the ability to imitate rationally is not limited to humans, I will present data on all four species of great apes' performance in two different rational imitation paradigms. In the second half of my talk I will focus on the question of what understanding rational imitation is based on. I will present data that seem to support a cognitively rich explanation of the current findings in terms of infants' (and, possibly, great apes') understanding of others' intentions as rational choices of action plans.

If great apes are capable of rational imitation, why are they so unlikely to actually imitate others? To answer this question I will end by presenting a recent study that suggests that it is not social-cognitive differences between humans and non-humans that led our species to develop a sophisticated form of culture including collaboration, teaching and norms.

14:30 - 15:00

Nicholas Allott and Hiroyuki Uchida
University of Oslo

Natural language indicative conditionals are classical

It is often claimed that inference schemas from Classical Propositional Logic (CPL) such as *weakening* (which leads to *antecedent strengthening*) and *transitivity* are intuitively invalid for indicative natural language conditionals.

Because of this, 1) it is generally supposed that the meaning of 'if' cannot be the simple truth-functional connective, material implication; and 2) CPL has been assumed to be inadequate to explain spontaneous propositional inferences and new inference formalisms have been proposed, such as Relevance Logic or Bayesian inference. However, these alternatives create new holes in the data coverage and require additional tools to be empirically adequate. Moreover, these alternatives lack some of the nice formal properties of CPL, such as a general completeness with regard to a well-identified semantics.

We show that in apparently non-monotonic reasoning with conditionals, the context is shifted mid-inference, which leads to a re-evaluation of some of the premises. In fact, none of the typical inference data show that classical properties are lost at the level of the underlying logic. In our paper, we first discuss some alleged counterexamples to the classical schemas. We then explain how these apparently non-classical properties arise at the level of performance. After that, we show that CPL can deal with some cases of apparently non-monotonic reasoning with a pragmatically motivated assumption that only a relevant sub-set of potentially usable premises are considered at each stage of a spontaneous inference. Finally, we sketch a performance algorithm that supports our analysis.

15:00 - 15:30

Eva Rafetseder and Josef Perner
University of Salzburg

Children's counterfactual reasoning and their experience of regret

Reflecting on ways in which events might have turned out better (counterfactual reasoning) is associated with the experience of regret. Some developmental studies suggest that even three year old children are able to reason counterfactually. However, in studies which assessed the feeling of regret, children had difficulties until six years or older. This discrepancy seems puzzling.

One hypothesis is that the tasks used to elicit regret are needlessly complicate for assessing the feeling of regret in children. The second hypothesis is that younger children's correct answers to counterfactual questions might not be based on counterfactual reasoning but on basic conditional reasoning (typical regularities are applied to counterfactual questions without regard for actual events).

In two conditions pre-schoolers, adolescents and adults had the choice between two boxes. In condition 1, they were asked how happy they are with what they got before (Baseline Question) and after (Test Question) they had seen what they could have got. In condition 2 participants were only asked after (Test Question) they had seen what they could have got.

Adults and adolescents older than ten years evaluated the Test Question of condition 2 significantly more negatively than the Baseline Question of condition 1 while preschoolers evaluated both questions similarly. Participants younger than ten might not reason counterfactually where they compare what they actually got with what they could have got. The Test Question of Condition 1, however, was evaluated more negatively than the Baseline Question even by preschoolers indicating that double questioning might create false positives.

15:30 - 16:00

Patrick Burns, Sarah Beck and Kevin Riggs
University of Birmingham

What might have been: Feelings of regret and counterfactual understanding in children

Feelings of regret rely on a comparison of current reality to what might have been. Previous research has indicated that children by 5-6-years of age are able to ignore reality and think about what might have been, i.e., counterfactual thinking (Beck, Robinson, Carroll & Apperly, 2006). However, it is not known whether the ability to think about counterfactuals is either necessary or sufficient for children to feel regret. We investigated the relationship between counterfactual understanding and feelings of regret. Children played a game with marbles in which they won stickers. On each trial there were two possible outcomes. The game was fixed so children won either 1 or 2 stickers. On some of those trials, however, the counterfactual outcome led to winning more stickers (regret trials) and other trials the counterfactual outcome led to winning the same amount of stickers as the actual outcome (baseline trials). Children showing regret were those who rated themselves as less happy on the regret trials than on the baseline trials. On other trials children were asked if the marble could have gone anywhere else (an open counterfactual question). Our results indicated that the emergence of regret feelings in children and their ability to think about alternatives to reality dissociated. Implications for models of children's counterfactual thinking are discussed.

14:30 - 15:00

Shin Sakuragi
Meiji Gakuin University

Propositional memory and retention

We have an obvious intuition about any types of memory: any memory must be somehow grounded in the past. Thus, if one remembers something, there must be something relevant in the past. In this paper, I call this relevant element in the past the 'source' of a memory. A type of memory may be characterized in many different ways. But, what fundamentally distinguishes one type of memory from others must be the traits of its source and their relation. This paper focuses on a particular type of memory, propositional memory, and tries to illuminate the concept of propositional memory in light of its relation to the source. There are four, rather historical proposals to the concept of propositional memory: the empiricist theory, the knowledge retention theory, the memory trace theory and the memory connection theory. I examine those four theories in turn, and raise serious questions about each of them.

15:00 - 15:30

Elizabeth Irvine
University of Edinburgh

Consciousness, d' and minimally flexible responses

Awareness is now often measured by d', an objective measure of a subject's sensitivity to stimuli. Although it has been argued (Holender, 1986) that d' measures the ability to generate intentional (hence conscious) responses, d' can also be characterised as a measure of unconscious information processing. Blindsight is the standard counterexample to the use of d' as a measure of awareness. Although d' is an inadequate measure of awareness in blindsighters I will argue that the differences between visual processing in blindsight and normal vision means that d' may still be an adequate measure in normals. Instead, the idea developed in this paper is that 'minimally flexible' responses, such as detection and n-AFC responses near d'=0, can be generated without conscious perception of stimuli. The role of expectation and learned associations in forming minimally flexible responses will be explored by considering Kunde et al.'s (2003) action trigger account of semantic priming paradigms, and alternative interpretations of Thorpe's (1996) ultra-rapid visual categorisation. A Bayesian model of expectation will be developed in which unsupervised learning generates priors that modulate processing and categorisation in forced choice detection tasks. In this case neuronal 'expectations' play the role of 'intentions' and provide the link between incoming visual information and responses. The way that minimally flexible responses can be generated in Bayesian systems suggests that d' does not adequately index awareness.

15:30 - 16:00

Silja Freudenberger
Universität Bremen

Is 'remembering' a mental state?

Most contemporary philosophers and cognitive scientists take the concepts of ‚remembering' and ‚memory' to be factive: If it is not the case that p, one can believe to be remembering that p, and it may seem as if one remembers that p. But if one is really remembering that p, p must be the case. Only a minority employs an ostensible concept of 'remembering' that makes no presupposition regarding the truth of p. In addition to a widespread preference for the 'factive' over the 'ostensible' concept there is a tendency to analyze 'remembering' in terms of mental states.

Bernecker, one of the (few) philosophers currently working on memory, explicitly states that

1) 'remembering' is a kind of mental state and
2) „‚remember that p' implies that the proposition in question is true."

But 1) and 2) cannot be held simultaneously without drastically changing our concept of 'mental states'. If 'remembering' implies the truth of what is remembered, it cannot be a mental state in the current sense. If, conversely, 'remembering' is thought of as a mental state, the truth of memory content cannot simply be stipulated. Since either 1) or 2) must be jettisoned, one should give up on analyzing 'remembering' as a kind of mental state and treat it as an epistemic state. If one retains a factive concept of 'remembering', the question of the truth of what is remembered is of paramount importance. This illuminates the point that an analysis of 'remembering' always has evaluative epistemological questions central to it.

14:30 - 15:00

Stuart Crutchfield
University of Glasgow

Can we experience empty space?

In this paper, I will examine what I take to be an interesting puzzle about spatial representation in the different sensory modalities. The issue is centred on whether or not we can represent empty space in perceptual experience, and which senses allow us to do so.

The form of this paper will be as follows: firstly I will make a distinction between two types of perceptual field. I will then claim that the difference between these two types of perceptual field is that in one, empty space can be represented, and in the other it cannot. I will then make the point which will be the central focus of the paper: that in order to determine which kind of perceptual field is present in a given case of perception, and thus determine whether empty space is represented or not, we need some principled way of distinguishing between a genuine experience of an absence, and a mere absence of experience. I am sceptical that we have such a principled method, and I will devote the rest of the paper to demonstrating why neither phenomenological considerations, nor empirical ones resolve this issue for us.

15:00 - 15:30

Richard Gray
Cardiff University

Introspection and the content of experience

Things are not always as they seem. Less obviously, our experience may not always be as it seems. The possibility of such is of interest in its own right. But it is also of interest for the light it can shed on the issue of the content of experience. Having distinguished the kind of case in which I am interested from near relatives, I outline an example involving touch and heat perception in which our experience may not be as it first seems. It prima facie seems to us as if an object feels to be hot, but a particular line of argument is canvassed in support of the view that our experience does not in fact seem this way. On this deflationary view of the contents of experience there is less to those contents than might first appear. I then contrast this view with an inflationary view in which there is more to the character of experience than the sum of its parts. I conclude by relating this case to discussions of the representation of causal relations in visual experience.

15:30 - 16:00

Işık Sarıhan
Middle East Technical University

Experience of darkness and blackness: A case for qualia realism

Experience of darkness and blackness are phenomena that are rarely touched upon within the discussions of phenomenal content. I will argue that reflecting on them gives us more reason to believe in qualia, the manifest qualitative properties that are the properties of the experience itself, instantiated by the relevant information processing system. I will also propose that the experience of darkness and blackness pose problems for some approaches like naïve realism, versions of representationalism and the relational theory of experience, the kind of theories that assume the manifest qualitative properties of experience to be properties of external entities.

We know that the experiences of color black and darkness result from failures to detect something, which is electromagnetic radiation. At the same time, they have a positive phenomenology. By a 'positive phenomenology', I mean that experiencing them is not like 'experiencing nothing.' They involve qualities that we can demonstratively pick out and apply trans-temporal identity criteria. They don't feel like failures to detect something: The color black looks like any other color quality on the surface of an object, the darkness of a volumetric area like the outer space looks like a quality of that space. Knowledge arguments about phenomenal experience apply equally well to darkness: Blind people, lacking a phenomenal visual field, don't know what it is like to see darkness. (see Sorensen 2008 for similar arguments.)

If a theory's aim is to successfully show that the qualitative content of the mind is exhausted by external properties, it should be able to reduce those properties to entities external to the mind-brain. I have in mind externalist representationalist theories like Tye (2000) or Byrne and Hilbert (2003). But as there are no external correlates for the qualities of darkness and blackness, while they still have a positive phenomenology, it is unclear what are they to be reduced to. For similar reasons, the same problem holds for relational theories of experience (eg. Campbell 2002) or naïve realism.

To externalize these properties, someone can adopt a strategy of welcoming absences into her metaphysics. Sorensen (2008) adopts such a strategy and proposes that "absence of light" is an entity that can be directly perceived. One problem with this approach is its anthropocentricism: Our experience of darkness does not result from there being no electromagnetic radiation around, but from there being no radiation that our eyes can detect. There are many wavelengths of radiation around us which we can't detect. If equated with "absence of light", the darkness we experience would never be veridical. Another related problem is that if we are directly perceiving darkness as an external entity, it has to be located somewhere. But waking up experiencing complete darkness, we are not in a position to know the size of the space where that absence is located: It is possible that we can be in a room or in a coffin, and our information processing systems naturally don't have the resources to figure it out.

Another oddity about these experiences is that the qualities manifested would disappear if we had higher detection mechanisms. Our experience of a black surface results from our ignorance about that surface, although it doesn't seem to be that way from the naïve phenomenological perspective. A surface seen to be black or an area seen to be dark would cease to look that way if we had the right kind of perceptual systems to pick up higher or lower wavelengths and produce relevant representations. It would be a strange consequence for certain theories of perceptual experience if systems with more sophisticated epistemic mechanisms would lose certain manifest knowledge about their environments. This doesn't pose a problem for a subjectivist theory.

As some authors like Hardin (1988) have emphasized, the darkness and blackness we experience seems to result from a contrastive, inferential process. It is an internally generated hypothesis about the world. This account is in harmony with the views that see perceptual experience as a hypothesis generation process along with its manifest qualities, views that have long been common in scientific circles but not popular among today's philosophers of perception.

Byrne, A. & Hilbert, D.R. (2003) Color realism and color science. Behavioral and Brain Sciences. 26, 3-64.

Campbell, J. (2002) Reference and Consciousness. Oxford.

Hardin, L. (1988) Color for Philosophers: Unweaving the Rainbow. Hackett: Indianapolis.

Sorensen, R. (2008) Seeing Dark Things: The Philosophy of Shadows. Oxford.

Tye, M. (2000) Consciousness, Color and Content. MIT Press.

14:30 - 15:00

Josep Lluís Prades
Universitat de Girona

The conjunctive fallacy and the ghost of reason

In my opinion, contemporary philosophy of action is under the illusion of what I will describe as the "conjunctive fallacy". Intentional action can be rationalised, at least in most common cases. Rationalisations are explanations that describe the reasons for which we act, or for which we form our intentions to act. The conjunctive fallacy is the fallacy of providing a conjunctive account of the process of forming an intention. The assumption is that when someone makes up her mind, it must be true both (i) that she has some reasons to make up her mind in the way she does and (ii) that those reasons she has are moving her in the adequate way. What is crucial for the conjunctive fallacy is the idea that the truth of (ii) is not guaranteed by the truth of (i). The fallacy then requires the assumption that *in the relevant sense of "reason" in which intentional action is action for reasons*, the agent could have had those reasons without forming the corresponding intention. We can be moved by our reasons because our having those reasons is an independent relation from the relation of being moved by them in the appropriate way .This fallacy is common both to Humean conceptions of motivation and standard non Humean accounts. I will try to explain why the conjunctive fallacy cannot provide a coherent account of the phenomenon of motivation. Then, I will argue that the source of the fallacy is a mistaken description of certain linguistic data connected to the form of standard rationalisations. In the end, my position points towards a radical teleological interpretation of the phenomenon of acting for reasons. In the sense in which intentional action is normally acting for reasons, it does not require the independent relation of having reasons to act. The reasons for which we act are just the content of the intention with which we act.

15:00 - 15:30

Jordi Fernandez
University of Adelaide

Self-deception and self-knowledge

I offer an account of self-deception. Essentially, the proposal will be that self-deception is a failure of self-knowledge wherein the subject should believe that she has a certain belief but she believes that she does not. To develop this idea, I will put forward a model of self-knowledge according to which our reasons for having a belief are identical with our reasons for thinking that we have that belief. If this model is correct, then we should not think that we lack a certain belief when we have reasons for that belief. My suggestion is that this is an epistemic obligation that the self-deceived subject fails to meet.

15:30 - 16:00

Gunnar Björnsson and Karl Persson
University of Gothenburg, Linköping University

Judgments of moral responsibility – a unified account

Recent work in experimental philosophy shows that folk intuitions about moral responsibility are sensitive to a surprising variety of factors. Whether people take agents to be responsible for their actions in deterministic scenarios depends on whether the deterministic laws are couched in neurological or psychological terms (Nahmias et. al. 2007), on whether actions are described abstractly or concretely, and on how serious moral transgression they seem to represent (Nichols & Knobe 2007). Finally, people are more inclined to hold an agent responsible for bringing about bad than for bringing about good side effects that the agent is indifferent about (Knobe 2003).

Elsewhere, we have presented an analysis of the everyday concept of moral responsibility that provides a unified explanation of paradigmatic cases of moral responsibility, and accounts for the force of both typical excuses and the most influential skeptical arguments against moral responsibility or for incompatibilism. In this article, we suggest that it also explains the divergent and apparently incoherent set of intuitions revealed by these new studies. If our hypothesis is correct, the surprising variety of judgments stems from a unified concept of moral responsibility.

Knobe, J. (2003) Intentional Action and Side Effects in Ordinary Language. Analysis 63, pp.190–93.

Nahmias, E.; Coates, J.; Kvaran. T. (2007) Free will, moral responsibility, and mechanism: experiments on folk intuitions. Midwest studies in Philosophy XXXI

Nichols, S.; Knobe, J. (2007) Moral responsibility and determinism: the cognitive science of folk intuitions, Noûs 41:4, 663-685.

14:30 - 15:00

Jiaxi Liu and Stefan Kaufmann
Northwestern University

Comparing the perception of meaningful discourse structure in music and language

Despite common belief that music lacks truth-conditional meaning, recent evidence of similar neural processing of the syntactic and semantic aspects of the music and language suggests that they share much in common (Steinbeis and Koelsch 2007). However, this similarity seems to break down at different structural levels. Music studies have proposed that listeners attend to local but not global structure (Tillman and Bigand 2004, Deliège et. al. 1997). Linguistic data have yet to distinguish the level of meaningful structure perception. Thus, this study aims to make parallel findings for both domains, additionally comparing musicians to nonmusicians.

Original musical and textual compositions were analyzed for tree structure by the Generative Theory of Tonal Music (Lerdahl and Jackendoff 1983) and the Rhetorical Structure Theory (Carlson et. al. 2001), respectively. The branches at each tree depth were cut and randomized as audio-visual music clips and visual text slides in iMovie projects. Collegiate native English speakers – 50 musicians and 50 nonmusicians – were asked to recreate what they considered the original work in a puzzle task.

The resulting ordered strings were analyzed using edit distance, revealing that successful recreation was overall independent of subject and stimulus type. Musicians performed better than nonmusicians for music only at intermediate tree depths ($p=0.03$). Cluster analyses suggested that musicians attended to structural (global) cues in their recreation process while nonmusicians relied on surface (local) cues. These novel findings provide empirical support for a differing compositionalistic tendency in music and language as perceived by musicians versus nonmusicians.

15:00 - 15:30

Emily S. Cross, Jens Brauer and Derek van Ott
Max Planck Institute for Human Cognitive and Brain Sciences

Individual differences in cognitive processing

Through the execution of complex cognitive control processes, such as accelerating when a green traffic light is illuminated, and braking when the light turns red, we are able to flexibly and dynamically respond to the changing demands of our environment. Past functional magnetic resonance imaging and event-related potential (ERP) research using task-switching paradigms has highlighted the prefrontal and parietal contributions to this cognitive control task (Brass et al., 2005). In terms of the causal role these regions might play in cognitive control in a task-switching paradigm, data from transcranial magnetic stimulation (TMS) to these two regions have been equivocal, and suggest that the relationship between prefrontal and parietal activity might be more complex than previously characterized. Here we use ERPs in a similar paradigm to that employed by Brass et al. (2005) to determine whether individual differences in P300- and N400-like components might account for the mixed TMS findings to date. Preliminary results demonstrate that when participants are grouped into fast and slow responders (based on response times in the behavioral task), significant differences emerge in ERPs over midline frontal and parietal electrodes. These findings suggest that individual differences might be able to be capitalized upon to improve TMS inquiry into frontal and parietal contributions to cognitive control.

15:30 - 16:00

David Papo
Technion

How can we study reasoning in the brain?

A recent comprehensive review of neuroimaging studies of reasoning (Goel, 2007) proposed that, despite their chaoticity and inconsistencies, their results point towards a general description of reasoning in terms of a fractionated system dynamically reconfigured in response to specific task and environmental cues.

Here, we propose that existing results' inconsistencies, lack of specificity and robustness stem from essential limits of standard (often covert) assumptions (characteristic length of cognitive function, separability of cognitive subcomponents), approximations (strict functional localization), and descriptions (static averaged measures) in cognitive neuroimaging. These limits emerge when facing the exceptional challenges represented by reasoning, namely an extremely complex brain-behaviour-cognitive process relationship, intrinsic variability, and non-trivial characteristic temporal length.

We argue that delineating the neural correlates of reasoning implies describing a long dynamical process, with no macroscopic behavioural correlates most of the time, in terms of meaningful microscopic fluctuations in neural activity.

Considering the brain as a non-linear spatially-extended out-of-equilibrium dynamical system, with similar properties at various non-separable spatio-temporal scales, and dynamically reconfiguring unstable spatiotemporal patterns of brain activity, reasoning episodes can be described in terms of generic multiscale dynamical and statistical properties of fluctuations of the topology of the brain's functional connectivity.

Analytical tools borrowed from statistical mechanics and network theory accounting for fluctuations at various temporal (from milliseconds to minutes), and spatial (from short-range local, to long-range whole-brain activity) scales are proposed which quantify, rather than disregard, nonstationarity, variability, spatiotemporal extension, and multiscaleness. Some implications for the observability of reasoning and for experimental designs are discussed.

Poster 1

Yin Wang and Antonia Hamilton
University of Nottingham

Eye contact modulates mimicry of intransitive hand movements

Humans have a tendency to automatically mimic other people's actions. This mimicry is pervasive among people's daily social behaviors and facilitates social interaction. Although mimicry is fast, unconscious and relatively automatic, it may also be modulated by top-down social factors such as liking and desire to affiliate. In this study we tested if direct social eye contact modulates automatic mimicry. We adopted a stimulus-response compatibility paradigm used by Heyes and colleagues, in which participants respond to a hand-opening or hand-closing stimulus by either opening or closing their own hand in different blocks. Before each hand action trial, we presented a movie of a woman naturally performing a head movement which resulted in direct eye contact or no eye contact. We found that direct gaze elicits faster hand movement reaction times than averted gaze. Most importantly, the results showed a significant interaction between eye contact and mimicry, where direct gaze enhanced the reaction times for congruent trials compared to incongruent trials, while averted gaze did not. This interaction was stronger when the delay between eye contact and hand movement was 800 msec. Our results demonstrate that even rapid mimicry in an experimental setting can be substantially modulated by social eye contact signals. Thus, mimicry both facilitates social interaction and can also be enhanced by social factors.

Poster 2

Anika Fiebich
Ruhr-Universität Bochum

Structure, content, and constituents of self-representations

To which extent is the self-concept of an individual constituted by social interactions? First of all, I introduce a distinction between the self (i.e. a biological system being self-conscious and thereby establishes representations about himself) and the self-concept (i.e. the unity of the contents of these representations). The leading question concerns only the self-concept. In the literature, we find two contradictory views: proponents of social-cognitive theories of self-concepts claim that a human self-concept is completely constituted by a social group (Baldwin 1897; Mead 1934), whereas proponents of individual-cognitive theories of self-concepts suppose that the constitution of a self-concept is primarily based on a standard cognitive ontogenesis (Piaget 1970; 2003). I argue that such monodimensional views are unconvincing in the face of a theory that gives credit to both dimensions and defend a developmental theory of self-concepts. The main evidence supporting this hypothesis comes from developmental psychology and anthropology. Whether the self-reference is implicit or explicit, and whether the individual experiences himself just in relation to inanimate objects or to other persons as well is due to the structure of self-representation at each ontogenetic stage. The present inquiry shows that there is a shift of dominance in the constitutive elements of self-representations from individual-cognitive to social-cognitive abilities during the first four years of life indicating that a full-blown self-concept is essentially relying on social-cognitive abilities.

Poster 3

Yuiko Sakuta, Hanae Ishi, Shigeru Akamatsu and Jiro Gyoba
Waseda University

Mere exposure effect and unconscious processing of facial impression

Many researchers have shown that repeating presentation of stimuli enhances cognitive or affective evaluation, especially preference, of the stimuli (mere exposure effect). However, it has not been discussed enough how subjective factors such as affective impressions or physical attractiveness affect the mere exposure effect. It has not also been discussed enough whether such changes occur only on the viewer's attitude or also on memory representation. If the representation is changed by the repetition, images (distracter) which have better impressions would be confused with original images (target). In contrast, if the representation is not changed, such confusion wouldn't be occurred and it can be said that only the viewer's attitude is changed by the repetition. In our study, we used face images with manipulating facial impressions quantitatively on a particular dimension. We especially focused on the dimension regarding "elegance" because we have confirmed the faces with elegant impression more easily cause mere exposure effect comparing to the other kinds of impressions (Sakuta et al., 2008). Experiments consisted of 2 factorial designs: duration (16ms or 500ms) and level of elegant impressions or attractiveness of distracter (middle or high). Target stimuli were repeatedly exposed in the exposure phase and then presented again with distracters in the preference ratings and recognition test phases. In the recognition test, forced choice paradigm was used in the Experiment 1, and yes-no test was used in the Experiment 2. As the result, it was suggested that our hypothesis would be supported when the stimuli were subliminally exposed.

Poster 4

Tomohiro Kumagai
Tohoku University

The power and "Kantian imperative":
The effect of power salience on interventional decision in the loop dilemma situation

Psychological studies concerning morality have indicated that it depends on context, situation or frame. Although some moral dilemma setting (e.g. the footbridge dilemma) endangers Kantian imperative (it is impermissible to use a person merely as a means to an end.), other types of dilemma (e.g. the trolley dilemma) did not. In this study, using two types of moral dilemma (the loop dilemma and the trolley dilemma), it examined whether moral dilemma is actually caused by Kantian imperative. Also, participants in the power salience condition were, first, asked to find power related word ("word-searching task"); then asked to imagine that they were in a powerful position. Participants in the neutral condition was asked to find non power word, and then asked to imagine that they were in a zoo. Next, they read scenarios which describing the trolley dilemma or the loop dilemma and answered a series of questions concerning moral decision. As a result, though the hesitation caused by moral dilemma was larger when they were in the loop dilemma than the trolley dilemma, the number of decision to intervene to save five person was increased by power salience only when the participants were in the loop dilemma. I discussed the relationship between morality and external factors.

Poster 5

Wouter Voorspoels and Gert Storms
K.U.Leuven

Lexical information and concept representation in biological categories

In a cross-linguistic study we tested the hypothesis that lexical information – i.e., information in the word used to denote a category – influences the conceptual representation of the category. E.g., in English the word 'starfish' seems to imply that the category to which the word refers, is a subspecies of fish, while the Dutch word for starfish ('zeester') does not. Does this result in different concept representation of the concept starfish in Dutch and English language users? In the present study we evaluated the effect of lexically informative elements on three variables deemed important in concept representation: typicality, inductive strength and similarity.

In a first task, Dutch and English participants rated the typicality of verbal items (e.g., 'starfish') for a superordinate category (FISH). The items were either lexically informative in English or in Dutch. In a second task Dutch and English participants judged the probability of the presence of a certain characteristic in a certain category; given the presence of that characteristic in another category. The categories were lexically related either in English ('bumblebee' and 'honey bee') or in Dutch ('varken' (pig) and 'aardvarken' (aardvark)). In a third task, English and Dutch participants were asked to judge similarity between two categories. Again the paired categories were lexically related either in English or in Dutch. A statistically significant effect of lexical information was observed in the typicality and the similarity tasks, and a similar, yet not significant trend in the third task. This suggests that the accidental use of informative lexical elements influences conceptual representations.

Poster 6

Gabriella Felhősi, Rozalia Ivady and Csaba Pléh
Budapest University of Technology and Economics

Perspective dependency in a visuo-spatial task in two developmental disorders:
Autism and Williams syndrome

In our study we compared the performance of two populations with neurodevelopmental disorders, both of particular interest to the study of cognitive development: Williams Syndrome and autism. Williams syndrome children are severely impaired in the area of visuo-spatial memory, while children with autism also show specific divergences in spatial processing and reduced spatial working memory abilities. Additionally, both disorders are characterized by the dominance of local versus global cues in visual perception.

In the experiment participants had to memorize a spatial array, then turn 180 degrees and choose between two identical but counterdirectional scenes, thus choosing between two frames of reference: egocentric or allocentric. Egocentric reference highlights the person's own body of as a point of reference, while allocentric perspective presupposes taking an external point or direction in space as reference. We studied subjects' behaviour in tasks of varying complexity (Levinson, 1996), trying to influence their choices of frames of reference by introducing intrinsic cues in the array (Li and Gleitman, 2002), which primed either egocentric or allocentric perspective.

Both populations proved significantly more egocentric in their choices than their mental age matched control groups. Their pattern differed though in a relevant aspect, children with Williams syndrome being insensitive to influencing intrinsic cues. The results of the group with autism showed some ability of perspective shifting while also contribute to the debate of social impairments being related to an excess vs. lack of egocentrism in the disorder.

Climate change and sustainability: Psychological, cognitive, and philosophical perspectives

Organizer: **Annette Hohenberger**
Middle East Technical University

Climate change and striving for sustainable development pose unprecedented challenges to mankind. While hitherto these topics have been discussed mainly within the natural and life sciences and solutions have been sought on the political, economical, ecological, and technological level, it becomes increasingly clear that they also have important sociological, psychological, pedagogical, and philosophical implications. Climate change may dramatically affect the life of billions of people in various respects: their sheer existence, level of economical subsistence, pursuit of happiness, family planning, work, personal life-style, attitudes, etc. Therefore, in this symposium we propose psychological, cognitive, and philosophical perspectives on climate change and sustainability. From a psychological perspective, the interaction between natural hazards and human behavior may mitigate or exacerbate risk, as in the case of climate change. From a cognitive perspective, given the cognitive outfit we have, we may ask what mental (and interfacing) systems might be crucial for reasoning about and acting on these problems. From a philosophical perspective, environmental ethics, epistemic problems related with the unpredictability of future events, intergenerational justice and responsibility are core issues in the current debate.

J. Richard Eiser
University of Sheffield
Risk perception, natural hazards, climate change and human agency

Natural hazards, whether geophysical (earthquakes, volcanoes, tsunamis) or meteorological (hurricanes, floods, droughts, wildfires) threaten many millions of people worldwide. Although perceptions of such risks may motivate behaviour change, when dealing with natural disasters, risk is difficult to estimate, because many such events are intermittent, because climate change makes our world more hazardous and less predictable, and because we cannot calculate such risks without taking account of human agency. What turns a natural event into a hazard is the interaction with human beings, both because many live in vulnerable areas but also because many human actions exacerbate risk.

Research on risk perception has traditionally queried people's capacity for 'rational' statistical reasoning, but needs instead to look at risk perception as a dynamic process involving learning and feedback from experience. Risk perceptions will often resist change because of the selectivity of the information people gain and the manner in which it is processed. People may also downplay the risks of activities in which they wish, or are required, to engage, while seeking reasons to deny that population statistics apply to themselves personally.

Nonetheless, beliefs and behaviour are not fixed forever. Acknowledgement of climate change not only demands but stimulates a change in perspective whereby we may think of consequences over a far wider societal, geographical and temporal scale than hitherto. Furthermore, heightened awareness of environmental hazards world-wide may lead to a greater appreciation of the complex dynamics that link human beings and their physical environment within a common interactive system.

Annette Hohenberger
Middle East Technical University
Cognitive perspectives on climate change and sustainability

Climate change is now widely recognized as anthropogenic to a non-negligible extent. Sustainability and sustainable development have been proposed as a paradigm change and solution to preventing and/or mitigating the future consequences of climate change. In this talk, I will discuss climate change and sustainability from a cognitive science perspective: In how far is our cognitive system apt or inapt at tackling and solving (aspects of) the problem, on various levels of complexity, individual and collective? The human cognitive system comprises astonishing abilities of perception, conception, thought, language, learning, memory, reasoning, and action. Selected areas of cognitive research that are particularly relevant in the present context are:

(1) Rational decision making in the face of uncertainty
(2) The human attention system
(3) Shifting baselines
(4) Proactive thought, abstract projectuality, mental time travel, and reverse-engineering
(5) Re-conceptualization of basic economical and ecological notions
(6) The human action system and its interfaces with perception, memory, motivation, and affect
(7) Systemic thinking and distributed cognition

Our cognitive system is evolutionarily adapted to tackling problems on a short- and medium time-scale. Given that in climate change causes and effects are temporally and spatially largely disrupted, we are facing a scaling-problem: how can we scale up our cognitive abilities to encompass large scale problems and their solutions? If so, how may these happen in the short period of time that is left for a sustainable solution?

Ayhan Sol
Middle East Technical University
Sustaining human community or biotic community?

Contrary to the anthropocentrism of sustainable development, Aldo Leopold's Land Ethic is concerned *essentially* with the sustainability of the biotic community. This exclusive concern leads to ecofascism. In order to avoid such accusations of ecofascism, J. Baird Callicott reinterpreted the moral psychology of the theory. Human communities have expanded like the trunk of a tree by the addition of annual rings. People recognized that they became part of newer communities, but they were not alienated with earlier communities. The second order principle (SOP-1) helps him avoid ecofascism: "obligations generated by membership in more venerable and intimate communities take precedence over those generated in more recently emerged and impersonal communities." Unfortunately this principle turns the land ethic into an anthropocentric theory. Hence Callicott offers SOP-2: "stronger interests (for lack of a better word) generate duties that take precedence over duties generated by weaker interests." However, this maneuver takes Callicott back in ecofascism.

I think we can relax the tension between ecofascism and anthropocentrism without appealing to SOP-2. Each added ring should change our awareness of the earlier rings. So for instance, the addition of the ring of the biotic community should change both our perspective and moral feelings about our human communities. Therefore the "gravitational force" exerted upon more venerable and intimate communities by new additions should be taken into account, but not in terms of their interests of those in the new community but in terms of our renewed awareness and moral feelings.

Rafaela Hillerbrand
RWTH Aachen University
Epistemic uncertainties in climate predictions: A challenge for practical decision making

While the vast majority of experts agrees on the reality of an anthropogenic climate change, few and far between sceptics demur that this consensus only rests upon highly uncertain information obtained from numerical models. Granted, but prognoses on the future climate will always remain uncertain. But what exactly is uncertain as regards our future climate? And how, if at all, must our moral and political reasoning about climate change incorporate these epistemic uncertainties?

The uncertainty of climate predictions is something all experts agree on and discuss intensively within the scienti_c community | not only among climate sceptics. This uncertainty, however, is not adequately reflected in public decision making on energy supply and demand in the face of a manmade climate change. This paper aims to show that public decision making has to deal with epistemic uncertainties that go well beyond what scientists refer to as uncertainties. Most pressing for decision making is the fact that these uncertainties cannot be quanti_ed. In particular, this paper argues that as regards climate change we have no good basis for assigning meaningful probabilities to most e_ects of our present greenhouse gas emissions, not the least because global warming predominately a_ects future generations. Unquanti_ed uncertainties question the rationality criteria that underly the work of Kahneman, Tversky and others. It is discussed as to what kind of decision criteria may be able to cope with the uncertainty of climate predictions.

16:30 - 17:00

Hanna Marno, Eddy J. Davelaar and Gergely Csibra
Birkbeck College, University of London

The effect of communicative context on the perception and memory of objects

We investigated whether the social context in which an object is experienced influences its encoding. We hypothesised that when an object is observed in a communicative context, its permanent features (such as its colour) will be preferentially encoded at the expense of its transient features (such as its location).

In the first study, we presented brief movies, in which an actor either performed a reaching gesture towards one of five objects, or communicatively pointed at one of them. A subsequent static image, in which either the location or the identity of an object changed, tested participants' attention to these two kinds of information. Our results revealed that change detection for location was better than for identity in the reaching context, while we found the opposite pattern in the pointing context.

Our second study tested whether the attention-modulating effect of communication influences memory for object features. In each trial, a demonstrator took a coloured shape from one of five coloured boxes either in a communicative or non-communicative context, while the participants' task was to memorise the colour of the box from which the shape was taken. We found that the participants in the non-communicative condition recalled the colour of the boxes better than those in the communicative condition. Moreover, error analyses revealed that communication biased participants to respond with the colours of the shapes.

These results suggest that, in situations involving communicative-referential signals, people tend to pay more attention to, and memorise more, the potentially kind-relevant, permanent object features.

17:00 - 17:30

Margaret Friend, Amy Pace and Tamara Headley
San Diego State University

Beyond event segmentation: How perceptual and social-cognitive processes facilitate verb to action mapping

The present paper investigates the integration of perceptual and social-cognitive processes in toddlers' mapping of concepts to real-world events. We ask how event segmentation might lay the groundwork for extracting actions from the event stream and conceptually mapping novel verbs to these actions. In Study 1, 24-month-olds viewed an action sequence and were prompted to re-enact a single action. Seventy-nine percent of toddlers spontaneously segmented the event. In Study 2, 24-month-olds watched the same action sequence. This time, a single component action was specified as the referent for a novel verb using a hierarchy of social-pragmatic cues to support intentional inference. Consistent with Study 1, 70% of toddlers segmented the sequence into its component actions. However, mapping of the novel verb to the target action did not differ from chance. We conducted Study 3 to determine whether temporally separating event segmentation and mapping processes facilitated mapping. In Study 3, the control phase was a modified replication of the segmentation task in Study1 and the test phase was a replication of the mapping task in Study 2. In the control phase, 80% of 24-month-olds spontaneously segmented the sequence. In the test phase, 70% correctly mapped the novel label to an embedded action referent when the action was specified by a novel label and intentional cues. Intentional inference shifted toddlers' re-enactments from control to test indicating successful conceptual mapping. These data suggest that toddlers build upon event segmentation skills using intentional inference to map verbs to action components in the event stream.

17:30 - 18:00

Ingrid Lossius Falkum
University College London

Polysemy and pragmatics

The phenomenon of polysemy (e.g. 'bake a cake'/'bake a potato', 'interesting book'/'red book') raises some foundational issues for a theory of lexical concepts. A central question is whether polysemy belongs to the realm of 'semantics' or 'pragmatics': Are the different senses lexically stored, or is a single representation stored and the others pragmatically derived? This paper argues that polysemy is both a semantic and a pragmatic phenomenon. The extent to which a word is 'semantically' or 'pragmatically' polysemous depends on its position on a 'continuum of ambiguity', ranging from homonymy at the one end to contextually adjusted senses at the other end. In some cases, the different senses may be stored in the lexicon (e.g. 'bake'), while in other cases only one sense is stored and the others pragmatically derived (e.g. 'book'). A second claim is that all instances of polysemy can be traced back to pragmatics. Polysemy starts out as a pragmatic phenomenon, where one sense is derived from another. Through usage, the derived sense may become established, and the word will have gained an additional meaning. Although this differentiates polysemy from homonymy, there may be little psychological difference between them; the closer to the homonymy end of the continuum a polysemous word is placed, the more its psychological representation will resemble that of homonymy. Finally, I show how the relevance-theoretic notion of 'ad hoc concept construction', where an occasion-specific sense is derived pragmatically from a word's linguistically-encoded meaning, sheds light on the generation of polysemy.

18:00 - 18:30

Georg Kjoll
University of Oslo

What notion of 'content' is needed for a theory of communication?

In this paper I use a recent debate between Cappelen and Lepore and proponents of Relevance Theory as a case study and critically examine the notion of communication as 'thought sharing' presupposed in much philosophy of language.

Relevance Theory has suggested that linguistic interaction can be successful even if it has as its end result that speaker and hearer end up with thoughts that are not literally shared, only similar. Against Cappelen and Lepore, I suggest that this doesn't commit Relevance Theory to the claim that information is not shared in conversation, merely that whether communication is successful or not has to be measured in some other way. Relevance Theory holds that two thoughts are similar enough for the purpose of interaction if they share the most relevant "contextual implications" in a context, and I show how this explains both cases where communication meets and cases where it fails to meet an intuitive criterion of success.

I also show how similarity of communicated content presupposes identity at the level of the contextual implications, and argue that this is an unavoidable problem for all theories of content. Nevertheless, I claim, the relevance theoretic idea of communication as a situation where not thoughts, only contextual implications, are shared comes out as more cognitively plausible and theoretically cheaper than the traditional idea of communication as thought sharing.

16:30 - 17:00

Louise Richardson
University of Warwick

Olfactory experience and bodily sensation

In this paper I will be concerned with a particular aspect of the phenomenology of olfactory experience. We think of smells as being or supervening on (in Reid's words) the 'effluvia' of odiferous objects or stuff. These extra-bodily effluvious things and their qualities are what we find out about when we have olfactory experience. Intuitively, this is because olfactory experience, like seeing, and opposed to sensations of, say, pain, presents its objects as distinct from one's body. Yet we can find in the small philosophical literature on olfactory perception the claim that smells do not, in olfactory experience, seem to be distinct from the body. On this view, smelling is akin to bodily sensation such as pain or itchiness, in that it presents the qualities of which one seems to be olfactorily aware, if it presents them as anywhere, in one's body, and not in anything distinct from it. I will argue that this view of olfactory experience is wrong. Nevertheless, I hope to show that there are some natural enough reasons for holding it. For one, certain spatial features of visual experience that are involved in its being as of things distinct from the body are absent from olfactory experience. However, I will argue, olfaction has another, unique and rather obvious feature that means that olfactory qualities seem, in olfactory experience, to be where we usually think of them as being- out there, in the smells, where they belong. I argue that smells seem to be distinct from our bodies because we are aware, in olfactory experience, of their being brought into our noses by sniffing.

17:00 - 17:30

Verena Gottschling
York University

A defense of perceptual accounts of pain

Perceptual accounts of pain are very popular these days. Nonetheless, they are also under heavy attack, because these types of accounts seem to be vulnerable to certain severe challenges and objections. Recently, nice versions of these challenges for perceptual accounts were presented (Aydede forthcoming). Thy will be my focus.

I argue that these objections in fact propose problems for only certain classes of perceptual accounts and rely on unfortunate assumptions about the nature of perceptual accounts. I will end by proposing a strong perceptual account of pain that avoids the mentioned problems and is more compatible with the empirical data.

17:30 - 18:00

Matthew Nudds
University of Edinburgh

Intersensory interactions

In this paper I discuss how to best to explain a number of auditory-vision inter-sensory interactions. I argue that inter-sensory interactions involve perceiving objects in a cross-modal or amodal way, and that we can understand such cross-modal perception consistently with the view that auditory experience is modality specific.

18:00 - 18:30

Barry C. Smith
Birkbeck, University of London

Re-thinking the senses

Traditionally, the senses have been seen as separate systems that put us directly in touch with the world. Higher cognition is seen as making sense of this information by constructing a model of reality. However, recent advances in neuroscience cast doubt on this modular picture of the senses. There is much cross-modal interaction in the early stages of perceptual processing, and many of things in the environment we are interested in are known to us in a multi-sensory way. We may need to see the senses and other early mechanisms as providing our initial access to people, places and things, without supposing multisensory integration combines individual senses as we commonly think of them. I shall offer an alternative way of modeling the sensory interactions that result in unified perceptual experiences.

16:30 - 17:00

Matteo Colombo
University of Edinburgh

Do emotions motivate social norm compliance?

Emotions and social norms seem to be intimately related. The role of emotion in norm compliance is controversial however. This role is often spelled out in terms of motivation: Emotions would motivate us to comply with norms. Robert Sugden is one of the main proponents of this view. In his (2000) he argues that the ultimate motives for norm compliance are resentment and aversion towards being the focus of someone else's resentment. This paper argues that Sugden's argument is unconvincing.

Sugden claims that people naturally feel resentment against those who act contrary to our expectations, and also that they feel aversion toward frustrating others' expectations. One conforms to a behavioural pattern because others will resent him otherwise, he knows this, and he is averse to others' resentment. Sugden articulates a set of sufficient conditions for the arousal of resentment. He then gives grounds for the empirical plausibility of his hypothesis by elaborating a tale about the evolutionary roots of resentment.

After having argued, by means of counterexamples, that Sugden's Resentment Hypothesis is not sufficient for the arousal of resentment, and thereby for motivating one to abide by norms, I argue that resentment and norm compliance both depend on a more fundamental capacity: the capacity to have goals and to care about them. I conclude by rebutting Sugden's adaptationist tale by arguing that anger may not be a basic feature of human psychology and that resentment may not be a by-product of anger.

17:00 - 17:30

Marieke Schouwstra
Utrecht University

From acquisition to evolution: Communicative principles

In this talk I focus on Jackendoff's (2002) claim that we can draw evolutionary conclusions from (among other phenomena) the structure of learner varieties of second language (L2) learners outside the classroom. I distinguish two routes to a justification for this claim, the 'cognitive route' and the 'interaction route'. The former focuses on the cognitive states of L2 learners and compares them to the cognitive states of our evolutionary ancestors, whereas the latter focuses on the learner's strategies for successful interaction and compares those to the situation our evolutionary ancestors were in. I will show that the interaction route is the most viable approach, by making clear that the communicative pressures that play a role in the acquisition process mimic the pressures that have played a role in the emergence of language in our evolutionary ancestors.

17:30 - 18:00

Sophie Rietti
University of Ottawa

Anger, euphoria, or just adrenaline? Schachter and Singer revisited

In a famous 1962 experiment, Schachter and Singer put subjects injected with epinephrine (adrenaline) in a situation conducive, mainly through a confederate, to making them feel either anger or (mild) euphoria. Subjects who were correctly informed about the effects of the injection (or received a placebo) proved much less suspectible to such emotion-induction than subjects who were uninformed or misinformed. Schachter and Singer conclude that physiological arousal is necessary but insufficient for emotional arousal, that it underdetermines emotion-type, and that cognitive and social cues play a major additional role in determining emotional experience and behaviour in cases of "unexplained" arousal. While their conclusions appear rather too strong, even in the light of other experimental data to which they appeal, and while there are issues of experimental design that can be queried, conversely emotion-theorists in both philosophy and psychology may have been too quick to dismiss some of the implications of the experiment. Specifically, we may be underestimating the extent to which ascriptions of emotion, to ourselves or to others, are vulnerable to lack of transparency about the effects of both physiological factors and situational, especially social, cues: these issues are compounded by the ways in which we "catch" emotions from others, by the ways in which general moods and specific emotions mutually shape and lead to each other, and by confabulation formed by the social and personal belief- and value systems we bring to bear on emotions.

18:00 - 18:30

María José Alcaraz León
University of Murcia

Laughing at violence is not such a bad thing, after all (Emotional discontinuity between reality and fiction and the possibility of moral knowledge through fictional engagement)

One of the most ancient disputes regarding the moral authority of art goes back to Plato's rejection of the poets as reliable educators of the youth. The main reason behind this rejection was that art could promote a distorted picture of moral soundness by eliciting responses that were asymmetrical with the sort of responses considered as warranted in real life.

If sometimes laughing may be the warranted response towards a violent fictional episode, or admiration may be the merited response towards an evil character, what sort of guide can these responses be to our morals?

My aim here will be first to examine different explanations of what makes some responses to fiction seemingly contrary to our daily life responses; henceforth, I will call this phenomenon the 'asymmetry problem'; secondly, I will focus upon what impact, if any, has this phenomenon upon the prospects of a project of moral education grounded in art. Is the cognitive moral value

of art threatened by the asymmetry of our responses to fiction and reality or is fiction a particular interesting device to gain moral insight precisely in virtue of this feature? My initial hypothesis is that any explanation of the asymmetry problem that sacrifices the continuity of our processing mechanisms in reality and fiction will be less able to embrace moral cognitivism in art. Thus, unless we find an explanation that both accounts for the asymmetry problem and acknowledges the continuity of our assessing mechanisms we will keep being threatened by Plato's worry.

16:30 - 17:00

Alberto Rubio
Universidad Autónoma de Madrid

On moods and emotions: Phenomenal character and intentional content

The distinction between the phenomenal character and the intentional content of emotions might suggest that emotion theories should have been focused on what makes an emotion what it is, either their phenomenal character or their intentional content. However, emotion theories are mainly focused on intentionality. The phenomenal character of emotions has been described in terms of feelings and emotional experiences. On the other hand, emotional intentionality has been described in terms of different sorts of content: representations, perceptions (Prinz, 2004), propositional attitudes (Solomon, 1976), appraisals and judgments (Lazarus, 1991) embodied responses (Damasio, 1999), etc. Cognitivist researchers have mainly supported views based on the conceptual content of emotions and their function as appraisals. Most "feeling theorists" have mainly characterized emotions as perceptions of embodied responses. Phenomenal character of emotions is not often discussed by philosophers but how intentional emotional content is described, either claiming a conceptual or embodied or perceptual intentional emotional approach to the environment. Furthermore, some researchers (De Sousa, 1987; Goldie, 2000; Gunter, 2003) have claimed that one of the characteristic aspects of emotions is that their phenomenal and intentional character is constitutively related. In this paper, I will criticize such a view. First, I will show how emotion theories are mainly based on different approaches to emotional intentionality. Second, I will argue that phenomenal character and intentional content can be distinguished if we take moods as genuine emotions, and how it could help to open new paths in the study of emotions.

17:00 - 17:30

Martina Fuerst
University of Graz

The resistance of phenomenal consciousness to the phenomenal concept strategy

Some physicalists take the phenomenal concept strategy to be one of the most powerful responses to anti-physicalist arguments such as the knowledge argument or the explanatory gap. It is held that the particularities of phenomenal concepts can explain why these anti-physicalist arguments seem so intriguing. My presentation aims at demonstrating that the target of the physicalist phenomenal conceptualist – namely, to give a satisfactory account of dualistic intuitions without drawing ontological dualistic conclusions – has to fail.

First, I show that most physicalist accounts of phenomenal concepts can not meet the constraint of explaining the decisive particularities of these concepts and their cognitive role. Second, analyzing Papineau's quotational account, I argue that if phenomenal concepts are interpreted adequately and hence can explain the scenarios in the anti-physicalist arguments, this will imply exactly the dualistic consequences the physicalist phenomenal conceptualist wants to avoid.

17:30 - 18:00

Eyja Brynjarsdottir
University of Iceland

Studying sensory properties by studying color

In this paper, I consider some proposed differences between different sense modalities and further between different sensory properties. I then consider whether anything can be inferred about the ontological status of sensory properties in general, more specifically about whether they are objective or subjective, from conclusions drawn about color specifically. My conclusion is affirmative.

Of the sensory properties, colors are by far the most studied. Among other things, the question of whether color is an objective or a subjective property has been extensively addressed. Our concept of color is to some degree based on the sensations we have when we perceive it and colors are in this sense undoubtedly sensory properties. But colors are not the only sensory properties; there are other properties associated with hearing, touch, smell, and taste. Can findings on color regarding its status as objective or subjective can be considered representative of all the sensory properties?

I argue that the reasons we have, on the one hand, for considering color objective, and on the other for considering it subjective, apply equally to all sensory properties. I then go on to considering accounts, by Sydney Shoemaker, P.F. Strawson, and Robert Pasnau, that indicate fundamental differences between colors and at least some of the other sensory properties in this respect. These accounts are not, in my opinion, successful in showing a relevant difference. Finally, I discuss some results from psychological research that support my view.

18:00 - 18:30

Alberto Voltolini
University of Turin

How to be disjunctivists and (light) ultrarealists at one and the same time

In this paper I want to show that there is a way of arguing in favour of disjunctivism, the thesis according to which a perception and a phenomenologically indistinguishable hallucination are two states of different kinds, which is independent of any traditional externalist assumption on the content of those states. This way appeals to the different modality of such states, which is interpreted in terms of their difference in functional role. Ad advantage of this way of putting things is that one can be a disjunctivist even of one believes in nonexistent intentional objects (at least of a schematic kind), by so ascribing a content of the same type, i.e. a singular content, both to that perception and to the corresponding hallucination.

Leonard Talmy
University at Buffalo, State University of New York

How language structures concepts

As a fundamental design feature, language has two subsystems, the open-class (lexical) and the closed-class (grammatical). These subsystems perform complementary functions. In the total meaning expressed by any portion of discourse, the open-class forms contribute most of the conceptual content, while the closed-class forms determine most of the conceptual structure. Across languages, further, all closed-class forms are under strong semantic constraints governed by certain general principles. They thus represent only certain concepts, but not others. Closed-class meanings accordingly constitute an approximately closed inventory of concepts that serve a structuring function. This inventory is universally available, and each individual language draws elements in some proportion and distribution from it for its own closed-class representations. The closed-class inventory is further semantically constrained in that the concepts in it fall into certain conceptual categories, but not others, and these categories in turn fall into a certain set of extensive "schematic systems" for structuring conception. Five of these schematic systems are configurational structure, location of perspective point, distribution of attention, force dynamics, and cognitive state (the talk will address the first, and further as time permits). The closed-class subsystem emerges as perhaps the most fundamental conceptual structuring system of language.

Consciousness in vegetative state patients

Organizers: **Nicholas Shea and Tim Bayne**
University of Oxford

This symposium investigates the philosophical issues raised by recent results which suggest that some patients in persistent vegetative state may in fact be conscious. The issues raised by the challenge of studying the problematic property of phenomenal consciousness in these patients will be of interest to many in engaged in consciousness studies and philosophy of mind.

Sponsored by the Oxford Centre for Neuroethics

Nicholas Shea
University of Oxford
Introduction

Adrian Owen
MRC Cognition and Brain Sciences Unit, Cambridge
When thoughts become actions:
Detecting awareness in disorders of consciousness

How can we ever know, unequivocally, that another person is aware? Notwithstanding deeper philosophical considerations about the nature of consciousness itself, the only reliable method we have for detecting awareness in others is by eliciting a predicted behavioural response to an external prompt or command. Logically therefore, our ability to detect awareness in others is determined, not by whether they are aware or not, but by their ability to communicate that fact through a recognised response. This problem exposes a central conundrum in the study of awareness in general, and in particular, how it relates to the disorders of consciousness such as the vegetative state. From this perspective, I will discuss various solutions to this problem using functional neuroimaging. In particular, I will contrast those circumstances in which fMRI data can be used to infer awareness in the absence of a reliable behavioural response, with those circumstances in which it cannot.

Anil Seth
University od Sussex
Measuring consciousness:
From behaviour to neurophysiology

How can we measure whether a particular sensory, motor, or cognitive event is consciously experienced or remains unconscious? Such measurements provide the essential data on which a science of consciousness depends, yet there is no clear consensus on how such measurements should be made. Much of what we know derives from subjective (introspective) verbal report, but such reports may confound mechanisms of metacognitive access with mechanisms of consciousness. In response, there has been a growing emphasis on neurophysiological measures as well as on behavioral measures that do not rely on introspection. But for these 'objective' measures it can be hard to guarantee that they are measuring consciousness per se. I will review theoretical issues surrounding the problem of measuring consciousness and describe some specific examples based on measures of 'complexity' and 'causal density' in neural dynamics. I will then discuss the implications of such brain-based measures for assessing residual consciousness in vegetative and minimally conscious patients.

Seth, A.K., Dienes, Z., Cleeremans, A., Overgaard, M., and Pessoa, L. (2008). Measuring consciousness: Relating behavioural and neurophysiological approaches. *Trends in Cognitive Sciences, 12*:314-321.

Tim Bayne
University of Oxford
The case for consciousness in the vegetative state

Recent studies have suggested that despite the severity of their impairments, some vegetative state patients might be conscious—that they might retain 'fragments of phenomenality'. I begin by briefly presenting the case for consciousness implicit in these studies, before turning to one of the central objections that the case for consciousness needs to address. The objection in question is that consciousness is necessarily unified, and that the required form of unity could not be possessed by vegetative state patients. I argue that although the unity of consciousness does place important constraints on the ascription of consciousness, it does not itself rule out the ascription of consciousness to vegetative state patients.

14:30 - 15:00

Mario Santos-Sousa
Universidad Autónoma de Madrid

The shape of number

In recent years, mathematical cognition has become a major research field within cognitive science. As a result, the study of our basic mathematical capacities has accrued large amounts of empirical evidence. This research has largely centered on our facility with numbers—under the working assumption that having a good grip on the mechanisms of basic numerical thinking may help us to tackle more complex cases. These mechanisms are nevertheless very specific: they only allow us to recognize small numbers of objects and approximate larger numerical quantities. Hence, due to their limited scope, they generally fail to explain our grasp of culturally mature mathematical concepts, such as that of an infinite ordered sequence (the natural number sequence).

I will draw on different areas of cognitive research in order to argue that, in addition to these primitive capacities, humans deploy different cognitive mechanisms—crucially, ones that are not specifically mathematical, as those responsible for visual and spatial cognition—to develop more sophisticated mathematical abilities. I will first examine the available empirical evidence on our primitive numerical capacities, and point out some of their inherent limitations. I will then consider other cognitive resources that interact in the course of development to shape our understanding of number. In particular, I will discuss the role of language, of mappings from physical experience, and of visualization in grounding our our mastery of the natural number sequence.

15:00 - 15:30

Valtteri Arstila
University of Turku

How not to account the experiences of time slowing down in accidents?

When people face sudden life-threatening events, they often report afterwards as if time had slowed down. This talk focuses on Chess Stetson, Matthew Fiesta, and David Eagleman's attempt to test what happens during these events and their speculative explanation for these experiences. It is argued that the rationale of Stetson and colleagues' study was flawed and that their own explanation does not make justice for the phenomenology of the experience of time slowing down.

15:30 - 16:00

Paloma Atencia-Linares
University College London

Should imagining turn (moving) pictures into fictions

It is frequently claimed that our engagement with pictorial representations involves a participatory imaginative activity. That is, that when experiencing a painting, a photograph, a film, etc., one imagines oneself seeing, from the inside, the events and characters depicted therein. The motivations for postulating what I will call the Participation Thesis (PT), and the implications drawn by different theorists are diverse. In its most radical version—proposed by Kendall Walton—all depictions would involve this participatory imagining-seeing, for this would explain pictorial experience. Moreover, as a consequence of this, on Walton's theoretical system, all depictive works would be fictional.

This controversial conclusion has lead many to reject Walton's theory, denying, in particular, that imagining-seeing explains pictorial experience. Although I partially side with Walton's critics in that we should not accept the entailments of his theory (it is not true that there are not nonfictional visual representations), I claim that they systematically misidentify the source of the problem. Unlike Walton's opponents, I argue that the problem with his theory is not so much his endorsement of the Participation Thesis: even if imaginative-seeing does not explain pictorial experience, it can still be claimed that participatory imaginative engagement is required to correctly appreciate pictures. The problem is, rather, an ill-conceived relation between imagination (make-believe) and fiction, which, interestingly, is also subscribed by Walton's critics. As a result, they are also subject to similar criticisms as Walton. Prescribing imaginations, I contend, is, at the most, a necessary condition for fictionality, yet, it is not sufficient.

This paper develops this argument for one particular case of depictive representations: cinematic representations.

14:30 - 15:00

Henrike Moll and Andrew Meltzoff
Max Planck Institute for Evolutionary Anthropology

How does it look? Level 2 visual perspective-taking in 3-year-olds

Previous research has found that children engage in level 2 visual perspective-taking, i.e., the understanding that an object may be seen differently from different perspectives, at about 4.5 years (e.g., Flavell, Everett, Croft, & Flavell, 1981). We re-examined this ability in 36-month-olds using a new color filter technique. In Experiment 1, we tested children's recognition of how an object looked to an adult when she (but not the children) saw it through a color filter. In Experiment 2, we designed a production test. Children sat next to an adult and were asked to place an object relative to the filter such that it looked a particular color for the adult. The results of both studies show that 36-month-olds know how an object looks to another person when this differs from how they themselves see it. We discuss the developmental relationship of visual perspective-taking to other 'theory of mind' abilities, such as the distinction between appearance and reality and understanding false belief.

15:00 - 15:30

Elisabeth Stoettinger and Josef Perner
University of Salzburg

Division of labour within the visual system – myth or truth? Which kind of evidence is appropriate to clarify this debate?

There is an ongoing debate in the literature whether the division of labour – proposed by Milner and Goodale – is due to a methodological error as was voiced most recently by Franz and Gegenfurtner (2008). They argue that existing evidence is flawed because perception is often measured by manual estimation which responds in general with a larger slope to a change of physical size than adjusting. Therefore results obtained under manual estimation have to be corrected for this difference in slope: in a reanalysis of six studies grasping and perception were equally influenced by the illusion after this correction. However, closer inspection of methods reveals that visual feedback was confounded with conditions (suppressed vision while grasping vs. full vision while adjusting). We argue that studies can produce relevant and decisive data only when they (1) do not confound conditions with visual feedback (2) do not allow online corrections of the action due to a direct comparison of the hand with the target and (3) do not provide any risk of grasping being memory driven when the target is removed. We considered all these points in our last study and found evidence for the dissociation theory of Milner and Goodale.

15:30 - 16:00

Manuel Liz, David Pérez Chico, María Ponte Azcárate and Margarita Vázquez
Universidad de La Laguna

What is a point a view?

The notion of points of view, or perspectives, is crucial in many scientific and ordinary fields. Also, it has played a central role in many philosophical discussions concerning scepticism, relativism, mental content, perception and consciousness.

In spite of the widespread use of the notion of points of view, however, there is not any satisfactory systematic analysis able to integrate the various sorts of ingredients present in the notion. In our paper, we propose a general framework for the clarification of some of its more relevant structural components and dynamical features.

There are two different approaches to the notion of points of view: conceptualists and non-conceptualists. Each approach emphasizes a distinctive aspect of points of view. We propose to integrate both aspects as different kinds of contents that can be explicitly included in a point of view.

In relation with the non-conceptual character of those implicit contents of a point of view linked with the attitudes, we will finish with a discussion of the idea of a basic "phenomenal intentionality.

16:30 - 17:00

Kristina Musholt
Humboldt-University Berlin, Berlin School of Mind and Brain

Self-consciousness - from implicit to explicit self-representations

Self-consciousness can be defined as the ability to think of oneself as oneself, an ability that is often thought to require highly demanding conceptual (and linguistic) abilities (e.g. Baker, 1998; Rödl 2007). In contrast to this, it has been suggested that self-consciousness is a much more basic phenomenon and that there are primitive forms of self-consciousness that are pre-reflective, pre-linguistic and nonconceptual (e.g. Frank 1995/2002; Hurley 1997; Bermúdez 1998; Légrand, 2007). Candidates for nonconceptual self-consciousness include proprioception, agency, and ecological perception. However, while self-consciousness, understood as the ability to think of oneself as oneself, requires explicit self-representations, so-called nonconceptual forms of self-consciousness only seem to provide implicit self-related information. Hence, a focus on the latter is insufficient for an understanding of self-consciousness. This point can be elucidated with the help of Perry's (1993) theory of 'unarticulated constituents' and Recanati's (2007) framework for a relativist semantics. I argue that in order to understand self-consciousness we need to explain how we get from states that contain information that is in fact about the subject to states that are explicitly represented as being about the subject. I suggest that the model of "representational redescription" (Karmiloff-Smith, 1992), might contribute to a better understanding of this process. Moreover, I argue that self-consciousness is constitutively linked to an awareness of others because self-consciousness requires a contrast space. This thesis is supported by arguments from philosophy of language, by empirical results, and by phenomenological analyses.

17:00 - 17:30

Gottfried Vosgerau
Ruhr-Uni Bochum

Non-conceptual self-consciousness

The main problem for any theory of self-consciousness is to explain the immediate self-reference of self-conscious states, often called "de-se mode". In this talk, I will present an account of non-conceptual levels of self-consciousness that is able to explain the characteristic immediate self-reference, which is in turn the basis for the immediate self-reference also found in conceptual levels of self-consciousness. I will argue that there is a basic subpersonal mechanism, the "self-world distinction", which separates the self-related information in the sense input from the world-related information. In this way, properties can be perceived as implicitly self-related without attribution to a pre-existing self-representation. In other words, the self-world mechanism is creating the (mental representation of the) self, thereby establishing the immediate self-reference of self-conscious states. Such non-conceptual self-representations are the basis of other processes that produce more refined self-representations, as they can be found in the feeling of agency, for example. However, a conceptual level of explicit self-attribution is needed to account for the full phenomenon of the "sense of agency". In introspection, however, such a basic mechanism is not present. Thus, introspected mental states are not implicitly self-related, such that the "sense of authorship" for thoughts can only be explained at a conceptual level.

17:30 - 18:00

Johannes Roessler
University of Warwick

Thought insertion and self-awareness

According to an influential view, understanding delusions of thought insertion requires acknowledging a distinction between two senses in which one might be said to be the subject or owner of a thought: an 'introspective' sense and an 'agential' sense. I present grounds for scepticism about the distinction and its explanatory value in interpreting thought insertion. I also question the assumption that can make the distinction seem compulsory, that delusions of thought insertion should be seen as a broadly rational response to an unusual experience; and I explore an alternative account, drawing on work by Josef Parnas.

14:30 - 15:00

Lisa Bortolotti, Rochelle Cox and Amanda Barnier
University of Birmingham

Methodological benefits of using hypnosis to study clinical delusions

There are serious methodological challenges to the study of clinical delusions. But hypnosis can offer an insight into the surface features of delusions, because hypnotic subjects can also report an implausible belief with absolute conviction, maintain the belief in spite of counterevidence, and engage into elaborate secondary confabulations in order to overcome potential objections. On the basis of the evidence gathered by Barnier and Cox with respect to hypnotic and clinical delusions of mirrored-self misidentification, we propose that hypnosis is a useful and appropriate way to recreate beliefs with delusion-like features in the laboratory.

15:00 - 15:30

Miklós Győri
Eötvös University, Budapest

Autism and cognitive architecture: A case for massive modularity?

The paper investigates the issue, which overall model of human cognitive architecture grasps the specific patterns of cognitive weaknesses and strengths observable in autism, an atypical case of neurocognitive development. By formulating a few arguments that should render one cautious about applying models elaborated for typical mental architecture to cases of atypical neurocognitive development, and, more specifically, to autism, a reserved approach is suggested. On this tentative basis, then, it is argued, as the main thesis of the paper, that a candidate to interpret the finer cognitive profile of autism in terms of overall cognitive architecture is (a version of) massive modularity (Carruthers, 2006; Sperber, 2002). The major advantage of massive modularity in this context is that – by assuming strong domain specificity and relative autonomy throughout human cognition –, it is potentially able to grasp the intricate and highly idiosyncratic patterns of cognitive impairments and assets that characterise autism. To illustrate this potential, psychometric and experimental findings from autism will be shortly analysed. It will be argued that some connectionist simulations also support this thesis. Finally, it will be pointed out that, although massive modularity is arguably a potential framework to interpret autism in terms of overall mental architecture, this adequacy does not automatically justify a nativist approach to the origins of this architecture. Therefore, it requires further fine analysis to evaluate if the autonomous micro-domains that apparently characterise cognition in autism are under strong genetic determinism or are results of constructive developmental processes.

15:30 - 16:00

Heidi Maibom
Carleton University

Without taste: Psychopaths and the appreciation of art

Philosophers have had a great deal to say about psychopaths' glaring and often horrifying lack of moral conscience. By comparison, their aesthetic capacities have received hardly any attention, and are generally assumed to be intact. In this paper, we examine the limited evidence concerning the psychopath's aesthetic appreciation, and argue that it is deficient. The best explanations of what the psychopath lacks implicate abilities that are also thought to be central to moral thought and action: an impaired capacity for empathizing with others and deficient ability to take a disinterested interest in things. Thinking about what underlies the psychopath's deficient aesthetic understanding turns out to throw light on the connection between ethics and aesthetics.

14:30 - 15:00

Zoltán Jakab
Budapest University of Technology and Economics

Perceptual representation and Levine's "second-order" explanatory gap

We offer an account of the cognitive mechanisms that are responsible for the peculiar features associated with phenomenal consciousness. In doing so we focus on cognitive features of perceptual representations themselves, instead of those of phenomenal concepts. We argue that perceptual representations underlying simple sensory experiences are representationally atomic, whereas many other perceptual representations are structured. Representational atoms can only be arbitrarily matched to structured representations, which provides an explanation of the ineffability of sensory experiences. Moreover, representationally atomic states are loosely associated with their functional role, which explains why functional role inversion (e.g., color-experience inversion) is easily conceivable, and why phenomenal states are functionally irreducible. We also compare atomic perceptual representations with the atoms of semantic representation in language (free morphemes) and argue that the cognitive-representational differences between free morphemes and sensory experiences readily explain why only the latter appear distinct from the physical realm.

15:00 - 15:30

Benedicte Veillet
Lafayette College

Thought, re-identification and fineness of grain

What Kelly (2001) calls the "re-identification condition" plays an important role in the most prominent argument for nonconceptualism, the argument from fineness of grain. The argument goes roughly like this: experience represents very determinate shades of color such as green17. The re-identification condition states that in order for a subject's experience to represent such determinate shades conceptually, the subject must have the ability to re-identify the shade at different times. However, we can easily imagine a subject who lacks the relevant abilities. The nonconceptualist concludes that some constituents of experience (namely those that represent fine-grained shades) are not concepts.

I argue here that appealing the re-identification condition in arguments from fineness of grain is self-defeating. For though the condition works as a crucial premise in the nonconceptualist's argument, it ultimately *undermines* the argument in which it figures. The nonconceptualist is better off, I conclude, arguing for nonconceptualism without relying on the re-identification condition.

15:30 - 16:00

David Pineda
Universitat de Girona

The conceivability argument against materialism and intertheoretic identities

In this paper I offer, on behalf of the materialist, a new consideration against the Kripkean modal argument in the third lecture of Naming and Necessity. My argument is based on intertheoretic identities, which are identities in which both terms flanking the identity sign are theoretical. I claim that the Kripkean has trouble to account for the appearance of contingency of these necessary identities. After considering several semantics for theoretical terms the Kripkean might want to embrace, I conclude that the modal argument against materialism only stands if at least one of the following two premisses is granted: either the claim that the world is ontologically Kantian, or the claim that a particular semantics for theoretical terms is correct. The upshot is that, if my argument is correct, the position of the Kripkean is weak, since there seem to be no good arguments for any of these additional premisses.

Poster 7

Richard Ramsey and Antonia Hamilton
University of Nottingham

Searching for mental states: Hide and seek in the human brain

If you see a friend standing by her car and delving into her bag, you can guess that she is looking for her car keys even if you know she left them on the kitchen table. This study examines the neural systems that support goal inferences even in cases where the goal cannot be achieved. Previous research has identified a mirror neuron system (MNS) in the inferior frontal gyrus and inferior parietal lobe (IPL) that encodes action features such as goals and kinematics as well as an action monitoring system in the anterior cingulate cortex (ACC), which responds when actions fail. However, it is not known how these areas work together. In the present paper, we used a repetition suppression paradigm during functional magnetic resonance imaging (fMRI) to examine how the brain encodes other people's searching behaviour. Participants watched short movie clips depicting a toy animal hiding in one of two locations and an actor searching in the correct or incorrect location. Repeated presentation of the toy animal hiding suppressed the Blood Oxygen Level-Dependent (BOLD) response in occipital and superior parietal regions, consistent with processing of the spatial location of objects. Repeated presentation of a person searching for their toy animal, irrespective of location, suppressed the BOLD response in the IPL and ACC. We propose that when observing other people searching for hidden objects, the IPL encodes the goal of action, whereas the ACC encodes the success or failure of such action. Together, our data reveal the brain systems that allow us to track objects, action goals and the success of actions in social environments; processes that are critical for successful social interaction.

Poster 8

Rozalia Ivady, Gabriella Felhősi and Csaba Pléh
Budapest University of Technology and Economics

The pencil looking Danube-wise: Developmental trends in using alternative spatial frames of reference of Hungarian speakers

Levinson (2003) distinguishes three types of frames of reference (FoR) in linguistic descriptions of space, absolute /North/, intrinsic /in front of/, and relative/to the right of/. He demonstrates in cross-cultural studies that people solve spatial memory tasks in accordance with the primary FoR, and he interprets this as a support for the linguistic relativity hypothesis. It follows from his argument that during language acquisition a gradual shift should take place in the solution of spatial memory tasks in accordance with the primary FoR.

We used an easier version of Levinson's original spatial memory task to study three age clusters of Hungarian native speakers (1) toddlers (3-6 years) (2) primary school students (7-10 years) (3) young adults (19-31 years). Participants were shown a pencil and after making a 180 degree turn they had to choose the pencil that points "the same way" out of two pencils pointing in opposing (absolute and relative FoR) directions. As Hungarian uses primarily relative and intrinsic FoRs, we expected a gradual shift towards such solutions.

We've shown that toddlers probably rely primarily on intrinsic FoRs, while primary school students show a dramatic increase in relative solutions, which is in line with language acquisition data of FoRs. Adults answer at random in this easy version of the task, but produce relative answers if the task is made more complex. Therefore, Levinson's original argument is supported by the developmental data.

Poster 9

Letizia Palumbo, Daniel Walters, Søren Overgaard and Tjeerd Jellema
University of Hull

Emotional anticipation

Emotional facial expressions are immediate indicators of affective dispositions. We investigated whether biases in the judgments of others' dynamic emotional facial expressions reflect a process of 'emotional anticipation', i.e. taking into account the emotional state of the other and how it might develop in the immediate future. The stimuli were 770 ms long video-clips of eight different agents showing a happy or angry facial expression, of which the emotional intensity gradually decreased until a neutral expression was reached.

Twenty-three participants with typical development judged the emotional expression depicted in the last frame of the video-clip using a 5-point scale (from slightly angry via truly neutral to slightly happy). We used a 3x2 within-subjects design with as factors (1) Final expression (10% happy vs. neutral vs. 10% angry) and (2) Perceptual history (happy vs. angry).

We found that the expression depicted in the last frame of the happy-to-neutral videos was judged as slightly angry, and that the expression depicted in the last frame of the angry-to-neutral videos was judged as slightly happy. This 'overshoot' phenomenon, however disappeared when the identity of the agent changed in the last frame. We argue that the 'overshoot' is due to emotional anticipation: an anticipation of the agent's future emotional state. We further speculate that 'embodied simulation' plays a key role. Implications for the mechanisms underpinning Theory of Mind are discussed from two traditional approaches in Philosophy of Mind: Theory-Theory (TT) and Simulation Theory (ST).

Poster 10

Andrei Dumbrava, Mihaela Rusu and Cristina Balut
"Al.I.Cuza" University

The "belief in a just world" phenomenon and its philosophical implications

Lerner's concept of a human "fundamental delusion" of "belief in just world" is presented alongside its most important empirical support. It basically states that common people are proned, just by watching or imagining another person being innocently victimized, to consider the victim as the source of what is happening to her / him and even as less worthy in general. This suggests that people's indifference to social injustice can be explained as a bias in perceiving and judging the person-situation context, that offers a comfortable feeling concerning the owner status and avoid responsibility for the unfortunate. The implications for social epistemology and moral philosophy are reviewed and limits for interventions toward a "better world" are discussed.

Poster 11

Outi Horne and Emese Csipke
SANE (UK)

The question 'What is an emotion?' and the phenomenon of self-cutting

How the philosophical question 'What is an emotion' is answered makes a difference to explaining the primary function of a very common pathological behaviour, self-cutting.

The primary function of self-cutting is to regulate emotion. When emotions such as anger are experienced in excess, self-cutting is used to alleviate tension and lower arousal. This effect is experienced as a release of anger etc. Paradoxically, self-cutting can also bring emotions about at times when the person appears to have stopped feeling altogether. In these experiential circumstances, disembodiment coincides with emotional numbness and self-cutting is able to bring relief from both.

According to cognitive theories of emotion, emotions are judgements, beliefs or conceptualizations, and their bodily counterparts (e.g. feelings of autonomic arousal, expressive behaviours) are essential parts, contingent parts or mere consequences of emotion. Cognitivist accounts that give non-constitutive or contingent role to bodily feelings fail to explain why self-cutting works at all; cognitivists who hold that bodily feelings are necessary for emotion do better.

However, the key to explaining the effects of self-cutting is to hold, as Jamesian somaticists do, that bodily experiences are identical with emotions and sufficient for them.

The answer to the question: 'What is an emotion?' that best explains the experiences of self-cutters and self-cutting goes as follows: An emotion is a bodily feeling with an entrenched conceptual and functional role. The absence of an emotion is an entity in itself, a gap in phenomenal consciousness where an emotion should be.

Poster 12

Marian Chen and Sandra Waxman
Northwestern University

Linguistic cues to conventionality at 14 months

We ask whether 14-month-olds understand that labeling an event conventionalizes it, building upon evidence that infants at this age selectively imitate unusual but goal-directed actions (Gergely, Bekkering & Kiraly, 2002). In this task, an experimenter draped a blanket around her shoulders before turning a light on with her head. In the hands-free condition, she placed her hands on the table; in the hands-occupied condition, she grasped the blanket. 14-month-olds turned the light on with their heads more often when the experimenter's hands were free, indicating that they evaluate others' behavior for underlying motivations and identify purposeful behaviors. We take this idea further: will labeling an unusual action increase infants' imitation?

We tested 14-month-olds in a modified version of this paradigm. In both conditions, the experimenter's hands were occupied. In the control, the experimenter turned the light on with her head as in the original study. In the verb condition, she labeled the action with a novel verb ("Look, I'm going to blick the light") before performing the action. Next, infants played for five minutes in another room before returning to the testing room to play with the light for two minutes. Two observers scored whether infants used their heads to touch the light. Girls in the verb condition touched the light with their heads significantly more than infants in the control condition; boys showed no significant difference in performance. Our results indicate that 14-month-old girls understand that labeling an event conventionalizes it, and use this information in planning their actions.

16:30 - 17:00

Judit Szalai
Eötvös University, Budapest

Emotion and the levels of cognition

The aim of the paper is to show the philosophical advantages of adopting a multi-level model of cognition in emotion. The 'conceptual' level of evaluation of stimuli in the form of belief or judgement does not prove necessary for all emotions, the key processing feature of which is 'schematization.' The introduction of the schematic level provides a tool for giving a plausible sense to the idea of 'construing' the object of emotion in certain way or 'seeing' the object 'as...'—a task the so-called 'perceptual' theories of emotion have attempted in order to offer an alternative to 'judgementalism' or strict cognitivism. Multi-level theories also make certain intuitions of different philosophical theories of emotion compatible with each other.

17:00 - 17:30

Raffaella Pocobello and Cristiano Castelfranchi
Istituto di Scienze e Tecnologie della Cognizione - CNR

Pride: cognitive aspects and social implications

In the present contribution we will propose a socio-cognitive theory of pride. Pride is defined as a positive feeling of satisfaction concerning the ownership of a capacity, a resource or a positively evaluated and desired power. In order to take into account the social character of this emotion, we propose a classification based on the expectation of the social evaluation concerning the object of pride: 1) basic pride, in which social judgments do not have a determinant role; 2) pride based on (potential) social approval with respect to an object considered as socially desirable; 3) "Emancipatory" pride, concerning a characteristic which is subject to a negative social evaluation, depreciation or derision. "Emancipatory" pride presupposes therefore a certain distress, shame or even an humiliation; it implies further an experience of indignation and a provocative behavior of non-concealing or exhibitionism of the object of shame which turns into an object of pride. This is the process which constitutes the base of social movements which strive for the creation of a "political identity", attempting the change of the social- and self conception of their participants belonging to specifically stigmatized groups (e.g. gay-pride movements, mad-pride movements).

17:30 - 18:00

Mog Stapleton
University of Edinburgh

Towards integrating emotion into cognition: An argument at three levels

The argument in this paper is that cognition can not be separated from emotion at the neural level, the psychological/functional level, and the phenomenological level. I do this by presenting evidence from neuroscience that the traditional distinction between emotion and cognition is not evident in either structural or functional analyses of the brain (Pessoa 2008). I then outline a model of the self-regulating brain (Lewis & Todd 2007) that maps the folk psychological notions of emotional response and cognitive interpretation onto the vertical dimension of the neuroaxis. Finally, I a sketch a phenomenological account of mood as a structure of experience (Ratcliffe in Press) in which cognition is embedded. I conclude that given the inseparability of emotion from cognition at these three fundamental levels of cognitive science, emotion should be integrated into all accounts of cognition.

18:00 - 18:30

Somogy Varga
University of Copenhagen

Affective attunement: The cases of Capgra´s and Cotard´s delusion

In the course of this paper it will be argued that the Cotard´s and Capgras´ delusions results from an anomalous perceptual experience, caused by the lack of affective responsiveness. The central difference seems to lie in the attributional manner: Capgras patients interpret the resultant experiences in a paranoid, projective attributional manner, while Cotard patients interpret them in a depressive, introjective attributional manner.

The main idea of this paper is that a philosophical analyse of anomalous experience in these delusions can help us to modify the traditional philosophical assumptions about the primacy of cognitive or theoretical attitudes to the world. I will argue that primacy is to be granted to an affective attunement to the world, which functions as a subpersonal mechanism of qualitative bodily responses. What these delusions show us is that the disruption of this affective attunement leads to a cognitive deficit, in which the patient accepts a belief that is incoherent with the rest of her believes.

Reference in the first few years of life
Organizer: **Melissa Allen**
Lancaster University

Reference itself encompasses not only the ability to mentally represent objects, but how we indicate to others which particular objects we are talking about. Our symposium will discuss the origins of establishing reference within several symbolic domains: words, pictures, and gestures. We will elucidate how young children successfully master the symbol-referent relationships using their intention-monitoring skills, which appears to be unique to humans.

Specifically, *Allen* will describe how young children use intention and eye gaze to learn the referential nature of pictures. *Liszkowski* will show that prelinguistic infants' pointing is a fully referential act, as infants can even point within common ground to refer to entities displaced from the immediate here and now. Additional results reveal that production and comprehension of full-fledge reference by pointing emerge together in ontogeny, and are phylogenetically different from captive chimpanzees' point comprehension and production. *Nurmsoo* will examine how 3- and 4-year old children can successfully predict what a character wants on the basis of eye gaze, and how eye tracking data can illuminate our understanding of mental states in situations of referential ambiguity. Thus, our symposium will discuss the ways in which young children use non-verbal and verbal social communicative cues to help guide them through the reference paradox and become efficient symbol-users. *Matthews* will discuss the three presentations with respect to how we define reference.

Melissa Allen
Lancaster University
The development of pictorial representation

Paintings and drawings are both symbolic representations and material objects. This duality can be difficult for young children to comprehend, as they often initially confuse representations with reality. The ability to make sense of visual representations and understanding that the point of pictures is to convey information to other individuals are substantial developmental achievements, which are particularly significant when we consider the relationship between symbolic understanding and language acquisition. How do young children come to understand the dual aspects of pictures, which is a precursor for more complex symbolic manipulations? This presentation will discuss two critical factors that facilitate young children's understanding of dual representation: intention and language (specifically, naming). Children often rely upon what a picture looks like in order to figure out what it represents; however recent evidence suggests that even 2-year-old children are able to decode picture-object correspondence by interpreting the artist's referential intent, even when the picture is abstract in nature. In addition, young children are able to treat pictures as either symbols or objects in their own right, depending simply on whether the picture is given a name. Thus, this presentation will review the relation between intention-monitoring, naming and understanding pictures as symbolic in the first few years of life.

Ulf Liszkowski
Max Planck Institute of Psycholingistics
Prelinguistic infants - but not chimpanzees - have and understand referential intentions about invisible and displaced entities

I will present recent experimental findings which demonstrate that 12-month-olds' pointing is premised on having and understanding referential intentions. Infants point to redirect others' attention when their visible referent is being misunderstood; to refer to invisible items inside opaque boxes; and to refer to entities displaced from the immediate here and now of mutually known locations. Further, infants comprehend the referential intent of pointing on a deeper level of inference then just following the pointing gesture to a target. They comprehend reference to invisible occluded entities and - as indicated by preliminary results - also to invisible displaced entities. Further, production and comprehension of referential pointing are empirically correlated, supporting the idea that pointing is premised on the social-cognitive understanding of referential intentions. Experimental results with chimpanzees reveal phylogenetic differences to prelinguistic human infants in the referential use and comprehension of pointing. Together, these findings show that the referential skills to communicate about invisible and displaced entities depends not on language, but rather on deeper social-cognitive skills that make acts of linguistic reference possible in the first place. These non-linguistic skills emerged presumably only after humans' divergence from great apes some 6 million years ago.

Erika Nurmsoo
Bristol University
Children's monitoring of gaze in referential contexts

Children are sensitive to the eyes from a very young age. Infants use gaze to disambiguate the referent of a range of behaviours including an adult's words (e.g., Baldwin, 1991), goals (e.g., Woodward, 2003), or emotional display (e.g. Repacholi, 1998). By four years of age, children even make explicit attributions of attentional focus and desire based on object-directed gaze (e.g., Einav & Hood, 2006). This talk will present new findings exploring 3- through 6-year-olds' ability to use gaze information to identify a referent in different contexts including the identification of a protagonist's desires or fears, and the interpretation of third-party social relationships. The

results reveal a developmental progression that is particularly marked in the social domain. While children are able to identify eye gaze direction very early, they do so well before they can explicitly interpret this behaviour in terms of the looker's emotional status or social relationships.

Danielle Matthews
University of Manchester
Discussant

Human nature and morality

Organizer: **Katinka Quintelier**
Ghent University

A growing number of moral philosophers and scientists draw on scientific knowledge concerning 'human nature' to readdress meta-ethical and normative questions. In this symposium, we investigate our 'evolved moral nature' and we consider the impact of this knowledge on moral philosophy. First, we explore the building blocks of moral behaviour; second, we focus on individual differences in moral psychology.

Several key aspects of our moral sense are shared with other primates. But are these shared moral sentiments sufficient to speak about a moral sense? We discuss differences between primate and human moral behavior. Further, we describe and evaluate some of the proposed building blocks of morality in primates, such as a sense of fairness, social norms, moralistic aggression or altruism.

With regard to altruistic motivation, the 18th century conflict between reason and affect seems to be replaced by a more nuanced opposition between top-down and bottom-up pathways. In this context we explore recent findings on children's development of prosocial behavior. Then, we discuss whether and how this opposition is taken into account in current moral philosophy.

Evolutionary theory predicts that individual differences occur with regard to our moral intuitions, depending on the sex, age and ecology of the actor. Specific predictions have been corroborated by psychological studies. This contrasts with the classic moral philosophers' ambition to build universal normative systems instead of collecting actor-dependent moral rules. The implications of this conflict for normative ethics are explored. Are we heading for a 'relativistic turn' in ethics?

Adrian V. Jäggi and Claudia Rudolf von Rohr
University of Zurich

What can our closest living relatives tell us about the evolution of morality?

Apes have been suggested to have some of the basic prerequisites of human morality. The aim of our studies was to describe the exact nature of such proposed prerequisites, in particular altruism and social norms. Altruistic acts among humans are characterized by a desire to help others according to their needs. Altruistic behavior among chimpanzees and bonobos was investigated in the context of food sharing. We tried to assess the psychological mechanisms behind this apparently altruistic behavior and the biological conditions under which it may evolve. The presence of social norms among humans can be inferred when unaffected bystanders react negatively towards their violation. Chimpanzees protest when becoming themselves victims of norm violations. However, such protests are primarily based on "egoistic" norms. To establish the presence of social norms among chimpanzees, we investigated whether they, like humans, also show reactions as unaffected bystanders. The results show that (1) apes rarely share food in an altruistic way and may respond to others' solicitations only if their sharing is likely to be reciprocated and (2) that chimpanzees differentially perceive and evaluate social events as completely unaffected bystanders and therefore satisfy a basic prerequisite for the presence of social norms. In sum, such studies may help to explain the evolution of human morality and the related psychological mechanisms. Thus, it may be interesting for moral philosophers to think of morality as the product of cultural but also evolutionary history, which may have implications for moral philosophy.

Amrisha Vaish
Max Planck Institute for Evolutionary Anthropology

Sympathy and moral evaluations as mediators of young children's prosocial behavior

Young children behave prosocially, but do they do so discriminately, that is, based upon the other's circumstances or moral behaviors? To test this, we examined children's prosocial behavior toward victims and perpetrators.

Study 1 assessed whether, in the absence of distress cues from a victim, children can nonetheless sympathize with the victim. We showed 1.5- and 2-year-olds a 'perpetrator' either harming a 'victim' by destroying or taking her possessions (Harm condition) or doing something similar but not harming her (Neutral condition). The victim expressed no emotions in either condition. Nevertheless, more children showed sympathy (p=.011) and prosocial behavior (p=.024) toward the victim in the Harm than the Neutral condition, and children's sympathy correlated with their prosocial behavior, p=.036. Thus, despite the lack of emotional cues from the victim, children sympathized with and showed greater prosocial behavior toward her, perhaps through affective perspective-taking.

Study 2 examined children's prosocial behavior toward perpetrators. After 3-year-olds witnessed the Harm condition (as in Study 1 except the victim displayed sadness), they had to decide between helping the perpetrator or a neutral person (i.e., not the victim but a third adult). Fewer children helped the perpetrator than the neutral person, p<.0005. Moreover, when the perpetrator intended to but could not harm the victim, 3-year-olds still helped the perpetrator less than the neutral person, p=.008, whereas when the perpetrator accidentally harmed the victim, children did not help differentially, p=.204.

In conclusion, young children's prosocial behavior is mediated by their sympathy for and moral evaluations of the beneficiary.

Jelle De Schrijver
Ghent University

Empathy and the nature of altruistic motivation: The rationalism-sentimentalism debate revisited?

Converging evidence from evolutionary sciences, developmental, moral and social psychology and cognitive neuroscience allows us to see the nature of altruistic motivation in a different light. Empathy - which is often regarded as a multipolar construct with both affective and cognitive aspects - is ascribed a central role in this mechanism of altruistic motivation. It is the aim of this paper to explore the processes allowing empathy to elicit altruistic motivation. Recently, two types of models have been developed. Whereas bottom-up models emphasize the role of the affective aspects of empathy, top-down models stress, in addition, the role of higher cognitive processes such as theory of mind and emotion regulation. The former conflict between reason and affect as was fought out among 18th century rationalists and sentimentalists seems to be replaced by a more nuanced opposition between top-down and bottom-up approaches.

Katinka Quintelier
Ghent University

Is it time for a relativist turn in ethics

Recent developments in moral psychology and in evolutionary theories of moral behavior focus on individual and group differences in morality. Moral intuitions may differ depending on sex, age, ecology and evolutionary strategy of the individual. Within the individual, different and mutually incompatible moral intuitions are triggered depending on specific aspects of the situation (see, e.g., Haidt, 2007; Greene et al., 2004). Thus there exist interindividual and intraindividual differences in moral intuitions.

This diversity of our moral intuitions has led naturalistic and evolutionary ethicists to question normative theories that articulate universal and mutually consistent moral principles. For example, E.O. Wilson has suggested that we cannot impose a single set of moral standards on all human populations or sex-age classes, for this would "create complex, intractable moral dilemmas" (Wilson 1975, p. 564). On the other hand, if we are not all in the same game, living together may not work very well (see, e.g., Ruse, 2008), especially if we conceive of moral principles as universally valid. There seems to be a trade-off between moral principles that are intuitively acceptable and moral principles that are universally valid.

The literature on naturalistic and evolutionary ethics discusses which implications scientific data can and cannot have on normative questions. I critically apply this discussion to the topic of normative implications of inter- and intraindividual differences in moral intuitions.

16:30 - 17:00

Dan Zeman
Univerzita Karlova

Meteorological sentences, unarticulated constituents and relativism

My focus in the paper is on meteorological sentences such as "It is raining" as they are representative for the debate between literalism and contextualism in contemporary philosophy of language. In the first part I have a close look on two criteria for unarticulateness that have been proposed (Recanati's "Optionality Criterion" and Stanley's "Binding Criterion"), and point out that they overgeneralize. I then take issue with the main challenge to contextualism – that it cannot account for the so-called "bound readings" – and present Recanati's way of answering the challenge, by employing variadic functions. I conclude that in the debate between the two authors the dialectical advantage is on Recanati's side. In the second part I apply the machinery of variadic functions to other sentences, such as those comprising predicates of personal taste, epistemic modals or epistemic terms. The upshot is that variadic functions support (moderate) relativism for those domains.

17:00 - 17:30

Josep Macia
Universitat de Barcelona

Presuppositions are not cancellable

The proper characterization of what presuppositions are is important in order to elucidate the nature of meaning and of the different levels of meaning (asserted meaning, conversational implicatures, presuppositions, etc.). There is a promising view of presuppositions which treats them as semantic entailments, and which models them using partial meaning functions. This promising view is challenged by the view put forward by those authors (for instance Soames(1989), Green(2000) and Potts(2004) that argue that presuppositions (like conversational implicatures) are cancellable. I will argue that each kind of data that has been used to argue for this view, can be more appropriately accounted for assuming the semantic view of presuppositions, and therefore, I will argue that we have no good reason to abandon the simpler, clear, promising semantic view according to which presuppositions are not (in the relevant sense) cancellable.

17:30 - 18:00

Alison Hall
University College London

Quantifier domain restriction: In defense of free pragmatic enrichment

In the following examples, the quantifier domains, despite not being made explicit, contribute to the asserted content. The uttered sentences are outside the brackets; inside are 'implicit' elements of asserted content, in appropriate contexts:

1. Everyone [AT FRED'S PARTY] left early.
2. There's nothing [WORTH WATCHING] on TV.

There are, broadly speaking, two approaches to what kinds of processes are responsible for domain restriction. The 'semanticist' approach (defended by von Fintel 1994, Stanley and Szabo 2000, among others), claims that all effects of context on asserted content are linguistically mandated, and so holds that domain restriction results from saturating an indexical element that is encoded in the sentence's linguistic meaning.

The alternative, 'pragmatist' approach (Bach 2000, Recanati 2002), which I will argue for, is that the domain is an unarticulated constituent: it is not linguistically mandated; rather, its provision is motivated and constrained entirely by pragmatic factors.

Elbourne (2008) argues that the difference in binding behaviour between phrases of the form "the X of Y's" and "Y's X" can only be explained by positing that "the" hosts a domain variable, whereas "Y's" does not: If quantifier domains could be supplied entirely pragmatically, the difference would not be predicted, he claims, so the pragmatist approach overgenerates.

In response, I give an entirely pragmatic account of Elbourne's data. With the pragmatist approach remaining a serious possibility for an account of domain restriction, then, I consider other factors such as optionality that favour it over the idea of linguistically-encoded variables.

18:00 - 18:30

Philippe Journeau
Discinnet Labs

Semantics versus formal and random limitations

Although Chomsky had introduced his mathematical model of a grammar for the study of natural languages, it has rather been useful for the study of formal languages of type 0, 1, 2 or 3, each more restrictive towards finite algorithmic and automation. Chaitin's proposition that "a theory may be viewed as a computer program for calculating observations" seems to mean that semantics could reduce to some generalized formal language. It questions the distance between a 'Semantic oracle' and the kinds of Formal oracles built within the framework of complexity theory. The present paper scrutinizes the relation between semantics, formal and random dimensions after four decades of complexity theory and proposes some solutions derived from previous work on the theories of knowledge and causality.

16:30 - 17:00

Naomi Eilan
University of Warwick

Locating consciousness in the natural world

When God created the physical world was there any thing else he needed to do to create phenomenal consciousness? This is a rough gloss on Saul Kripke's formulation of what is widely regarded, in the consciousness literature, as a rough gloss on the Metaphysical Question about consciousness. What is it about this question that makes it philosophically challenging? In most accounts of the difficulty, it turns a potential gap or distance between the concepts we use to describe the physical world and those we use to describe our phenomenal life. The gap of interest, if it exists, is said to be such that it makes it hard to make sense of the location of consciousness in the natural world, hard to see how such a location could be so much as intelligible. Let us call the question of whether or not there is such a gap the Conceptual Question. My focus in the talk will be on the latter. I distinguish three versions of the conceptual gap claim, due to McGinn, Chalmers and Nagel respectively. I argue that a relational account of perceptual experience, developed in response to a distinct question about perceptual consciousness, namely how we should account for it if it provides for access to the external world, falsifies all three conceptual gap claims.

17:00 - 17:30

Tobias Schlicht
Ruhr-Universität Bochum

Consciousness:
Rethinking phenomenology and accessibility

Block (2008) argues that we can be phenomenally conscious of contents without being able to cognitively access them and that the neural substrates of these kinds of consciousness are different. The first claim rests on experiments (Sperling 1960) in which subjects insist that they consciously perceive a whole array of characters although they can only report (access) a few. When instructed to focus attention on only some, they can give an accurate partial report. According to Block, subjects are phenomenally (yet not access) conscious of all specific characters.

Block's claim is not supported by evidence:

(1) For Block's conclusion to be justified, subjects would have to report that with respect to each single item they saw which item it is. But their reports are compatible with a weaker interpretation according to which subjects consciously perceive only an array of items – a 'generic' content of which only a subset is accessible.
(2) Block's view raises the methodological problem that a third-person neural criterion of phenomenal consciousness needs to be invoked, while it is unlikely that a neural substrate of phenomenology independent of attention can be determined empirically.
(3) Block's separation of phenomenology from access is incompatible with his adherence to the 'same-order-theory' of consciousness. This is shown in connection to point (2) and to Block's assessment of a patient suffering from visuo-spatial extinction.

17:30 - 18:00

Ian Phillips
All Souls College, Oxford University

Perception and iconic memory:
What Sperling doesn't show

Sperling's pioneering partial report technique (Sperling 1960) and subsequent work on 'iconic memory' (Neisser 1967) have recently been seized upon by philosophers as psychological evidence for controversial claims about perceptual experience: for example, that phenomenology outstrips cognitive access or that perceptual content is non-conceptual. (See Block 1995, 2007, Dretske 2006 and Tye 2006, and Fodor 2007 respectively.) I set out Sperling's experimental paradigm and the arguments based upon it. I highlight a crucial and unquestioned independence assumption, viz. that a subject's experience of the stimulus in a partial report condition is independent of which report is cued.

Dainton (2008) divides accounts of temporal experience into two broad camps: Retentionalist and Extensionalist. I argue that both call into question the independence assumption at the timescales in question. In particular, Tye's own Retentionalist theory casts doubt on independence; as does the author's preferred Extensionalist model. Consequently, Sperling's partial report technique does nothing to establish phenomenal overflow nor the existence of non-conceptual content. Moreover, in this light, I suggest that the very notion of 'iconic memory' needs re-evaluating.

I conclude by considering recent work on short term visual memory--in particular, Landman et al. 2003 and Sligte et al. 2006, 2008. Pace Block (2007), I argue that this work is fundamentally different from Sperling's work on iconic memory. These new paradigms do not clearly flout the independence assumption. But nor do they bear on questions of overflow or non-conceptual content.

18:00 - 18:30

Sid Kouider
CNRS and Ecole Normale Supérieure

The partial awareness hypothesis:
Reframing access to meet phenomenology

Dissociative approaches to consciousness (phenomenal vs access consciousness; consciousness with vs. without attention) capture much of our intuition about subjective experience. However, such dissociations raise a major methodological puzzle: they are difficult, if not impossible, to demonstrate experimentally. In addition, the empirical evidence "pointing towards" these dissociations does not unequivocally support them. I will provide an overview of several alternative theories, including workspace models and compare them with dissociative approaches. In particular, I will focus on alternative ac-

counts positing that the intuition of a rich phenomenal experience is actually a mere retrospective illusion. I will argue that although dissociative approaches offer a promising way to tackle the hard problem, parsimonious (i.e., non-dissociative) interpretations relying on partial awareness and accessible levels of representation still have as much explanatory power.

Alex Byrne
MIT

Silent soliloquy and thought insertion

The phenomenon of "inner speech", or what Ryle called "silent soliloquy", suggests some puzzling questions. If inner speech is entirely silent (as Ryle's term suggests, presumably correctly), how can it be any kind of speech? What is the relation between inner speech and thought? How is inner speech different from auditory verbal hallucination? The paper sketches answers to these and other questions, and applies the resulting account of inner speech to the schizophrenic symptom of "thought insertion".

Representations of space

Organizer: **Peter Svenonius**
University of Tromsø

This symposium takes up important issues concerning mental representations of of space as reflected in linguistic utterances. The four participants all have extensive experience with the semantics of linguistic expressions representing space, and will take up complementary topics each reflecting the state of the art.

Leonard Talmy
SUNY Buffalo
Spatial primitives in language

Linguistic research to date has determined many of the factors that govern the structure of the spatial schemas found across spoken languages. We can now integrate these factors and propose the comprehensive system they comprise for spatial structuring in language. This system is characterized by several features. At a componential level, it has a relatively closed universally available inventory of fundamental spatial elements. These elements group into a relatively closed set of spatial categories. And each category includes only a relatively closed small number of particular elements: the spatial distinctions that each category can ever mark. At a composite level, elements of the inventory combine in particular arrangements to form whole spatial schemas. Each language has a relatively closed set of "prepackaged" schemas of this sort. Finally, the system includes a set of properties that can generalize and processes that can extend or deform pre-packaged schemas and thus enable a language's particular set of schemas to be applied to a wider range of spatial structures.

Joost Zwarts
Utrecht University
The reference object of prepositions

The semantics of prepositions is based on a reference object (ground, landmark), relative to which the place or path of a figure (trajector, theme) is defined. This reference object, typically a stationary, salient, physical object is expressed as the syntactic object of the preposition: 'under the table', 'over the bridge', 'into the box'. One might be inclined to believe that this is the general and universal pattern for all prepositional phrases. However, there are several groups of prepositional phrases that don't work this way. In my talk I will focus on compass expressions like 'in the west', 'to the north', 'from the south', that can be argued to have a different semantic structure in which the reference object is implicit and the syntactic object refers to an axis. This raises important issues about the way spatial relations and directions are conceptualized and encoded in syntactic structures.

Jean Mark Gawron
San Diego State University
Stative paths

Spatial prepositions may be classified according to whether they specify location, path, or both. Cross-cutting this distinction is the distinction of motion versus non-motion. The distinctions are orthogonal because the criterial feature for a path is not motion, but the exploitation of an axis along which temporal stages or spatial slices of a figure are arrayed. When the axis is temporal there is motion; when the axis is spatial we have some relation distributed over portions of the figure arrayed along a major axis. Thus, _along_, _from_/_to_, and _into_ are all path prepositions which may enter into both motion and non-motion relations:

(1a) The boy/shelf ran along the wall.
(1b) The boy/road ran into the city.
(1c) The fog extended from the shore to the base of the cliff.

The naturalness of such extensions may be attributed to the fact that complex spatial relations must be decomposed into conditions that hold only on parts of a figure, and thus are naturally organized as "stages". Although I call a path exploiting a spatial axis a _stative_path_, such paths are not actually restricted to stative clauses:

(2a) The crack widened from the north gate to the tower (in minutes).
(2b) Snow covered the ridge from the tree line to the summit (in less than an hour).

Both the sentences in (2) have readings describing accomplishments, events with endpoints that develop over time, yet I will show the path phrases are stative; that is, they describe the spatial extent of the event, not its progression through time. I will argue that English has prepositions limited to locatives or paths, but no prepositions limited to motion, a fact which harmonizes with the existence of a large class of predicates like __cross__, __zigzag__, and __climb__, ambiguous between motion and non-motion readings.

Peter Svenonius
University of Tromsø

Mental models of spatial relations:
What linguistic expressions describing space tell us about the mental representations of spatial relations

Despite great variation, there are some very striking cross-linguistic commonalities in linguistic descriptions of the locations of objects and of the movement of objects in space. Certain basic domains are carved up in very similar ways across languages, as seen in the ways that morphemes are combined to express information about orientation and configuration relative to a landmark.

Meanwhile, evidence from navigation experiments involving animals, children, and adults suggests an intricate interplay among distinct modules of mind, including one concerned with orientation with respect to a landscape as a whole, and another concerned with location relative to landmarks.

At this point it is possible to venture a specific hypothesis concerning the relationship of the syntactic system of adpositions and other spatial expressions to the modules of mind which are implicated by the various navigation and orientation experiments.

14:30 - 15:00

Konrad Talmont-Kaminski
Marie Curie-Sklodowska University

Evolution, generative entrenchment and the bounds of rationality

Human rationality is bounded. Is this due, however, to it being the product of evolutionary processes or to some more fundamental limitations? If, indeed, there are any. Furthermore, does the evolutionary legacy place additional limitations upon human rationality that are fundamentally different from those placed upon all boundedly rational beings? I will argue that the boundedness of rationality is fundamentally a response to the insolubility of Hume's problem and, as such, a property of all reasoning beings. The flip side of boundedness, however, is the open-endedness of rationality afforded by the capacity to improve reasoning abilities by the addition of new heuristics, reliant as it is upon generative entrenchment. Again due to Hume's problem, the processes by which such new heuristics are arrived at will be broadly evolutionary in nature. The conclusion is that the sets of evolved agents and those that are bounded but open-ended are co-extensive but that their fundamental properties are due to a fundamental epistemic consideration.

15:00 - 15:30

Kerry McColgan, Liz Robinson, Sarah Beck and Martin Rowley
University of Warwick

Thinking about Possibilities: Factors responsible for children's biases when guessing on chance events

It has previously been shown that children are susceptible to an irrational bias when guessing the outcome of chance events (Robinson, Pendle, Rowley, Beck, & McColgan, in press). They prefer to guess when the outcome has happened rather than when the outcome is as yet undetermined. This study explored what factor might be responsible for this guessing preference: determination or position in causal chain. Younger (4- to 5-year-olds) and older (5- to 6-year-olds) children played a game with a novel apparatus, in which they had to guess which of three drawers a ball was going to land in. We compared their preferences for guessing at different points in the sequence. They could guess before a ball had been selected (when the outcome was undetermined), when a ball had been selected but not yet in the drawer (the outcome was determined but not at the end of the causal chain), or when the ball was in the drawer (determined and at end of causal chain). Both age groups showed the same preference to guess when the ball was in the drawer, regardless of the determined status of the other choice. However, only the younger children also preferred to guess at the determined yet incomplete stage rather than at the undetermined stage. We will discuss possible interpretations for these findings in light of adults' lack of preference between possible guessing points in the same game, and also the implications of these results for the differences between younger and older children's conceptualisation of possibilities.

15:30 - 16:00

Andrew J. B. Fugard, Mary E. Stewart and Keith Stenning
Universitaet Salzburg

Modelling reasoning processes as a function of autistic-like traits

When drawing inferences people must first reason to an interpretation of the task -- i.e., represent the premises to be reasoned about and what one is expected to do with those premises. There are two broad interpretative strategies: credulous, reasoning to a speaker's intended interpretation, and sceptical, drawing inferences which are robust to all kinds of adversary (Stenning and van Lambalgen, 2008). There are also inter-individual differences in the interpretations to which participants reason. University students with no formal training in logic were given a range of quantifier and conditional reasoning tasks so that cross-task consistency could be investigated within participants. There is evidence that peaks and troughs in ability found in people with autism spectrum disorder (ASD), e.g., variation in the ease with which information is integrated, relate to reasoning. We investigated relationships with autistic-like traits, milder variants of the traits found in ASD which are continuously distributed in typically developing populations, using the Autism-Spectrum Quotient (AQ) and Broad Autism Phenotype Questionnaire (BAPQ). We found that pragmatic language impairment (measured using BAPQ) predicted a greater tendency to reason to a sceptical interpretation, and this tendency was consistent across the individual tasks. There was also a strong relationship between autistic-like traits and information ordering, e.g., the effect of premise term-orders, which could not be interpreted as being related to credulous versus sceptical reasoning, and instead seems to relate to more general top-down versus bottom-up processing.

14:30 - 15:00

Thor Grünbaum
University of Copenhagen

Vision and the individuation of action

Psychologists and philosophers are often tempted to make general claims about the importance of certain experimental results for our commonsense notions of intentional agency, moral responsibility, and free will. Some notion of intentional control seems to lie at the heart of these different notions. It is a very strong intuition that if the agent does not intentionally control her own behaviour, her behaviour will not be an expression of agency, she will not be morally responsible for its consequences, and she will not be acting as a free agent. It therefore seems natural that the interest centres on the notion of intentional control. If it can be experimentally shown that agents do as a matter of fact not control their own actions even though they think they do, it will have far reaching consequences for our moral psychology. In this paper I look at one recent argument (Spencer 2007) allegedly demonstrating that our commonsense notion of intentional control is false. According to this argument, experimental data show that agents systematically do not do what they think they are doing and intend to do. I will use this argument as a foil for the discussion of principles of action individuation and their relevance to philosophical psychology.

15:00 - 15:30

Ophelia Deroy
Institut Jean Nicod

The importance of being able

The notion of an ability is very often used in our common sense attributions to others, and usually attributed by « can » or « to be able » statements. It is different, and less theory-ladden, than the notion of "knowing-how", which has for a long been the focus of debates, but has come under sustained philosophical pressure. This notion picks out something distinct from the mental attitudes we commonly attribute to one another, but something that plays an important explanatory role in the ways we make sense of one another. To establish the importance of this notion, it is necessary to defend the indispensability of attributions of abilities in explaining actions and to fit them into the existing accounts of our common interpretations of actions and agency. The challenge is to see how abilities can be accommodated at the personal level while not fitting into the category of mental attitudes like belief, desire or intention. This can be done if we think of abilities, first, as enabling conditions, distinct both from causes and from reasons, and as a means to adjust to opportunities, distinct from attitudes and dispositions. I conclude by examining how this model could accomodate experimental data on the way people actually perform, and learn to perform, explicit attributions of abilities to other agents.

15:30 - 16:00

Valeria Giardino
Institut Jean Nicod

Seeing as doing what

In this paper, I discuss the activity of seeing as as introduced by Wittgenstein in the *Philosophical Investigations* and in the *Remarks on the Philosophy of Psychology*. My claim is that these passages shed light on the role of ambiguity and multiple interpretation in some mathematical processes and creativity. Moreover, they suggest that different manipulations and different practices correspond to different interpretations. As Wittgenstein claims, interpretation is an action. In the first part of the paper, I first present some studies in computer science on correct image analysis and Gestalt conflicts. Secondly, I introduce Grosholz's analysis of Gödel's numbering as an example of the essential use of ambiguity in logic.

In the second part of the paper, I present my definition of *constructional diagrams*. These inference-promoting diagrams are in line with some recent research in psychology and what Tversky defines *constructional perception*, i.e. the coordination of two processes: reorganizing perception and associating ideas. These processes are correlated independently with a perceptual ability, reorganizing parts of figures, and with a conceptual ability, associative fluency. My conclusion is that in seeing a diagram we *see a practice*. Therefore, it not only seeing as which is involved, but also doing what afterwords: the capacities of dealing with different descriptions and with different manipulations express the same typically human ability.

14:30 - 15:00

Elena Zinchenko and Jesse Snedeker
University of Chicago

The role of motor information and language in early concepts: The case of tools

Brain imaging studies have found activation in premotor and motion-processing areas during conceptual tasks involving tools, leading to a hypothesis that motor information is central to the conceptual representation of tools. However, these data are consistent with several theories of conceptual content. We used a word extension paradigm to examine whether children and adults use motor information to determine the extension of new tool categories. Adults, 5-year-olds and 3-year-olds were introduced to a novel tool ("a dax") and shown its function and how to manipulate it. Then two unlabelled tools were presented, one with the same function and one with the same motor manipulation. All three groups systematically extended the novel label to the tool with the same function rather than the one with same motor manipulation. Three- and 5-year-old children continued to extend by function when the function was invisible (and thus perceptually inaccessible), and despite having had motor experience with the novel tools. We conclude that function is central to tool concepts while motor information is not. A further series of studies examined the role of language in novel tool category formation. When children were presented with minimal verbal description of the tools' function and manipulation, 3-year-olds did not extend category by function, while 5-year-olds continued to do so. This finding suggests that early in development, linguistic labels are helpful in abstract conceptualization of tool categories.

15:00 - 15:30

Anne-Katharina Ochsenbauer
Ludwig Maximilans Universität München

Caused motion in first language acquisition: Typological constraints in French and German

Research on linguistic diversity has revived a number of debates concerning universal and language-specific determinants in language acquisition. In the context of these debates, we compare how German and French children express caused motion, with particular attention to the implications of language-specific properties on acquisition. Thus, spatial systems present striking typological differences. Germanic languages typically encode Manner or/and Cause in verbal roots and Path in satellites. However, Romance languages express Path or Manner and Cause in main verbs and rely on less compact structures when describing complex motion events. Five age groups of German and French speakers (adults and children between 4 and 10 years) described animated cartoons in which an agent acted upon an object in a certain Manner causing its displacement according to a certain Manner and Path. The descriptions of German and French adults clearly displayed the expected typological contrast and even at 4 years children's utterances reflected the lexicalization patterns that are typical for their mother tongue. Irrespective of age, German responses were denser and more compact than in French. German adults and children systematically expressed Manner and Cause in the verbal root and Path in satellites. In contrast, French speakers tended to use main Path verbs and/or to scatter Cause, Manner, and Path among various devices within and across utterances. Developmental progressions were much more striking in French than in German. The discussion highlights the implications of typological constraints for the relation between language and cognition in models of first language acquisition testing the more general impact of typological constraints on cognitive functioning.

15:30 - 16:00

María Ponte Azcárate and Margarita Vázquez
University of La Laguna

Expresiveness and temporal reference

Prior´s approach on time has been neglected by semanticist for several reasons. The main one is the impossibility of Priorean tense logic to refer to times. The second one, is the impossibility to account for some important features of natural language such as temporal anaphora and the role of temporal constructions in discourse.

Priorean tense logic has, however, one important advantage over other accounts: the internal perspective of time (due to its modal nature).

This paper examines extensions of Priorean tense logic in which reference to times is possible, focusing on the so-called hybrid temporal logic. We will outline some of its main features (such us the introduction of temporal indexicals) and analyse some of its philosophical implications.

14:30 - 15:00

Richard Breheny, Heather Ferguson and Napoleon Katsos
University College London

An online investigation into how Gricean pragmatic reasoning affects incremental utterance interpretation

Here we present two visual world studies that examine non-lexically triggered, 'ad hoc' quantity implicatures. These are quantity implicatures (like so-called scalar implicatures) but which have no linguistic trigger. The aims of these studies were to establish (1) whether ad hoc quantity implicatures can be integrated early into incremental utterance processing and (2) whether in these contexts, hearers are evaluating what is said against the contextually specified level of speaker-informativeness as a Gricean reconstruction of the reasoning behind such implicatures suggests. The results demonstrate that ad hoc quantity implicatures can rapidly be generated online during discourse processing. Thus we conclude that Gricean reasoning does take place on line and can directly affect incremental interpretation.

15:00 - 15:30

Gottfried Vosgerau
Ruhr-Uni Bochum

Vagueness in thinking

Vagueness – understood as the fact that some of our utterances lack a clear truth-value – is mostly viewed as a genuine linguistic phenomenon. In this talk, I would like to defend the thesis that vagueness of predicates is a genuine mental phenomenon (it is vagueness of concepts understood as mental particulars), such that linguistic expressions merely inherit this property from the mental concepts they express. I will argue for my thesis in two steps: 1) In most everyday situations, categorizations have to be made on the basis of incomplete knowledge about the relevant properties of an object. Moreover, time pressure prohibits further enrichment of the information. Vague concepts provide the possibility to make fast categorizations that are reliable in spite of the poorness of information. 2) I will argue that the vagueness of concepts has the additional benefit of ranking the possible inferences that can be drawn from a certain categorization. Depending on how much information is gathered and on how prototypical the object is for the category, the possible inferences are more or less valid. Thus, the poorness of information does not only lead to vague concepts, but it is exploited to the advantage of the perceiver: not only information about the object is extracted, but simultaneously, the consequences of the categorization are ranked. Although this argument applies to perception-based concepts in the first place, it could be extended to theory-based concepts as well.

15:30 - 16:00

Elia Zardini and Paula Sweeney
University of St Andrews

Vagueness and context dependence

Contextualist theories have recently come to the fore in the vagueness debate. These theories appeal to and expand on the context dependence of vague expressions to explain various phenomena of vagueness. Roughly, they all crucially rely on establishing the lemma that, if 'F' has explicitly and truly been predicated of an object x in context c, then every object relevantly similar to x also falls under the extension of 'F' in c. After showing how otherwise very different contextualist theories all fall under our abstract characterisation, we proceed to present four challenges to such theories. The first challenge offers empirical examples of vague expressions in natural language that are not plausibly taken to be context dependent. The second challenge points out various epistemological and psychological gaps in the contextualist explanation of the phenomena of vagueness. The third challenge questions the sheer consistency of the principles typically embraced by contextualists. The fourth challenge shows the inadequacy of the contextualist explanation by appealing to certain facts concerning VP-ellipsis.

14:30 - 15:00

Antonia Hamilton
University of Nottingham

Understanding goals and intentions in the typical and autistic brain

When you see a someone fumbling in a handbag which emits a ringing sound, you immediately assume she is trying to answer her phone. The ability to make judgements about the intentions behind other people's everyday actions is a key building block of human social cognition, and is believed to depend at least partly on a 'mirror neuron system' (MNS) which links the actions of self and other. Here, I present brain imaging research into goal and intention understanding in typical and autistic individuals. First, I review studies of goal understanding, arguing that a simple process of 'direct matching' in the MNS is unable to account for action recognition at many different levels of the action hierarchy. Second, I will share new fMRI results examining how the autistic brain responds during observation of goal directed actions. These data shed light on the neural processing underlying this critical social ability in autism, and highlight the contrast between good goal understanding and poor belief understanding in autism. This has important implications for our ideas about Theory of Mind and about the role of the MNS in autism. Third, I go beyond goals to consider how the brain links information about goals to the identity of the actor performing the goal, which is a crucial step in agency judgements and social information processing. Overall, these studies have broad implications for our ideas about intentions, theory of mind, agency and social cognition.

15:00 - 15:30

Hong Yu Wong
Institute of Philosophy and
Birkbeck College, University of London

The significance of bodily awareness for bodily action

There appears to be an intimate connexion between feeling our limbs 'from the inside' and our power to act directly with them. This talk attempts to evaluate the strongest understanding of the connexion between bodily awareness and bodily agency: that feeling a body part 'from the inside' is necessary for acting directly with that body part. The most influential defence of this claim is to be found in O'Shaughnessy's work on action. I lay out O'Shaughnessy's arguments and analyse them. It turns out that there are two different strands implicit in O'Shaughnessy's account. I tease these strands apart and evaluate them separately. I then consider three counterexamples against his account: (one) deafferented agents; (two) direct brain control of physical apparatus made possible by brain-machine interface technologies; and (three) the automatic character of the majority of our bodily actions. Each case presents different difficulties for O'Shaughnessy. I end by drawing the upshot of these counterexamples for O'Shaughnessy and explore to what extent he can respond to them.

15:30 - 16:00

Nicholas Shea
University of Oxford

Representations of prediction error

In recent years a near-consensus has emerged in cognitive neuroscience that some forms of behaviour, especially reward-driven decision making, are caused in part by internal representations that predict the anticipated outcome of an action and then keep track of errors in those predictions, once the actual outcome has been observed. Similar prediction error signals appear to be important in other domains, such as motor learning and perceptual learning. This paper will focus on representations of prediction error, both in order to understand more about how such representations work, and as a particular case that can help throw light on more general questions about the nature of mental representations. The evidence for representations of prediction errors is twofold. First, they are inferred from the fact that postulating internal representations of prediction error is part of a model that accurately predicts subjects' behaviour. Secondly, the presence of such representations is thought to be confirmed through direct measures of brain activity. For present purposes, prediction errors are an interesting case. On the one hand, they are part of a relatively simple system, implicit processing in which appears to be responsible for a form of decision-making which is shared between humans (in some experimental settings) and many other animals. On the other hand, they differ from the standard fare of philosophical theories of content in being relatively disconnected from particular inputs or particular actions. This paper will ask the crucial content question about these putative representations: in virtue of what do they have the content they do?

Poster 13

Zeynep Emine Okur, Nilay Senturk, Hande Sungur and Munir Gunes Kutlu
Bogazici University, Istanbul

Examining the sex difference in jealousy in Turkish university students: The role of evolutionary disposition and cognitive operations

Evolutionary jealousy hypothesis suggests that men indicate more distress in response to imagined sexual infidelity, whereas women are more distressed in response to imagined emotional infidelity. Present study investigates how the sex difference in jealousy is affected under different response conditions in order to investigate whether the aforementioned sex difference is observed when the decision-making process is inhibited. The first experiment explored the sex difference in jealousy via forced choice measure in: (1) Unrestrained response time condition (URT), and (2) restrained response time condition (RRT). The second experiment examined the jealousy judgments under verbal and visual cognitive loads, so that responses are examined when the decision-making process is decreased. Results suggested that (1) the evolutionary sex difference is supported in URT, RRT, verbal load, and no load conditions. However, in the URT condition the observed sex difference was more pronounced in comparison to the RRT and verbal load conditions. In the verbal load condition the frequency of men being distressed to emotional infidelity was increased with respect to the URT condition. Moreover, the frequency of women being distressed to sexual infidelity was higher in the visual load condition than in the URT condition. Implications will be discussed with respect to the evolutionary and the social-cognitive accounts in jealousy judgment.

Poster 14

Nancy Mcquaid and Jeremy Carpendale
Simon Fraser University

Infants in relation:
Social understanding in social interaction

In this poster we consider findings from observational research on mother-infant interaction in order to explore the nature of young infants' knowledge of agency and intentionality. We present findings from our research on individual differences in maternal contingent responsiveness and infant social expectations and we offer an interpretation of these findings that is consistent with a relational account of social cognitive development. Research on social cognitive development has moved from a focus on preschool-aged children's understanding of false beliefs to infants' ability to share attention with others in the second half of the first year of life. There is considerable debate, however, about whether these infants understand themselves and others as intentional agents. In order to explore this question, we consider evidence from a study of younger infants in face-to-face interaction with their mothers.

Poster 15

Birgit Knudsen and Ulf Liszkowski
Max Planck Institute for Psycholinguistics

Infants correct others' false beliefs in anticipation of mistaken actions

The current study employed a new Theory-of-Mind paradigm to investigate whether infants correct a person in anticipation of a mistaken action. Anticipatory correcting requires both an understanding of the persons' intention prior to her acting (prior intention), and her misrepresentation of reality (false belief). In the experiment, 18-month-old infants observed an experimenter successively looking for an object hidden in the last of four containers. In a False Belief condition, E was out of the room and did not witness the switch of a confederate, whereas in a True Belief condition E stayed in the room and saw the switch. Finally, in a Different Intention condition, instead of trying to find the object, E had successively put stickers on the containers and only incidentally found the object. In this last condition, the switch, while unknown to E, was irrelevant to her prior intention. We measured infants' spontaneous pointing to the object's new location before E reached toward it. An ANOVA on the mean number of points revealed significant differences between conditions $F(2,45)= 5.44$, $p < .008$. Infants pointed significantly more to the object's new location in the False Belief condition compared to the Different Intention and True Belief conditions (respectively, $p < .002$; $p < .005$). This is the first study to show that by 18 months, infants not only understand others' prior intentions and false beliefs, but also use this ability actively to correct others helpfully and appropriately.

Poster 16

Mikolaj Hernik
University College London

Sensitivity to motion-cues of intentional agency across ontogeny: a nonverbal one-trial task

Adults as well as verbal children and non-verbal infants from diverse cultures show impressive ability to attribute intentional agency to moving geometrical shapes or artificial agents and to form expectations about these agents' behaviour. Some theorists argue that a single specialised agency-detection mechanism may be responsible for triggering intentional-agency attributions across human ontogeny (Leslie, 1994; Király et al, 2003). However, existing data provide only indirect support for these claims as studies of different age groups employ diverse, incomparable methodologies. The aim of the present study is to put agency-detection-mechanism hypothesis to a more stringent test: both adults' and infants' sensitivity to motion-cues of intentional agency is assessed using the same one-trial preferential-looking paradigm without any relevant verbal instruction.

The data from adults clearly show that even a single, brief and verbally-unprimed exposure to motion-cues of intentional agency alone affects adults' spontaneous looking-behaviour: When watching a pair of 10-sec-long clips of two colourful discs moving around the screen, adults are biased to look at the movie that violates attribution of intentional agency (one of the disc appears to move backwards), if and only if the motion of the discs bears motion-cues of intentional agency. The bias is independent of the presence/absence of morphological similarity between the discs and humans and morphological similarity alone is not sufficient to elicit it. The poster will also discuss the results of an ongoing complementary study with 12-month-olds as well as theoretical conclusions for our understanding of the mechanisms of intentional-agency attributions across the lifespan.

Poster 17

Péter Bodor
Eötvös University, Budapest

Varieties of feel-talk and their common ground

Varieties of personal experiences are among the fundamental issues of psychology and philosophy of mind. One class of these personal experiences is "feeling", including its emotional version.

Occurrences of a set of emotion relevant words in the talk of a child's and his caregivers' were investigated in a longitudinal corpus of CHILDES. Three aspects of emotional language use were analysed: terms for display such as cry and smile, emotional experience terms, such as feel, and emotion words proper, such as happy and mad. In this paper we will describe our findings with regard to the emotional experience terms, occurrences of feel. We will present the pattern of various feels as they occurred in the transcripts. Beside emotional uses, we will exemplify a set of non-emotional uses of feel: sensory experience-related (perceptual and pain) uses, and epistemic uses.

Regarding acquisition and ordinary use of language the various uses of feel points to the possibility that a number of subtle conceptual distinctions disclosed by ordinary language philosophers are to be drawn by ordinary language users, including children as well. The data also indicated a hypothesis that originally all feel-talk is a qualification of the actor's commitment, and the lay and professional ability to reify these claims into subjective experience is a secondary development. Our suggestion is analogous to the explication of look-talk Sellars offered. According to this proposal, the use of feel realises a person's own stance towards some state of affairs, indexes his or her subjectivity or own perspective. In this way there would be a common functional core to all types of feel-talk present in the data, such as perceptual, pain related, emotional and epistemological varieties, which differentiate only gradually through development.

Poster 18

Erika Marchetto and Luca L. Bonatti
SISSA

Statistical computation and rule-learning in 12- and 18-month-olds: Evidence for two distinct mechanisms

Acquiring language requires learners to find words and to master the morphological rules governing word structure. In our studies, we investigated whether infants recruit different mechanisms to accomplish both tasks, one mechanism devoted at extracting statistically defined speech sequences, the other one to generalize word-internal rules. Crucially, we hypothesized that different mechanisms would require different signal properties to be activated. Infants at 12 and 18 months were tested with a modified head-turn procedure. They were first familiarized with artificial speech streams containing nonsense words. Then, they were tested with sequences statistically present in the stream, but spanning the word boundaries, and with sequences never occurred in the stream, but structurally similar to words. When exposed to a segmented stream, both 12- and 18-month-olds generalized word-internal rules to novel sequences. When exposed to a continuous stream, however, 18-month-olds but not 12-month-olds extracted statistically defined sequences but failed to generalize. The results suggest that two distinct mechanisms, activated by different signal properties (i.e., the presence or the absence of the pauses in the familiarization stream), are recruited to find words and to process word-internal structure. The developmental difference suggests that the two mechanisms have different time courses, and that the generalization mechanism may be effective before infants can fine-tune to statistical relations occurring in speech.

Communicative intentions in infancy

Organizers: **Richard Moore and Gerlind Grosse**
University of Warwick and Max Planck Institute for Evolotionary Anthropology

The proposed symposium aims to address the following questions: (1) What are the socio-cognitive abilities necessary for the (a) having and (b) grasping of communicative intentions? (2) What evidence exists that these abilities can properly be attributed to human infants?

The canonical philosophical analysis of the nature of communicative acts can be found in Paul Grice's analysis of what it is to mean something by an utterance. However, the question of whether infants could grasp Gricean intentions is controversial. Recent commentators have both rejected (Breheny 2005, with respect to (b) questions of comprehension) and endorsed (Tomasello et al. 2007, Tomasello 2008, with respect to (a) questions of production) the appropriateness of a Grice-like characterisation of infant communicative intentions. Without necessarily endorsing the Gricean model, we propose to use it as a starting point for discussion of questions (1) and (2).

One clause of Grice's analysis tries to capture the sense in which a communicative intention is intersubjective – i.e. produced for another. This phenomenon is well illustrated in Behne et al. (2005). But what is it to produce an action for another? What social cognitive abilities (e.g. mind-reading) does this require? Grosse will give an overview of the experimental evidence, including her own work, in favour of attributing to infants intentions to share and manipulate others' epistemic states as well as the ability to recognise such intentions in others. Csibra will argue for a more austere account, according to which the ability to attribute epistemic states to others is not always necessary for grasping communicative intent, citing his work on early infant communication and 'pedagogy' (e.g., Gergely & Csibra 2005, 2006). Reddy will discuss these questions in relation to her recent work on 'engagement' between infant and caregiver (Reddy 2008) and question some of the assumptions of the Gricean and attributionist approaches. Moore will address philosophical and developmental issues relating to the contents of communicative acts – in particular, whether infants' first uses of language are characterised by perlocutionary intentions (intentions to make one's interlocutor do or think something) or illocutionary intentions (roughly, intentions to be understood as having performed a certain speech act), citing recent relevant experimental findings by Grosse.

Behne, T., Carpenter, M., Tomasello, M. – 2005: 'One-year-olds comprehend the communicative intentions behind gestures in a hiding game', in Developmental Science, 8:6 (2005), pp.492-499

Breheny, R. – 2006: 'Communication and Folk Psychology', Mind & Language, 21(1) February 2006, pp.74-107

Csibra, G. & Gergely, G. – 2006b: Social learning and social cognition: The case of pedagogy, in : M. H. Johnson & Y. M. Munakata eds. Processes of change in brain and cognitive development, Attention and Performance, XXI, 249-274

Gergely, G. & Csibra, G. – 2005: 'The social construction of the cultural mind: Imitative learning as a mechanism of human pedagogy', Interaction Studies, 6:3, 463-481

Gergely, G., & Csibra, G. – 2006a: Sylvia's recipe: 'The role of imitation and pedagogy in the transmission of cultural knowledge', in: S. Levenson & N. Enfield eds.: Roots of Human Sociality: Culture, Cognition, and Human Interaction, (Berg Publishers, Oxford)

Reddy, V. – 2008: How Infants Know Minds, (Harvard, Cambridge, Mass.)

Tomasello, M., Carpenter, M., & Liszkowski, U. - 2007: 'A New Look at Infant Pointing', Child Development, May/June 2007, Vol.78 no.3, pp.705-722

Tomasello, M. – 2008: Origins of Human Communication, (MIT, Cambridge, Mass.)

Gerlind Grosse
Max Planck Institute for Evolotionary Anthropology

Communicative intentions in infancy: Some empirical evidence

Some researchers have proposed that infantsb_ communicative attempts are potentially quite simple and aimed at mere behavioural responses (e.g., Moore & D'Entremont, 2001; Shatz, 1983; Shatz & O'Reilly, 1990). Some researchers have proposed that infantsb_ communicative attempts are potentially quite simple and aimed at mere behavioural responses (e.g., Moore & D'Entremont, 2001; Shatz, 1983; Shatz & O'Reilly, 1990). In a recent study we demonstrated that at least by 18 months of age, infants have the intention to be understood independently of achieving their material goal. Keeping the material outcome constant, children repaired more when their request was misunderstood than when it was understood correctly. Their repair was even specific to different types of misunderstanding (misunderstanding the referent of the request or misunderstanding the communicative intention). And, crucially, infants did not repair in a condition in which they did not receive the requested object but were understood correctly and given general consent. They thus also demonstrated a general assumption of helpfulness or benevolence which is a necessary basis for an intention to be understood. These results together with recent empirical findings on the nature of infant's expressive communication (i.e. pointing to share attention) indicate that children before the onset of language proper already have communicative intentions and assumptions of cooperativeness along the lines proposed

by Grice (1975) and Sperber and Wilson (1986). However, these intentions and assumptions might not yet be as articulated and differentiated as to allow for more complex manifestations such as indirect speech, deception or emphasizing and hiding authorship.Keeping the material outcome constant, children repaired more when their request was misunderstood than when it was understood correctly. Their repair was even specific to different types of misunderstanding (misunderstanding the referent of the request or misunderstanding the communicative intention). And, crucially, infants did not repair in a condition in which they did not receive the requested object but were understood correctly and given general consent. They thus also demonstrated a general assumption of helpfulness or benevolence which is a necessary basis for an intention to be understood. These results together with recent empirical findings on the nature of infantb_s expressive communication (i.e. pointing to share attention) indicate that children before the onset of language proper already have communicative intentions and assumptions of cooperativeness along the lines proposed by Grice (1975) and Sperber and Wilson (1986). However, these intentions and assumptions might not yet be as articulated and differentiated as to allow for more complex manifestations such as indirect speech, deception or emphasizing and hiding authorship.

Gergely Csibra
Central European University
Ostensive signals and manifestation of communicative intention

I argue that, while extracting the meaning of an utterance or a non-verbal communicative act is an inferental process, recognizing the manifestation of communicative intentions is normally based on decoding of ostensive signals directed at the addressee. Even young infants are sensitive to such ostensive cues and respond to them appropriately: by expecting further communicative signals from the source. This suggests that recognizing that someone manifests a communicative intention is one of the sources, rather than the result, of the development of communicative competence in human children.

Vasudevy Reddy
University of Portsmouth
Emotional engagement and the awareness of communciation

'Getting' communicative meanings has often been seen as an inferential process, with meanings to be extracted from somewhere behind the scenes. And becoming aware of communicative intentions has sometimes been depicted as a more complex, meta-level, process than awareness of 'ordinary' intentions. I argue that both these depictions, based on implicit Gricean concerns, are problematic. The driving role of emotional engagement in the awareness of communication is less well understood, and often puzzling in the face of dualist assumptions about the hidden-ness of mind. To explore these assumptions and issues I will focus on early emotional engagements in human infants.

Richard Moore
University of Warwick
Illocutionary and perlocutionary intentions in infancy

According to John Searle,

> The illocutionary act is the minimal complete unit of human linguistic communication. Whenever we talk or write to each other, we are performing illocutionary acts. (Mind, Language and Society, p.136)

This contrasts with a Gricean account of communicative interaction, according to which communicative acts are perlocutionary acts. Whereas speakers perform perlocutionary acts with intentions to have others think or do something, illocutionary acts are performed with the intention that a speaker be understood as having performed a speech act with a certain content and force – for example, as having made a particular assertion or order. How should we think of infants' early communicative acts?

Members of the 'Leipzig school' have recently drawn comparisons between early infant communicative acts and illocutionary acts. For example, Tomasello, Carpenter & Liszkowski ('A New Look at Infant Pointing', 2007) compare infants' pointing at 12-months to the declarative, expressive and directive speech acts described by Searle. However, such comparisons should be made only with caution. If they imply that young infants act with illocutionary intentions, then we ought to be sceptical that they are appropriate. This is because the distinction between the force and content of an utterance that is central to the performance of illocutionary acts is primarily an explanatory notion, which fails to find application when applied to these interactions. Research by Grosse et al. suggests that infants as young as 18 months do communicate with intentions to be understood – but these need not be characterised as illocutionary intentions.

16:30 - 17:00

Hemdat Lerman
University of Warwick

Maintaining negative disjunctivism

According to what has been labelled 'negative disjunctivism', a hallucination that is subjectively indiscriminable from a certain veridical perceptual experience has no positive mental characterization that explains the subject's inability to discriminate it from the relevant experience; its only mental characterization is its being indiscriminable through reflection from the veridical perceptual experience. Several philosophers have recently raised objections to this view. I argue that many of these objections can be addressed by taking into account facts about the sub-personal mechanisms responsible for the occurrence of the relevant episodes.

17:00 - 17:30

Michael Sollberger
University of Lausanne

Synesthesia and the relevance of phenomenal structures

The aim of my presentation is to sketch a new version of indirect realism in the philosophy of perception. I take the causal argument to highlight that empirical objects fail to directly determine the perceptual consciousness of the perceiver. Therefore, one has to conceive phenomenal properties as intrinsic properties of experiences of which we perceivers are directly aware in perception. Assuming this overall framework of indirect realism to be true, it will be shown how the relation between the inner phenomenal realm and the outer empirical realm can be construed. To do that, I shall concentrate on two main issues: a) cognitive sciences and their structural account of mental representations, and b) empirical cases of synesthesia. In particular, the argument will make clear that synesthetic experiences lend support to a structural understanding of perceptual consciousness. Finally, it will turn out that the version of indirect realism here defended fits into the framework of what can be called narrow, non-reductive, structural representationalism.

17:30 - 18:00

Keith Allen
University of York

Hallucination and imagination

Hallucination presents a well known problem for naive realist theories of perception, according to which perception is a relation between subjects and mind-independent objects. Standard disjunctivist responses to the problem of hallucination try to give a merely negative or relational characterisation of hallucination, as a mental state that is subjectively indistinguishable from a veridical perceptual experience. I consider a more positive characterisation of hallucination, as a pathological form of imagination—the pathology consisting in the fact that it is a form of imagination over which subjects lack direct control. I suggest that this more positive characterisation of hallucination is independently motivated, and helps to address what is often thought to be an explanatory failing of standard disjunctivist defences of naïve realist theories of perception.

18:00 - 18:30

Tom Stoneham
University of York

When do we dream?

Norman Malcolm and Daniel Dennett have both infamously tried to cast doubt on the apparently obvious claim that dreams are experiences we have while asleep, experiences which we can and sometimes do report upon waking. In this paper, I offer another argument for that conclusion. Unlike Malcolm and Dennett, I do not start from considerations about evidence or meaning but from the premise that to dream is not to undergo a series of misleading perceptual experiences and to make false judgements thereon, but merely to imagine having those experiences and making those judgements.

16:30 - 17:00

Fabrice Clément and Laurence Kaufmann
Université de Genève

How children reason about the social world: The case of roles

Social cognition tends to be apprehended by psychologists in terms of theory of mind. Recently, we proposed that social cognition cannot be reduced to some variations of naive psychology and needs a theory of its own: naive sociology (Clément & Kaufmann, in rev.; Kaufmann & Clément 2007; Kaufmann & Clément, subm.).

This paper is dedicated to one of the core concepts of this naive sociology: social roles. Four studies have been conducted to examine preschoolers ability to detect and use the information «encapsulated» in social roles. In the first study, we associated a conventional activity (putting shields vs spares away) with a traditional social category (male vs female). 3-year-olds were as good as 5-year-olds to predict what other individuals from the same categories would do. In study 2, we invented a social norm by using a character wearing a strange uniform and executing a specific movement in front of a machine; an other «neutral» character, without uniform, was not doing this movement when encountering the same machine. Younger children tended to overgeneralize and predicted that two novel characters, one wearing the uniform and the other not, would also effectuate the movement. Such overgeneralization was not present in studies 3 and 4, which presented contrasted roles. In study 3, indeed, two novel roles were presented to the subjects with characters wearing different uniforms. Thanks to these contrasted roles, younger children were able to predict the behavior of two new characters sharing the same uniforms. In study 4, predictions were even better when the two different roles were labeled with a generic name (e.g. here is a «cledeur» / a «roduit»), showing the fundamental role of language in indicating the relevant categories in the task and, more generally, in shaping and supporting essentialist categorization (Gelman 2004, 2005). Those results shed light on social cues necessary for determining category membership and for using «social kinds» to make inductive inferences from the known to the unknown.

Clément, F., & Kaufmann, L. (in revision). Social cognition is not reducible to theory of mind. When chidren use deontics rules to predict others' behavior.

Gelman, S., A. (2004). Psychological essentialism in children. Trends in Cognitive Sciences, 8(9), 404-409.

Gelman, S. A. (2005). The Essential Child: Origins of Essentialism in Everyday Thought (Oxford Series in Cognitive Development). Oxford: Oxford University Press.

Kaufmann, L. & Clément, F. (2007). Les formes élémentaires de la vie sociale, Enquêtes, 6: 241-269.

Kaufmann, L. & Clément, F. (submitted). Beyond Theory of Mind: A New Approach of Social Cognition.

17:00 - 17:30

Elena Hoicka
University of Stirling

Abstract language as a cue to irony

This study examined whether abstract language can make a statement sound more ironic. Fifty-five participants filled out a survey which asked them to choose which of two statements was more ironic given a context. For 12 of the contexts (e.g. After Roger sees someone's small dingy flat, he says...), one of the statements was non-abstract, referring only to perceptual or evaluative features of the current context itself (e.g. This is very luxurious!), while the other statement was abstract, referring to a different class of people/animals/objects, or prototypical exemplars of such classes (e.g. This is like Buckingham Palace!) For eight of the contexts (e.g. When watching a marathon runner, Lesley says...), one of the statements was again non-abstract (e.g. That runner is so lazy), while the other statement was abstract, referring to the class of people/animals/objects within the context (e.g. Runners are so lazy). Both same-class and different-class abstract statements were judged as more ironic than non-abstract statements. One explanation is that abstract language serves as a form of hyperbole, making the wrongness of the statements more salient. A second possibility is that abstract language makes people think in an abstract way, allowing them to identify irony, a type of abstract language requiring abstract thought, more easily.

17:30 - 18:00

Maria Graefenhain, Malinda Carpenter, Tanya Behne and Mike Tomasello
University of Goettingen

Young children's understanding of joint activity

Human children seem to engage in joint activities with others in different contexts early in their ontogeny (e.g., Warneken, Chen, & Tomasello, 2006). However, little is known about what young children understand about joint activities, that is, whether they merely coordinate their actions with their partner in order to achieve an individual goal, or whether they truly understand joint activities as following shared goals creating joint commitments (Bratman, 1992; Gilbert, 1990).

To investigate this question, young children were engaged in games that they could play either alone, in parallel with another player, or jointly with another player. We assessed whether children adapted their behavior to the established play context. Results revealed that 1- to 4-year-old children are highly motivated to play jointly with an adult partner even when they could play the games alone. Two-year-old children seem to regard their partner as an intentional agent with whom they share goals and intentions. However, they also seem to regard another person as acting jointly as long as she acts in parallel with them. Only the 3- and 4-year-old children adapted their behavior to another person depending on whether or not they had previously formed a joint commitment to play together with that partner. Together the findings thus suggest that children develop a relatively sophisticated understanding of joint activity

between 2 and 3 years of age. Ongoing studies currently investigate how young children monitor and understand the role of their partner in a joint activity by assessing children's memory of joint activities.

18:00 - 18:30

Olivier Morin
Institut Nicod et Université Paris IV Sorbonne

The Durkheimian Stance : Treating conventions as independent objects with necessary features

In an experiment, we tested two hypotheses concerning a widespread tendency to view social conventions as less arbitrary than they really are. Some people may think that pudding made in their hometown is not merely a better kind of pudding, but the one correct recipe. Two factors might explain this. First, our local conventions come from a cultural tradition backed by authorities that we respect. A second factor may be reification : the belief that conventions are things, existing somewhat independently of what people may say about them. Like Émile Durkheim, we tend to treat social facts as though they were objects.

Subjects read a story in which a character, Olga, demonstrated a recipe. When the recipe was referred to by a name ("the Barratz") rather than as "the recipe", subjects were significantly more likely to judge that the recipe could not be made without a certain ingredient. Moreover, they were significantly more likely to judge that it would still not be correct to prepare the recipe without that ingredient even if Olga had explicitly allowed it. It made no difference to the subjects' judgments whether the recipe was a traditional dish in Olga's country, or Olga's recent invention. The subjects' answers to these questions were not correlated with their preference for one form of the recipe over another.

This result, coherent with other studies showing that labelling promotes essentialist ways of thinking, suggests that the 'Durkheimian Stance' is what leads us to underestimate the arbitrariness of conventions.

16:30 - 17:00

Delphine Blitman
Institut Jean Nicod, Paris / Université de Franche-Comté

How to prove or refute the poverty-of-stimulus argument ? The lessons of a recent controversy

The argument from the poverty of stimulus, proposed by Chomsky in defense of the linguistic nativism has been challenged for ten years or so by many authors in the field of linguistics, psycholinguistics and philosophy. During the last decade, both conceptual issues concerning the definition and the formulation of the argument, and empirical ones were raised.

I examine a recent controversy between Lidz and colleagues (Lidz, Gleitman and Gleitman 2003. Understanding how input matters: Verb learning and the footprint of universal grammar. Cognition, 87:151–178; Lidz and Gleitman 2004. Yes, we still need Universal Grammar. Cognition, 94:85–93), and Goldberg (2004. But do we need Universal Grammar? Comment on Lidz, Gleitman and Gleitman 2003. Cognition, 94:77–84).

I propose to draw some lessons from a critical account of this controversy, that are important for the general understanding of the argument. First, the argument from the poverty of stimulus is not a general claim but must be applied to specific linguistic phenomena, which implies to reject Chomsky's formulation of the argument as too general. Secondly, the argument is a relational one : that means that no poverty or richness of the stimulus can be assessed without taking into account the learning mechanisms that process this stimulus. Thirdly, and finally, conceptual and empirical issues can not be separated : in order to prove or refute experimentally the poverty-of-stimulus argument, it is necessary to state it theoretically in a correct and clear way.

17:00 - 17:30

Marion Godman
King's College London

The prospect for a poverty of the stimulus argument for folk psychology

One of the most influential arguments for an innate language endowment is the poverty of stimulus argument (PoSA). Chomsky's famous contention: If children were merely general-purpose learners, the relevant linguistic stimulus would be too poor to account for their linguistic competence, has also come to inspire nativist claims for other domains of competence as well as general nativist hypotheses such as the massive modularity thesis. Still it is rarely addressed how such a PoSA should be spelled out for these putative innate knowledge domains. This paper examines the possibility of constructing a PoSA for an innate theory of mind or folk psychology (FP), particularly in relation to how it most recently, and perhaps most explicitly, has been defended by Gabriel Segal . The main concern of the paper is to demonstrate that the attractive considerations that support a linguistic argument cannot be generalised to support the case for an innate folk psychology (and possibly other putative innate knowledge domains).

The paper begins by reviewing the key premises in the linguistic PoSA and argues that the strongest support comes from idea that the primary linguistic data underdetermines the grammar, which children reliably arrive at. Some preliminary doubts are raised concerning whether there are any folk psychological candidates analogous to those linguistic principles that support our language competence. There is a general worry in this domain since the study of our implicit folk psychological knowledge having a very non-corroborative nature (e.g. debate between theory-theory vs. simulation theory). Most commonly the concept of belief is taken to be the primary candidate for a FP primitive. However it is suggested that recent studies with 15 months old infants on the one hand, and adolescents, on the other hand, challenges this assumption. The studies indicate that the trajectory toward a mature folk psychology involves many more steps than just "parameter-setting" for the concept of belief.

Yet even if one were to establish an analogy between linguistic principles and primitive folk psychology concepts ("belief, "desire" etc.) this is by no means sufficient for constructing a PoSA for folk psychology. Instead it is claimed that in order for a PoSA for folk psychology to draw on considerations from the linguistic argument, there needs to be support for two crucial premises: 1) FP concepts need not, and typically are not, pre-theoretically simpler or more natural than alternative explanatory concepts, 2) In most cases the data that would be needed for choosing among alternative kinds of explanatory concepts is not available to a general-purpose learner in the child's epistemic situation.

The paper then proceeds to show that these premises do not hold true for folk psychology. Some viable alternatives to FP concepts are considered and rejected in turn. The most plausible proposal seems to be different heuristics concerning behavioural propensities – which is how Daniel Povinelli suggests chimpanzees understand one another. This alternative is rejected as it is argued that once FP concepts like "seeing" are available to the child, they should indeed be considered the more simple or more natural alternative due to their explanatory, predictive, and social utility.

If we nevertheless accept that such heuristics are likely to be employed by mere general-purpose learners, it is argued that the second premise would not be supported. That is, the data in the child's learning environment would indeed yield a kind of selective pressure to either replace such behavioural heuristics or bypass them completely in favour of folk psychology. In short, it is likely that there is such a thing as decisive folk psychological data. Kim Sterelny's account of the child's epistemically scaffolded learning environment proves useful in this respect, describing "scaffolding" via for instance cultural inventions like storytelling, negative evidence (emotional penalties, explicit corrections) and linguistic reinforcement. Finally the paper contests Segal's attempt to bolster a strong PoSA for folk psychology by appealing to evidence that there is a implicit moral dimension inherent our intentional judgements .

Whereas Segal takes the poverty of stimulus argument not to have the same "polemical force" in folk psychology as it does in the case of language, the paper concludes that there is no compelling reason to think one could construct PoSA for folk psychology at all.

17:30 - 18:00

Claire Hewson
The Open University

The folk psychological concept of belief: An experimental investigation

Various authors have speculated about the commitments of the folk psychological concept of belief (e.g. Stich, 1983), yet there has been little effort to establish what naïve subjects do in fact claim about beliefs by testing the intuitions of actual participants. This paper presents an experiment which probed people's judgements about belief individuation, and explored factors which may influence these judgements. Building upon a thought experiment described by Stich (1983), subjects were presented with vignettes each of which provided a description of two agents who held beliefs which were identical in terms of their potential causal interactions, but which each had a different referent. Stich proposed that folk psychology would, in such cases, classify the two beliefs as different, thus indicating a commitment to a broad account of belief. The present results indicate that people are not committed to a broad account of belief, and if anything tend to favour a narrow account. However, information concerning an agents' past beliefs did play a role in influencing belief individuation judgements, arguably supporting a commitment of folk psychology to a causal-historical account of belief. In conclusion, the present findings provide useful initial data concerning the commitments of the folk concept of belief, with implications for debates about the nature of folk psychology and it's role within developed scientific accounts of mind and behaviour. It is proposed that this type of methodology may be useful for further elucidating the commitments of folk psychology, and suggestions for future research in this vein are offered.

18:00 - 18:30

Carlos Mauro and Susana Cadilha
University of Porto

Weakness of will - an experiment about the folk concept

The paper will be methodologically based on experimental philosophy, following the same structure designed by Joshua Knobe in the paper entitled "Intentional Action and Side-Effects in Ordinary Language" – simple experiment. 110 people will be interviewed in a public place in the city of Oporto with the aims of: a) trying to understand if moral aspects influence, or not, the imputation of weakness of will to a person in some circumstances and not in others; b) what is the relationship between decision, action and weakness of will. We will ask people questions that will help to get at their ordinary views about these relationships.

The main ideas of this paper are:

(1) The weakness of will is not a phenomenon that happens in the real agent. It is just a way to characterize behaviors that seem to go against the better judgment of the agent himself, however it is nothing more than a cultural form of categorization influenced by moral language, despite the several efforts to dissociate the weakness of will from this discourse (in our opinion, unsuccessful).

(2) The so-called "decision" does not exist, i.e., there is no pre-action element called decision that has a casual effect over the action and to which we categorically compromise ourselves, to the extent that we say that the decision "x" is the expression of the better judgment of the agent.

(3) We believe that the action is proceeded by a continuous production of intentions (belief+desire) more or less strong and that the action expresses the intention which for the agent was stronger in the moment the action begins. We think that beliefs are influenced by the set of desires of the agent, as well as the desires are influenced by the beliefs of the agent.

(4) If there is an element that we can call decision and this should cause action, we will have to consider what happens with the agent between decision and the action. Nothing? A time gap in which the world in which the agent is in is frozen? A simple example: I decide to read a paper today, but I do not read it, even though knowing that everything considered (my beliefs and desires) this was my better judgment and that therefore I should behave according to this decision, since this, according to what is said, has an effect over me (action). The problem here is that we have to believe that there is in us some flaw, or that a demon of some kind steps into action and we do not do what I had decided to do. We cannot believe this. Something happened in me to make me act differently from the "decision" I had taken earlier. For us it seems plausible to imagine that something happened in the space of time between my decision and my action.

(5) The agent can be conscious of its own action, the moment he carries it on, but this does not mean that he is conscious of the reasons (effective intention) that led him to act in that direction. We believe that unconscious reasons could led the agent to action. We tend to think that there is always an unconscious part of the reasons to act, greater or smaller depending on the type of action. We know this may seem little intuitive in basic cases like turning on the light of the living room. However, it seems intuitive when we think in self-destructive actions, i.e., in which the agent many times rationalizes the explanation for his action (in a psychological sense, not in Donald Davidson's philosophical sense).

(6) We assume that we can only explain the action once it was carried out, i.e., the action itself is the most important and initial data of any research effort in this field. The agent's action reveals much more than the decision statement of the agent, prior or even after the action. In practical psychological terms the most interesting thing is to know which beliefs and desires were involved in my action of not reading the paper and go play with my son, rather than exactly trying to find what happened in my head that made me take the opposite direction of the "decision. Finally, we believe that a simple model of explanation of the action based on the continuous improvement of intentions can lead us to better results concerning the effectiveness of any social intervention (e.g. economy/psychology), or even individual (e.g. psychology). (but what would be the "improvement" of intentions?).

16:30 - 17:00

Olle Blomberg
University of Edinburgh

Cognition and grammatical investigations

Wittgenstein's philosophical psychology is sometimes recruited in attempts to show that the cognitive sciences are entangled in conceptual confusions (e.g. Schroeder 2001, Bennett & Hacker 2003, 2008). Conceptual confusions, it is argued, can be avoided if cognitive scientists, or philosophers with whom they collaborate, pay careful attention to the ways in which psychological terms such as 'remembering', 'perceiving' and 'representing' are used in ordinary language (Harré & Tissaw 2005). In this paper, I will examine what role and status such "grammatical [or conceptual] investigations" could and should have in cognitive science. The Wittgensteinian critics argue such grammatical investigations are purely conceptual in nature and that a sharp distinction can be drawn between conceptual claims (about what it makes sense to say) and empirical claims (about what is the case). However, Dennett (2007) describes the grammatical investigations of Bennett and Hacker (2003) as a form of "autoanthropology" and Wittgenstein himself, in the "Big Typescript", characterised such investigations as "the descriptive science of speaking". But if this empirical conception is correct, then it is not clear whether there is any special value in philosophers' grammatical investigations of psychological terms, especially in the wake of rigorous research programmes in linguistics and the social sciences (conversation analysis, ethnomethodology, discursive psychology, etc) which could fit the "descriptive science of speaking" characterisation. In this paper, I will analyse and evaluate what investigations of the grammar of concepts and talk-in-interaction might have for cognitive science, given different conceptions of what such investigations amount to.

17:00 - 17:30

Peter Fazekas
University of Edinburgh

Monadic markers: from cognitive architecture to conceptual irreducibility

Nowadays, those physicalists who acknowledge the presence of an epistemic gap explain why there is an epistemic gap by relying on a conceptual gap: they claim that certain physical properties of the brain can be picked out by two distinct sets of concepts—physical-functional concepts and phenomenal concepts. The conceptual gap stems from these two sets of concepts being mutually irreducible to each other; there is no a priori link between physical-functional and phenomenal concepts. This conceptual irreducibility, then, is explained by relying on some special features of phenomenal concepts.

The present paper offers an account of conceptual irreducibility without relying on any special feature a phenomenal concept might have. The emphasis is shifted from the nature of phenomenal concepts to that of the experiences that phenomenal concepts are concepts of. The account proposed is based on principles of cognitive architecture, and their epistemic consequences. It makes and defends three assumptions about our cognitive architecture: first, that there are unstructured representations in it, second, that there are no associative links between these unstructured representations and others without activating the unstructured representations in the first place, and third, that the low-level complex processes giving rise to unstructured representations are encapsulated—that is inaccessible for higher cognition. On the basis of these assumptions it becomes possible to straightforwardly explain the conceptual irreducibility of phenomenal concepts, and thus providing a defence of physicalism in philosophy of mind.

17:30 - 18:00

John Lumsden
Université du Québec à Montréal

Meaning and reference, conception and perception, time and space

Why do all natural languages express clausal events in a relatively simple propositional format? I argue that the linguistic combination of meaning and reference is accomplished by the same cognitive interface that combines our conception and perception of events in the world. The propositional format of this general interface allows us to understand the temporal succession of events.

Following Talmy (2000), it assumed that grammatical (i.e., closed-class) forms constitute the concept-structuring system of language. I argue that that the propositional format of the clause is encoded in grammatical forms and it is these forms that enable linguistic reference.

Following Mandler (2004) it is assumed that the extraction of conceptual categories from perceptual displays emphasizes events and the “roles” that objects take in events, even before children have learned to speak. I argue that the cognitive interface that relates conception and perception has a propositional format. Thus, the grammatical forms of language refer to our perception of events, while non-grammatical forms express conceptual content.

Following Lucretius (c.60 BC), it is assumed that we cannot perceive time directly; we must conceive of time in terms of space. A propositional format provides for this conception. Predicates like BE(y, z), for example, establish a time-line by asserting the existential continuity of an entity ‘y’ in some context ‘z’, while relations like AFFECT(x, y) establish intervals by identifying moments of change in the entity ‘y’. I argue that such relations provide the basis for all clausal semantics.

18:00 - 18:30

Krisztina Orban
Birkbeck College, London

Identification-dependent immunity to error through misidentification

It seems that when one asserts 'I am here now' we cannot misidentify the 'I' in the assertion. If we cannot misidentify the referent of a term in a statement, then the statement is said to be immune to error through misidentification relative to the term. One of the most influential models of immunity to error through misidentification derives from the work of Gareth Evans (1982). On Evans's account, immunity consists in identification-freedom – for the reason that there is no possibility of misidentification if there is no identification, and any possibility of identification makes room for misidentification. I will argue against Evans's claim that immunity consists in identification-freedom. To this end, I will provide a number of examples designed to show that identification-dependent judgements can be immune to error through misidentification relative to the identified term.

Giacomo Rizzolatti
University of Parma

The mirror mechanism in monkeys and humans

Primates, and humans in particular, are exquisitely social species whose survival critically depends on their ability to understand what others do and feel. In my talk I will first describe the general properties of a neural mechanism – the mirror neuron mechanism- that allows individuals to understand the actions done by others and their emotions. This mechanism produces, in the brain of the viewer, representations of the observed actions and observed emotions in a motor format. Because the observing individuals know the outcome of their motor representations, they are able to achieve, through the mirror mechanism a *direct* knowledge of what the others do and feel. In the second part of my talk I will show that, while individual mirror neurons code the "what" of a given motor act (e.g. grasping), their "chained" organization enables the observer to infer the "why" of it (e.g. grasping-for-eating"), that is to read the agent's intention. I will conclude discussing the relationship between mirror mechanism and some aspects of autistic syndrome.

Action and perception: Associations and dissociations

Organizer: **Pierre Jacob**
Institut Jean Nicod

We perceive objects on which we act. Furthermore, we perform actions and we also perceive actions performed by others. Finally, many of the actions that we either perform or see others perform are not only directed towards inanimate objects, but also towards conspecifics. The overall goal of this symposium is to examine the various links between action and perception. After a short introduction, this symposium will be comprised of talks by three speakers: a cognitive neuroscientist of vision and action and two developmental psychologists. The cognitive neuroscientist Mel Goodale will examine some of the experimental evidence in favor of the two-visual systems model of human vision which he has promoted over the past twenty years or so. The developmental psychologist Jessica Sommerville will review some of the experimental evidence showing the role of motor experience in human infants' ability to understand others' goal-directed actions. The developmental psychologist Josef Perner will examine some of the developmental dissociations in tasks of mindreading between verbal responses and perceptual responses.

Melvyn Goodale
University of Western Ontario

Visual duplicity:
Action without perception in the human visual system

Visual systems first evolved not to enable animals to see, but to provide distal sensory control of their movements. Vision as 'sight' is a relative newcomer on the evolutionary landscape, but its emergence has enabled animals to carry out complex cognitive operations on representations of the world. In the more ancient visuomotor systems, there is a basic isomorphism between visual input and motor output. In representational vision, there are many cognitive 'buffers' between input and output. Thus, in this system, the relationship between what is on the retina and the behaviour of the organism cannot be understood without reference to other mental states, including those typically described as "conscious". The duplex nature of vision is reflected in the organization of the visual pathways in the primate cerebral cortex. The dorsal 'action' stream projecting from primary visual cortex to the posterior parietal cortex provides flexible control of more ancient subcortical visuomotor modules for the control of motor acts. The ventral 'perceptual' stream projecting from the primary visual cortex to the temporal lobe provides the rich and detailed representation of the world required for cognitive operations.

This might sound rather like Cartesian dualism—the existence of a conscious mind separate from a reflexive machine. But the division of labour between the two streams has nothing to do with the kind of dualism that Descartes proposed. Although the two kinds of visual processing are separate, both are embodied in the hardware of the brain. Moreover, there is a complex but seamless interaction between the ventral and the dorsal streams in the production of adaptive behavior. The selection of appropriate goal objects depends on the perceptual machinery of the ventral stream, while the execution of a goal-directed action is mediated by dedicated on-line control systems in the dorsal stream and associated motor areas. Moreover, as I will argue, the integration of processing in the two streams goes well beyond this. The dorsal stream may allow us to reach out and grasp objects with exquisite ease, but it is trapped in the present. Evidence from the behaviour of both neurological patients and normal observers shows that, by itself, the dorsal stream can deal only with objects that are visible when the action is being programmed. The ventral stream, however, allows us to escape the present and bring to bear information from the past – including information about the function of objects, their intrinsic properties, and their location with reference to other objects in the world. Ultimately then, both streams contribute to the production of goal-directed actions.

Jessica Sommerville
University of Washington

Perception-action associations in infancy:
The role of motor experience in infants' developing understanding of goal-directed action

A variety of research provides evidence for perception-action dissociations in infancy. A paradigmatic example of such dissociations concerns the knowledge that an object continues to exist when hidden from view: infants' looking behavior provides evidence of sensitivity to object permanence several months prior to when infants can successfully search for hidden objects. In contrast, emerging research suggests that perception-action associations also exist in infancy, particularly within the domain of social cognition. In my talk, I will review recent evidence suggesting that motor experience plays a critical role in infants' understanding of goal-directed action. Specifically, I will discuss studies that provide evidence that a) variability in infants' ability to produce particular goal-directed actions is related to infants' understanding of these actions as performed by others, and b) intervening to facilitate infants' ability to produce particular goal-directed actions also enhances infants' ability to identify the goal of such actions in other people's behavior. Finally, I will attempt to reconcile these seemingly disparate findings: why do perception-action dissociations arise in some contexts but not others?

Josef Perner
University of Salzburg

Precocious sensitivity to false belief: Is it "implicit" knowledge?

I review research on children's ability to predict where a protagonist will look for an object, when he is mistaken about its location (false belief test). When the protagonist enters the scene at different points depending on where he thinks the object is, then the following dissociation can be observed in children below the age of 4 years: Many children look in expectation at the entry point where he thinks to find the object but they indicate verbally that he will come out at the other point, where the object really is. This dissociation of an earlier sign of understanding from correct answers to questions is in several aspects similar to the dissociation between explicit and implicit knowledge in, e.g., blind sight patients, subliminal perception, or susceptibility to illusions: it reflects a difference in terms of (1) indirect and direct measures of knowledge, (2) unreflected, spontaneous action and delayed, hesitant action, and (3) accessibility to metacognitive confidence judgments. I speculate on the nature of this earlier developing "implicit" knowledge as analogous to implicit memory and try to explain why ever earlier signs of this knowledge are found in infancy.

14:30 - 15:00

Daniel Acquah, Fenja Ziegler and Peter Mitchell
University of Nottingham

Developments in children's understanding of the mind: Evaluating the selection processing model

Friedman and Leslie (2004a; 2004b) reported a striking pattern of finding using the avoidance false belief task. Participants must predict the actions of a protagonist who wishes to avoid an object, but is mistaken about which of three locations it is in. The task has two correct answers- in wishing to avoid the location where the protagonist falsely believes the object to be, they might go to either the actual location of the object (TB), or the remaining empty location (Neutral).

In experiment one we presented children (N=42) with the avoidance false belief task. We replicated the TB bias even when the test questions preceded the control questions. In line with the selection processing model we found no evidence of systematic bias in the control task. A failure bias would cause children to select TB because it would frustrate the protagonist's desire to avoid the object. This bias account is consistent with children's tendency to use a rule linking ignorance with "getting it wrong."

In a second experiment (N=32) we used a further task to rule out the failure bias. Jenny wishes to put her dress away in one of two clean boxes. After checking they are empty she goes to fetch her dress. In her absence a dirty toad enters one of the boxes. In this task we found a bias towards the object location, consistent with possibility of children adopting a rule linking ignorance with searching in the "wrong" box. We explore the possibility that selection processing provides a default method for understanding other minds with rule based approaches developing as a shortcut.

15:00 - 15:30

Judith Bek and Suzanne Lock
University of Sheffield

Afterlife beliefs: priming and category effects

Recent work in Anthropology and Psychology has generated interest in the phenomena of afterlife beliefs. Astuti and Harris (2008) found that continuity judgements for mental states after death are context-sensitive, with an increase in continuity judgements following a religious prime relative to a secular prime. Bering and Bjorklund (2004) found that adults are more likely to attribute certain categories of mental states than others to a dead agent, notably emotional states were attributed significantly more than psychobiological states. There are competing explanations of why afterlife beliefs are a cross-cultural phenomena, with Boyer (2001) suggesting that they are a by-product of competing cognitive systems and Bering (2006) explaining them as a result of our attempt to simulate the situation of the dead person.

In this paper, we will present the findings of our current experiment, which provides new evidence on both the nature of adults' tendency to attribute continuing mental states to dead agents, and the cognitive mechanisms underpinning this tendency. Our study involves 180 participants who are given a biological, emotional or neutral prime, read a vignette describing the death of a human character, and are asked to judge the continuity of a range of psychological states. Preliminary results support Bering and Bjorklund's category effects, show that the context-sensitivity of afterlife beliefs is limited, and give tentative support to Bering's simulation hypothesis. Further results will be presented and discussed, and we will consider the philosophical implications of this emerging data for theories of belief, and pre-theoretic conceptions of the mind.

15:30 - 16:00

Szabolcs Kiss and Zoltán Jakab
Institute of Sociology, Hungarian Academy of Sciences

Understanding privileged access to mental states in preschoolers and first graders

The attribution of privileged access to mental states fits well into the topic of naïve theory of mind or mentalisation, but so far it has not been examined systematically. Privileged access means that we have first-person authority concerning our own mental states, while we can access the mental states of others only via their (verbal) behaviour. In our study, we raised the questions of when and how does the child acquire the notion of privileged access during development. We presented children with a puppet show in which the protagonist reports different mental states while other characters also form an opinion regarding those mental states. Then the child's task was to select the character who knew best the mental state in question. We argued that if the child is able to answer appropriately than s/he ascribes privileged access to the protagonist.

After the puppet show we asked children about some of the mental states in a first-person perspective. According to our results, even 7- or 8-year-old children cannot apply the principle that the protagonist knows best his mental states, in other words they cannot ascribe privileged access to mental states. At the same time, even preschool children were able to answer the first-person question correctly. In sum, our results do not give support the so called "theory theory" (Gopnik, 1993) of mentalisation.

16:00 - 16:30

Giulia Piredda
Roma Tre University

Extended mind and belief conception: A critical assessment

In this paper I will let two philosophical questions interact: namely, the extended mind thesis and the theory of belief. Rehearsing the main argument for extended mind, I will first show its link to the issue of belief conception. In claiming for extended mind, Clark and Chalmers implicitly ask us to accept a notion of "external dispositional mental state", which, in my view, remains obscure and problematic. In order to show it, I will analyze this notion by testing its coherency within two different belief accounts: the first is Sperber's account of intuitive and

reflective beliefs, considered as an example of representationalism; the second is Dennett's soft instrumentalism.

My analysis will proceed by considering first the concept of "external mental state" and then that of "dispositional mental state". The result will be that in both conceptions, for different reasons, the notion of "external dispositional mental state" remains problematic. I will thus conclude that, if Clark and Chalmers want to appeal to this notion in order to argue for extended mind, they have to find an appropriate account of belief, one in which an external dispositional mental state makes sense. This conclusion will also introduce some reflections about the appropriateness of extended approaches to mind and cognition and a general assessment of the philosophical debate concerning cognitive individualism.

14:30 - 15:00

R Geary-Griffin
Keele University

Is there room in recognition memory for global environmental context?

The reinstatement of the encoding environmental context (EC) at the retrieval phase aids recognition (Smith, 1988). Also, it has been suggested that global EC (e.g. a room) possesses more conceptual than perceptual properties (Smith, 1995). Due to a number of reported process dissociations, that will be addressed, a dual-process approach to recognition was adopted. The research investigated the nature of global EC-dependent recognition memory by employing incidental learning and an explicit two-step Independent-Remember-Know-Guess recognition test. Recollection was viewed as a threshold process; the double high-threshold sensitivity measure p(c) and the response criterion k were employed. Familiarity was viewed as a continuous process (i.e. processing fluency); the signal detection sensitivity measure d' and the response criterion c were employed. A variety of experimental features were employed including partial recognition tests, implicit conceptual/perceptual tests, awareness instructional manipulation and reaction time data. The results bring into question earlier reports of global EC recognition memory. The absence of a global EC effect with implicit conceptual testing supports Parker, Dagnall and Coyles (2007) view that such reports are due to explicit contamination. The detection of a global EC-dependent effect with implicit perceptual testing challenges prior assumptions (see Parker, Gellatly & Waterman, 1999). The following shall also be addressed: the phenomenon of false recognition, the danger of local EC contamination, the distinction between folk and experimental accounts of global EC-dependent effects and also the nature of global EC (cf. other types of context).

15:00 - 15:30

Tahir Wood
University of the Western Cape

The proposition is a semantic form

The goal of this paper is to establish the place of the proposition in linguistic theory. The proposition has long been an object of interest in philosophical logic and in certain psychological approaches to language. But within these fields discussion of the proposition has generally failed to distinguish it clearly from such related terms as sentence, predicate, belief and judgment. Unlike the predicate, which is a grammatical concept, the proposition has a mental existence relatively autonomous from any linguistic expression. In the evolution of language, a case system emerges, in which relations of noun to verb and noun to noun are organised by the emerging verb valences. The underlying semantic forms (propositions) must be thought of as schemas that link two or more relevant semantic domains. Thus valence is not just a grammatical category linked to other grammatical categories like subject and object; it is indicative also of a semantic level in which the typology of the actants and the nature of their interrelations are specified. In its intimate relationship with the verbal schema, the proposition is a semantic form that acquires the status of meaning through its function of linking semantic domains within the integrated long term memory system, the semantic substance. Propositions do not include truth or reference as aspects of themselves. A proposition is pure ideation, dependent on language as an evolved faculty, but independent of any linguistic expression.

15:30 - 16:00

Elia Zardini
University of St Andrews

Knowledge-how, true indexical belief, and action

Intellectualism is the doctrine that knowing how to do something consists in knowing that something is the case. Drawing on contemporary linguistic theories of indirect questions, Jason Stanley and Timothy Williamson have recently revived intellectualism, proposing to interpret a sentence of the form 's knows how to F' as ascribing to s knowledge of a certain way w of F-ing that she can F in w. In order to preserve knowledge-how's connection to action and thus avoid an overgeneration problem, they add that this knowledge must be had under a "practical" mode of presentation of w. I argue that (i) there can be non-knowledgeable true beliefs under a practical mode of presentation and that (ii) some such beliefs would nevertheless be sufficient to establish knowledge-how's characteristic connection to action, and thus count as knowledge-how. If so, Stanley & Williamson's account is faced with a serious undergeneration problem. Moreover, the structural features on which the argument relies make it likely to present a quite general challenge for intellectualist strategies.

16:00 - 16:30

Manuel García-Carpintero and Teresa Marques
University of Barcelona

Disagreement and relativism

Do I contradict you if I disagree with what you have just said? And do I disagree with you if I assent to the negation of what you have just said? What does disagreement amount to, and what constraints on content does it impose? Intuitions concerning reports of agreement and disagreement play a central role in contemporary arguments motivating relativism, and against more standard contextualist positions. Briefly, relativists accuse contextualist positions of loosing the sense of disagreement that seems to exist in certain central cases involving, for example, predicates of personal taste. A contextualist about predicates of personal taste will be committed to holding that utterances of a sentence containing such a predicate made in different contexts may express different propositions, which the relevant standard of taste, in that context, contributes to individuate. This looses the seeming disagreement manifested in matters of taste. Disagreement, so the story goes, requires that the same content is accepted/ rejected by those in disagreement. In this paper, we will argue that disagreement in this sense is neither a sufficient nor a necessary condition for the same

proposition to be asserted/denied.We will argue that this poses a problem for the relativist: while the point that disagreement does not suffice for sameness of content can be appealed to by the contextualist, the point about disagreement not being necessary poses a problem for relativist accounts.

14:30 - 15:00

Zoltan Dienes
University of Sussex

How to have rational beliefs: Orthodox vs Bayesian inference

Two notions of rationality are: having beliefs that are justified; or having beliefs that have survived criticism. These two notions correspond to two opposing approaches to statistical inference: The first to Bayesian inference and the second to orthodoxy (hypothesis testing/Neyman Pearson). The orthodox approach is the one used by almost all psychologists and linguists whenever they accept or reject a hypothesis by citing a p-value. However, most users of statistics implicitly believe they are getting Bayesian answers to a Bayesian question and the result has been a long standing mis-use of statistics. Assuming one can assign numerical continuous degrees of justification to beliefs, some simple minimal desiderata lead to the axioms of probability and hence "the likelihood principle" of inference. Hypothesis testing violates the likelihood principle in a number of ways – suggesting that some of the deepest held intuitions we train ourselves to have as orthodox users of statistics may be irrational. While these arguments are old, they are not widely appreciated, and I illustrate them with new examples (which counter some recent arguments against Bayes). One example uses unpublished experiments to test Rupert Sheldrake's theory of morphic resonance.

15:00 - 15:30

Víctor Verdejo
Universitat Autónoma de Barcelona

Systematicity, structure and the language of thought

In the present paper, first, I will try to reach some important clarification as regards the notion of structure in mental representation (MR) with respect to a domain (D) in explanations of systematicity phenomena. In particular, I will defend that, contrary to Cummins et al.'s uses (Cummins, 1996; Cummins et al., 2001; Cummins et al., 2005), the notion of structure in MR with respect to D needs, at a minimum, the distinction between a high level and a low level of description. To do this, I will show that without such a distinction, Cummins et al.'s own distinction between MR that shares structure with a given domain D and MR that encodes that structure is either unintelligible or else cognitively irrelevant. Second, I will argue that, even if we interpret charitably Cummins et al.'s developments, they clearly beg the question against what since Fodor and Pylyshyn's famous 1988 paper is taken to be the challenge for the connectionist contender. In relation to this, and contrary to the usual assumptions in the literature, I will articulate the view that only very implausible demands on the LOT kind of MR can lead to the denial that encodings –such as Gödel numbering– can be an instance of that kind of MR.

15:30 - 16:00

Tevfik Aytekin
Bahcesehir University

Representational structures in connectionist systems

In his 2007 book, Representation Reconsidered, Ramsey examines different notions of representation invoked in the two main paradigms of cognitive modeling: classicism and connectionism. He claims that although the representational notions used in classical systems (I-O representation and S-representation) play valuable explanatory roles qua being a representation, those used in connectionist systems (receptor and tacit notions of representation) do not. From this he concludes that cognitive science is taking a non-representational turn. I will argue that Ramsey's treatment of representation in connectionist systems is problematic. I have two main reasons for this claim. First, I will argue that Ramsey adopts the "physical stance" in describing the functioning of connectionist systems and this prevents him to see the representational structures in those systems. Second, Ramsey does not discuss sufficiently the possibility that connectionist systems might contain S-representations. If, as I will argue, connectionist systems contain S-representations then it does not follow that cognitive science is taking a non-representational turn even if Ramsey is right that the receptor and tacit notions of representation do not play explanatory roles qua being a representation.

16:00 - 16:30

Jussi Jylkkä
University of Turku

Defending prototype compositionality

It has been argued that prototypes cannot compose, and that for this reason concepts cannot be prototypes (Osherson & Smith 1981; Fodor & Lepore 1996; Connolly, Fodor, & Gleitman 2007). In this paper I will argue that prototypes do compose, though only extensionally and not necessarily intensionally. I will put forward a variety of an extensional account of compositionality, which relies on the notion of triggering a concept. I argue that the theory probably escapes the problems traditionally raised against extensional theories of compositionality.

14:30 - 15:00

Ferenc Huoranszki
Central European University

Psychological states and causal dispositions

Most contemporary philosophical discussion about the intentionality of psychological states centers around two issues: first, whether or not every mental state is intentional; and second, whether non-intentional mental states are logically supervenient on – and hence in-principle reducible to – some physical states. In this paper I propose an alternative approach both to the issue of intentionality and to the question of reducibility. Intentionality is characterized with reference to the modal implications of the ascription of certain properties. On the one hand, intentional states are relationally specified, hence their ascription implies the specification of some object(s) on which they are 'directed'. On the other hand, the instantiation of intentional properties does not require the actual existence of the object that is necessary for their specification. It has recently been observed that the ascription of causal dispositions has similar modal implications. I argue, however, that the ascription of thoughts has interestingly different modal implications from the ascription of causal dispositions. The difference can be best captured with reference to the way in which the correct ascription of these states is tied to actuality. Then, I briefly argue that the difference I identify has important consequences with regard to the possibility of reduction of intentional mental states to the physical ones. I conclude that, since the ascription of beliefs as causal dispositions and their ascription as intentional psychological states have different modal implications, beliefs cannot be identical with functional roles or states.

15:00 - 15:30

Panu Raatikainen
University of Helsinki

Mental causation, exclusion, and the interventionist theory of causation

The exclusion argument, popular among the contemporary physicalists (e.g. Lewis, Kim, Papineau), seems to show that either the mental is causally ineffective (epiphenomenalism) or we have to return to some sort of mind-body identity theory after all. It is suggested that the problematic could be substantially illuminated by taking into account the interventionist theory of causation (developed especially by James Woodward 2000, 2003) which is becoming increasingly popular in the philosophy of science, and also in the theory of causation in general. Namely, there is an argument, discovered independently by the present author and Peter Menzies (Menzies 2008, Raatikainen 2006, 2007, 2009; also Woodward (2008), and Shapiro & Sober (2009), now seem to endorse a related argument) which shows that from the interventionist perspective, a mental state can truly be a cause of behaviour, and moreover, that the underlying physical state may after all fail to be such. I shall briefly outline the argument, and then elaborate some more detailed issues. The distinction between causal relevance between causal variables and "actual causation", i.e. variable's particular value's being a cause of a particular value of another variable, turns out to be especially important. Also relevant is the contrastive nature of causal judgements. Finally, it is argued that from the interventionist perspective, if we also assume supervenience, the question of overdetermination also does not even make sense in this context. Consequently, the whole exclusion argument fails likewise to make clear sense.

15:30 - 16:00

Albert Newen and Tobias Schlicht
Ruhr-Universität Bochum

How do we understand other human beings? The person model theory

For decades we had an intense debate between Theory-Theory and Simulation-Theory. The most important progress during the last few years have been made by Goldman's recent detailed presentation of his Simulation Theory (Goldman 2006) and by Gallagher (2008) who argues for a revival of the phenomenological thesis that we directly perceive mental states of others. The aim of the presentation is to criticize both proposals and develop and defend a new theoretical approach: the person model theory.

According to that theory we develop 'person models' from ourselves, from other individuals and from groups of persons. These person models are the basis for the registration and evaluation of persons having mental as well as physical properties. Since there are two ways of understanding other minds (non-conceptual and conceptual mindreading), we propose that there are two kinds of person models: Very early in life we develop non-conceptual person schemata: A person schema is a system of sensory-motor abilities and basic mental dispositions related to one human being (or a group of people) while the schema functions without awareness and is realized by (relatively) modular information processes. During ontogeny we also develop person images: A person image is a system of conceptually structured and consciously registered mental and physical dispositions as well as situational experiences (like perceptions, emotions, attitudes, etc.) related to one human being (or a group). It will be argued that it is theoretically plausible and empirically grounded that understanding other minds is realized on the basis of person models.

Thought disorders

Organizer: **György Gergely and George Tudorie**
Cenral European Uninversity

This symposium aims to bring together a number of philosophers, cognitive neuroscientists, clinical psychologists and psychiatrists who share a common theoretical interest in understanding the nature of different kinds of thought disorders and their causal origins in the human mind/brain. But apart from their common topical focus, the interdisciplinary participants of the symposium also share a common methodological commitment in so far as they all pursue their often qualitatively different theoretical interests and goals in studying the nature of thought disorders by systematically grounding their work in the large body of recent empirical findings that the new brain imaging methodologies of cognitive neuroscience provide about the differential neural brain processes associated with particular types of thought disorders (such as hallucinations, paranoia, obsessive compulsive thought, rigid and reality-incongruent self-representations and negatively biased unrealistic self-evaluations, inability to infer, attribute, or metarepresent and/or reason about causal intentional mind states of self and/or other, deficit in recognizing categorical emotion states in others, or context- and/or domain-specific transient deficits of mentalization abilities, deficits in self-other distinctions and attributions of intentional agency, a deficit in switching perspective taking, etc.). The different presentations also provide a conceptual analysis and methodological criticism of current clinical research models for the study of psychopathological thought processes by contrasting the role of symptom-based causal theories vs. diagnostic category-centered approaches to the empirical study of thought disorders.

Katalin Farkas
Central European University
The experienced reality of hallucinations: A reconsideration

Hallucinatory experiences are subjectively indistinguishable from real perceptions. This means either that a hallucination is phenomenologically the same as – or very similar to – a real perception, or that the subject lacks the ability to discriminate the two. I suggest that while the first sense is dominant in philosophical accounts of hallucination, the second sense is more important in defining real hallucinations in psychology and psychiatry. Then I attempt to draw up the most important criteria for the experienced reality of a mental episode.

Peter Fonagy
University College London
Failure of mentalization in borderline personality disorder: A clinical hypothesis explored

Over the past decade with colleagues we have attempted to specify the abnormality of social cognition commonly observed in patients with severe cluster B personality disorder. Our current formulation assume that the dysfunction may be described as a profile on four polarities of mentalization defined by neuroimaging and neuropsychological investigations. Social cognition may fail in borderline personality disorder fdor one or more of the following reasons: (1) dysfunctional explicit but intact implicit mentalization, (2) accurate mentalization based on external features of self and others but inadequate mentalization based on internal features, (3) limitations of cognitive mentalization but intact mentalization in affective terms, (4) excessive influence of others' state of mind on self states through a failure of the medial prefrontal system for inhibition of the imitative system. In this presentation we will review evidence for this model including a study of interpersonal trust in borderline personality disorder and consider its application for developing clinical interventions.

George Tudorie
Central European University
Too much, too little, too strange: Problems with theory of mind explanations of schizophrenia

In this talk I discuss two problems with theory of mind explanations of schizophrenia. The first problem is inherited from theorizing about mental state attributions. While such attributions are an established phenomenon, it is disputed whether they constitute a unitary ability, and we are far from having a mature model of how they work (developmental timeline, scope, cognitive architecture, neural correlates etc.). Since theory of mind is itself in need of explanation, it is doubtful that it can ground deep explanations of other phenomena.

The second problem is located in the etiologies of schizophrenia themselves. Here I discuss some recent material mainly by R. Corcoran and C. Frith – proposals based on Frith's metarepresentational model of schizophrenia from the early 1990s. The difficulty in this case is that the concept of theory of mind is preserved in succeeding explanations, but its content changes dramatically. The clearest example of such a change is the shift from metarepresentation to analogy/simulation. Such ambiguities erode the force of the models; explanatory concepts should have some degree of stability. I conclude the paper by discussing possible ways to fix these problems.

György Gergely and Ágnes Kovács
Central European University
New approaches to conceptualizing the nature of the deficit in core systems of social cognition that underlie Autism Spectrum Disorder

In this talk we shall explore some new ways of conceptualizing the nature of the types of basic deficits in innate systems of normal social cognitive functioning that may contribute to Autism Spectrum Disorder. In particular, we shall present recent empirical evidence from normally developing infants that sheds new light of the nature of core systems of early social cognitive functioning in a number of domains (such as preverbal ability to automatically represent others' knowledge states including false beliefs, and evidence for early sensitivity to turn-taking contingent reactivity as cues of communicative intent for referential knowledge transfer). We shall then sketch some existing and new models that imply a deficit in these core domains as forming the basis of ASD. We shall review some evidence from studies with ASD patients providing preliminary support for these new and promising approaches to ASD and discuss new directions that they suggest for future research to understand ASD.

Csaba Pléh
Budapest University of Technology and Economics
Discussant

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Acquah	Daniel	lpxda2@nottingham.ac.uk	Paper Session 27	Sunday	14:30
Akamatsu	Shigeru	akamatsu@hosei.ac.jp	Poster Session 1	Thursday	16:00
Alcaraz León	María José	alcaraz.mariajose@gmail.com	Paper Session 8	Thursday	18:00
Allen	Keith	ka519@york.ac.uk	Paper Session 23	Saturday	17:30
Allen	Melissa	melissa.allen@lancaster.ac.uk	Symposium 2	Friday	16:30
Allott	Nicholas	n.e.allott@csmn.uio.no	Paper Session 1	Thursday	14:30
Arstila	Valtteri	valtteri@utu.fi	Paper Session 10	Friday	15:00
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Aytekin	Tevfik	tevfik.aytekin@gmail.com	Paper Session 29	Sunday	15:30
Azcárate	María Ponte	mariaponteazca@gmail.com	Paper Session 11 Paper Session 20	Friday Saturday	15:30 15:30
Baldwin	Dare	baldwin@uoregon.edu	Invited Lecture 1	Thursday	9:00
Balut	Cristina	fulcanica@yahoo.com	Poster Session 2	Friday	16:00
Barnier	Amanda	amanda.barnier@maccs.mq.edu.au	Paper Session 13	Friday	14:30
Bayne	Tim	tim.bayne@gmail.com	Invited Symposium 2	Friday	10:45
Beck	Sarah	s.r.beck@bham.ac.uk	Paper Session 1 Paper Session 18	Thursday Saturday	15:30 15:00
Behne	Tanya	behne@eva.mpg.de	Paper Session 24	Saturday	17:30
Bek	Judith	j.bek@sheffield.ac.uk	Paper Session 27	Sunday	15:00
Björnsson	Gunnar	gomengb@gmail.com	Paper Session 4	Thursday	15:30
Blitman	Delphine	delblit@hotmail.fr	Paper Session 25	Saturday	16:30
Blomberg	Olle	K.J.O.Blomberg@sms.ed.ac.uk	Paper Session 26	Saturday	16:30
Bodor	Peter	peter.bodor@gmail.com	Poster Session 3	Saturday	16:00
Bonatti	Luca L.	lucabonatti@mac.com	Poster Session 3	Saturday	16:00
Bortolotti	Lisa	l.bortolotti@bham.ac.uk	Paper Session 13	Friday	14:30
Brauer	Jens	brauer@cbs.mpg.de	Paper Session 5	Thursday	15:00
Breheny	Richard	r.breheny@ucl.ac.uk	Paper Session 21	Saturday	14:30
Brynjarsdottir	Eyja	eyjabryn@hi.is	Paper Session 9	Thursday	17:30
Burns	Patrick	p.burns.2@bham.ac.uk	Paper Session 1	Thursday	15:30
Buttelmann	David	buttelmann@eva.mpg.de	Invited Symposium 1	Thursday	10:45
Byrne	Alex	abyrne@mit.edu	Invited Lecture 3	Saturday	9:00
Cadilha	Susana	susanacadilha@gmail.com	Paper Session 25	Saturday	18:00
Carpendale	Jeremy	jcarpend@sfu.ca	Poster Session 3	Saturday	16:00
Carpenter	Malinda	carpenter@eva.mpg.de	Paper Session 24	Saturday	17:30
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Chen	Marian	marian-chen@northwestern.edu	Poster Session 2	Friday	16:00
Clément	Fabrice	Fabrice.Clement@unige.ch	Paper Session 24	Saturday	16:30
Colombo	Matteo	M.Colombo-2@sms.ed.ac.uk	Paper Session 8	Thursday	16:30
Cox	Rochelle	rcox@maccs.mq.edu.au	Paper Session 13	Friday	14:30
Cross	Emily S.	emily.s.cross@gmail.com	Paper Session 5	Thursday	15:00
Crutchfield	Stuart	stu.crutchfield@gmail.com	Paper Session 3	Thursday	14:30
Csibra	Gergely	csibrag@ceu.hu	Paper Session 6 Symposium 4	Thursday Saturday	16:30 16:30
Csipke	Emese	Emese.Csipke@iop.kcl.ac.uk	Poster Session 2	Friday	16:00
Davelaar	Eddy J.	e.davelaar@bbk.ac.uk	Paper Session 6	Thursday	16:30
De Schrijver	Jelle	jelle.deschrijver@ugent.be	Symposium 3	Friday	16:30
Deroy	Ophelia	ophelia.deroy@gmail.com	Paper Session 19	Saturday	15:00
Dienes	Zoltan	dienes@sussex.ac.uk	Paper Session 29	Sunday	14:30
Dumbrava	Andrei	rodumb@yahoo.com	Poster Session 2	Friday	16:00
Eilan	Naomi	n.eilan@warwick.ac.uk	Paper Session 17	Friday	16:30
Eiser	Richard	j.r.eiser@shef.ac.uk	Symposium 1	Thursday	16:30
Falkum	Ingrid Lossius	i.falkum@ucl.ac.uk	Paper Session 6	Thursday	17:30
Farkas	Katalin	farkask@ceu.hu	Symposium 5	Sunday	14:30
Fazekas	Peter	P.Fazekas@sms.ed.ac.uk	Paper Session 26	Saturday	17:00

Felhősi	Gabriela	felhosi@nytud.hu	Poster Session 1 Poster Session 2	Thursday Friday	16:00 16:00
Ferguson	Heather	h.ferguson@ucl.ac.uk	Paper Session 21	Saturday	14:30
Fernandez	Jordi	jorge.fernandez@adelaide.edu.au	Paper Session 4	Thursday	15:00
Fiebich	Anika	anifiebich@gmail.com	Poster Session 1	Thursday	16:00
Fonagy	Peter	ucjtpsf@ucl.ac.uk	Symposium 5	Sunday	14:30
Freudenberger	Silja	i19l@uni-bremen.de	Paper Session 2	Thursday	15:30
Friend	Margaret	mfriend@sciences.sdsu.edu	Paper Session 6	Thursday	17:00
Fuerst	Martina	martina.fuerst@uni-graz.at	Paper Session 9	Thursday	17:00
Fugard	Andrew J.B.	andy.fugard@sbg.ac.at	Paper Session 18	Saturday	15:30
García-Carpintero	Manuel	m.garciacarpintero@ub.edu	Paper Session 28	Sunday	16:00
Gawron	Jean Mark	gawron@mail.sdsu.edu	Invited Symposium 3	Saturday	10:45
Geary-Griffin	Robert	rcd03@ilcs.keele.ac.uk	Paper Session 28	Sunday	14:30
Gergely	György	gergelygy@ceu.hu	Invited Symposium 1 Symposium 5	Thursday Sunday	10:45 14:30
Giardino	Valeria	valeria.giardino@gmail.com	Paper Session 19	Saturday	15:30
Godman	Marion	marion.godman@kcl.ac.uk	Paper Session 25	Saturday	17:00
Goodale	Melvyn	mgoodale@uwo.ca	Invited Symposium 4	Sunday	10:45
Gottschling	Verena	vgott@yorku.ca	Paper Session 7	Thursday	17:00
Graefenhain	Maria	graefenhain@eva.mpg.de	Paper Session 24	Saturday	17:30
Gray	Richard	grayr@cf.ac.uk	Paper Session 3	Thursday	15:00
Grosse	Gerlind	gerlind.grosse@eva.mpg.de	Symposium 4	Saturday	16:30
Grünbaum	Thor	tgr@hum.ku.dk	Paper Session 19	Saturday	14:30
Gyoba	Jiro	gyoba@sal.tohoku.ac.jp	Poster Session 1	Thursday	16:00
Gyori	Miklós	research.gyori@gmail.com	Paper Session 13	Friday	15:00
Hall	Alison	a.hall@ucl.ac.uk	Paper Session 16	Friday	17:30
Hamilton	Antonia	antonia.hamilton@nottingham.ac.uk	Poster Session 1 Poster Session 2 Paper Session 22	Thursday Friday Saturday	16:00 16:00 14:30
Headley	Tamara	tamara.sdsu@hotmail.com	Paper Session 6	Thursday	17:00
Hernik	Mikolaj	Mikolaj.Hernik@annafreud.org	Poster Session 3	Saturday	16:00
Hewson	Claire	c.m.hewson@open.ac.uk	Paper Session 25	Saturday	17:30
Hillerbrand	Rafaele	rafaela.hillerbrand@gmail.com	Symposium 1	Thursday	16:30
Hohenberger	Annette	hohenberger@ii.metu.edu.tr	Symposium 1	Thursday	16:30
Hoicka	Elena	elena.hoicka@stir.ac.uk	Paper Session 24	Saturday	17:00
Horne	Outi	outihorne@hotmail.com	Poster Session 2	Friday	16:00
Huber	Ludwig	ludwig.huber@univie.ac.at	Invited Symposium 1	Thursday	10:45
Huoranszki	Ferenc	Huoransz@ceu.hu	Paper Session 30	Sunday	14:30
Irvine	Elizabeth	elizabethirv@gmail.com	Paper Session 2	Thursday	15:00
Ishi	Hanae	ishi@miyagi-ct.ac.jp	Poster Session 1	Thursday	16:00
Ivády	Rozália	ivadyrozi@gmail.com	Poster Session 1 Poster Session 2	Thursday Friday	16:00 16:00
Jacob	Pierre	jacob@ehess.fr	Invited Symposium 4	Sunday	10:45
Jäggi	Arian	jaeggi@aim.uzh.ch	Symposium 3	Friday	16:30
Jakab	Zoltán	zjakab@cogsci.bme.hu	Paper Session 14 Paper Session 27	Friday Sunday	14:30 15:30
Jellema	Tjeerd	T.Jellema@hull.ac.uk	Poster Session 2	Friday	16:00
Journeau	Phillippe	phjourneau@discinnet.org	Paper Session 16	Friday	18:00
Jylkkä	Jussi	jusjyl@utu.fi	Paper Session 29	Sunday	16:00
Katsos	Napoleon	nk247@cam.ac.uk	Paper Session 21	Saturday	14:30
Kaufmann	Laurence	laurence.kaufmann@unil.ch	Paper Session 24	Saturday	16:30
Kaufmann	Stefan	kaufmann@northwestern.edu	Paper Session 5	Thursday	14:30
Király	Ildikó	kiralyi@mtapi.hu	Invited Symposium 1	Thursday	10:45
Kiss	Szabolcs	kiss.szabolcs@t-online.hu	Paper Session 27	Sunday	15:30
Kjoll	Georg	georgak@hf.uio.no	Paper Session 6	Thursday	18:00

Knudsen	Birgit	santusalem@hotmail.com	Poster Session 3	Saturday	16:00
Kouider	Sid	sid.kouider@gmail.com	Paper Session 17	Friday	18:00
Kovács	Ágnes	agneskovacs@mtapi.hu	Symposium 5	Sunday	14:30
Kumagai	Tomohiro	kumagai@sal.tohoku.ac.jp	Poster Session 1	Thursday	16:00
Kutlu	Munir Gunes	kutlugunes@yahoo.com	Poster Session 3	Saturday	16:00
Lerman	Hemdat	h.lerman@warwick.ac.uk	Paper Session 23	Saturday	16:30
Liszkowski	Ulf	Ulf.Liszkowski@mpi.nl	Symposium 2	Friday	16:30
			Poster Session 3	Saturday	16:00
Liu	Jiaxi	jiaxiliu2007@u.northwestern.edu	Paper Session 5	Thursday	14:30
Liz	Manuel	manuliz@ull.es	Paper Session 11	Friday	15:30
Lock	Suzanne	s.lock@philosophy.arts.gla.ac.uk	Paper Session 27	Sunday	15:00
Lumsden	John	johnlums@gmail.com	Paper Session 26	Saturday	17:30
Macia	Josep	josep.macia@ub.edu	Paper Session 16	Friday	17:00
Maibom	Heidi	heidi_maibom@carleton.ca	Paper Session 13	Friday	15:30
Marchetto	Erika	erika.marchetto@sissa.it	Poster Session 3	Saturday	16:00
Marno	Hanna	hanna.marno@gmail.com	Paper Session 6	Thursday	16:30
Marques	Teresa	marqteresa@gmail.com	Paper Session 28	Sunday	16:00
Matthews	Daniele	danielle.matthews@manchester.ac.uk	Symposium 2	Friday	16:30
Mauro	Carlos	cmauro00@gmail.com	Paper Session 25	Saturday	18:00
McColgan	Kerry	k.l.t.mccolgan@warwick.ac.uk	Paper Session 18	Saturday	15:00
Mcquaid	Nancy	nmcquaid@sfu.ca	Poster Session 3	Saturday	16:00
Meltzoff	Andrew	meltzoff@u.washington.edu	Paper Session 11	Friday	14:30
Mitchell	Peter	peter.mitchell@nottingham.ac.uk	Paper Session 27	Sunday	14:30
Moll	Henrike	moll@eva.mpg.de	Paper Session 11	Friday	14:30
Moore	Richard	r.t.moore@gmail.com	Symposium 4	Saturday	16:30
Morin	Olivier	Olivier@treizh.net	Paper Session 24	Saturday	18:00
Musholt	Kristina	kmusholt@gmail.com	Paper Session 12	Friday	14:30
Newen	Albert	Albert.Newen@rub.de	Paper Session 30	Sunday	15:30
Nudds	Matthew	matthew.nudds@ed.ac.uk.	Paper Session 7	Thursday	17:30
Nurmsoo	Erika	E.Nurmsoo@bristol.ac.uk	Symposium 2	Friday	16:30
Ochsenbauer	Anne-Katharina	anne.ochsenbauer@lipp.lmu.de	Paper Session 20	Saturday	15:00
Okur	Zeynep Emine	emine.okur@boun.edu.tr	Poster Session 3	Saturday	16:00
Orban	Krisztina	orbankrisztina@gmail.com	Paper Session 26	Saturday	18:00
Overgaard	Søren	S.Overgaard@hull.ac.uk	Poster Session 2	Friday	16:00
Owen	Adrian	adrian.owen@mrc-cbu.cam.ac.uk	Invited Symposium 2	Friday	10:45
Pace	Amy	amyepace@gmail.com	Paper Session 6	Thursday	17:00
Palumbo	Letizia	L.Palumbo@2007.hull.ac.uk	Poster Session 2	Friday	16:00
Papo	David	papodav@gmail.com	Paper Session 5	Thursday	15:30
Pérez Chico	David	dcperez@unizar.es	Paper Session 11	Friday	15:30
Perner	Josef	Josef.Perner@sbg.ac.at	Paper Session 1	Thursday	15:00
			Paper Session 11	Friday	15:00
			Invited Symposium 4	Sunday	10:45
Persson	Karl	karl.persson@filosofi.gu.se	Paper Session 4	Thursday	15:30
Phillips	Ian	ian.phillips@all-souls.ox.ac.uk	Paper Session 17	Friday	17:30
Pineda	David	david.pineda@udg.es	Paper Session 14	Friday	15:30
Piredda	Giulia	giulpi@gmail.com	Paper Session 27	Sunday	16:00
Pléh	Csaba	pleh@cogsci.bme.hu	Poster Session 1	Thursday	16:00
			Poster Session 2	Friday	16:00
			Symposium 5	Sunday	14:30
Pocobello	Raffaella	raffaella.pocobello@istc.cnr.it	Paper Session 15	Friday	17:00
Prades	Josep Lluís	Josepll.prades@udg.edu	Paper Session 4	Thursday	14:30
Quintelier	Katinka	katinka.quintelier@gmail.com	Symposium 3	Friday	16:30
Raatikainen	Panu	panu.raatikainen@helsinki.fi	Paper Session 30	Sunday	15:00
Rafetseder	Eva	eva.rafetseder@sbg.ac.at	Paper Session 1	Thursday	15:00
Ramsey	Richard	richard.ramsey@nottingham.ac.uk	Poster Session 2	Friday	16:00

Reddy	Vasudevi	vasu.reddy@port.ac.uk	Symposium 4	Saturday	16:30
Richardson	Louise	l.f.richardson@dunelm.org.uk	Paper Session 7	Thursday	16:30
Rietti	Sophie	srietti@uOttawa.ca	Paper Session 8	Thursday	17:30
Riggs	Kevin	k.riggs@londonmet.ac.uk	Paper Session 1	Thursday	15:30
Rizzolatti	Giacomo	giacomo.rizzolatti@unipr.it	Invited Lecture 4	Sunday	9:00
Robinson	Liz	e.j.robinson@warwick.ac.uk	Paper Session 18	Saturday	15:00
Roessler	Johannes	J.Roessler@warwick.ac.uk	Paper Session 12	Friday	15:30
Röska-Hardy	Louise	Louise.Roeska-Hardy@uni-wh.de	Invited Symposium 1	Thursday	10:45
Rowley	Martina	m.g.rowley@psy.keele.ac.uk	Paper Session 18	Saturday	15:00
Rubio	Alberto	arubiofrutos@gmail.com	Paper Session 9	Thursday	16:30
Rusu	Michaela	mihaelarusu1982@yahoo.com	Poster Session 2	Friday	16:00
Sakuragi	Shin	shinsakuragi@gmail.com	Paper Session 2	Thursday	14:30
Sakuta	Yuiko	y.sakuta@aoni.waseda.jp	Poster Session 1	Thursday	16:00
Santos-Sousa	Mario	msansou@gmail.com	Paper Session 10	Friday	14:30
Sarihan	Isık	isiksarihan@gmail.com	Paper Session 3	Thursday	15:30
Schlicht	Tobias	tobias.schlicht@rub.de	Paper Session 17 Paper Session 30	Friday Sunday	17:00 15:30
Schouwstra	Marieke	Marieke.Schouwstra@phil.uu.nl	Paper Session 8	Thursday	17:00
Senturk	Nilay	nilay.senturk@boun.edu.tr	Poster Session 3	Saturday	16:00
Seth	Anil	a.k.seth@sussex.ac.uk	Invited Symposium 2	Friday	10:45
Shea	Nicholas	nicholas.shea@philosophy.ox.ac.uk	Invited Symposium 2 Paper Session 22	Friday Saturday	10:45 15:30
Smith	Barry C.	b.smith@philosophy.bbk.ac.uk	Paper Session 7	Thursday	18:00
Snedeker	Jesse	snedeker@wjh.harvard.edu	Paper Session 20	Saturday	14:30
Sol	Ayhan	asol@metu.edu.tr	Symposium 1	Thursday	16:30
Sollberger	Michael	michael.sollberger.2@unil.ch	Paper Session 23	Saturday	17:00
Sommerville	Jessica	sommej@u.washington.edu	Invited Symposium 4	Sunday	10:45
Stapleton	Mog	m.l.stapleton@sms.ed.ac.uk	Paper Session 15	Friday	17:30
Stenning	Keith	k.stenning@ed.ac.uk	Paper Session 18	Saturday	15:30
Stewart	Mary E.	M.E.Stewart@hw.ac.uk	Paper Session 18	Saturday	15:30
Stoettinger	Elisabeth	elisabeth.stoettinger@sbg.ac.at	Paper Session 11	Friday	15:00
Stoneham	Tom	twcs1@york.ac.uk	Paper Session 23	Saturday	18:00
Storms	Gert	gert.storms@psy.kuleuven.be	Poster Session 1	Thursday	16:00
Sungur	Hande	rugnus@hotmail.com	Poster Session 3	Saturday	16:00
Svenonius	Peter	peter.svenonius@uit.no	Invited Symposium 3	Saturday	10:45
Sweeney	Paula	pm34@st-andrews.ac.uk	Paper Session 21	Saturday	15:30
Szalai	Judit	jszalai@webmail.phil-inst.hu	Paper Session 15	Friday	16:30
Talmont-Kaminski	Konrad	konrad@talmont.com	Paper Session 18	Saturday	14:30
Talmy	Leonard	talmy@buffalo.edu	Invited Lecture 2 Invited Symposium 3	Friday Saturday	9:00 10:45
Tomasello	Mike	tomasello@eva.mpg.de	Paper Session 24	Saturday	17:30
Tudorie	George	tudorie_george@phd.ceu.hu	Symposium 5	Sunday	14:30
Uchida	Hiroyuki	hiroyukiu21@hotmail.com	Paper Session 1	Thursday	14:30
Vaish	Amrisha	vaish@eva.mpg.de	Symposium 3	Friday	16:30
van Ott	Derek	ottd@cbs.mpg.de	Paper Session 5	Thursday	15:00
Varga	Somogy	varga@hum.ku.dk	Paper Session 15	Friday	18:00
Vázquez	Margarita	mvazquez@ull.es	Paper Session 11 Paper Session 20	Friday Saturday	15:30 15:30
Veillet	Benedicte	bveillet@hotmail.com	Paper Session 14	Friday	15:00
Verdejo	Víctor	victor.verdejo@uab.cat	Paper Session 29	Sunday	15:00
Voltolini	Alberto	voltolini.alberto@unito.it	Paper Session 9	Thursday	18:00
von Rohr	Claudia Rudolf	claudiarvr@aim.uzh.ch	Symposium 3	Friday	16:30
Voorspoels	Wouter	wouter.voorspoels@student.kuleuven.be	Poster Session 1	Thursday	16:00
Vosgerau	Gottfried	gottfried.vosgerau@rub.de	Paper Session 12 Paper Session 21	Friday Saturday	15:00 15:00

Walters	Daniel	D.walters@phil.hull.ac.uk	Poster Session 2	Friday	16:00
Wang	Yin	lpxyw@nottingham.ac.uk	Poster Session 1	Thursday	16:00
Waxman	Sandra	s-waxman@northwestern.edu	Poster Session 2	Friday	16:00
Wong	Hong Yu	whywong@gmail.com	Paper Session 22	Saturday	15:00
Wood	Tahir	twood@uwc.ac.za	Paper Session 28	Sunday	15:00
Zardini	Elia	ez4@st-andrews.ac.uk	Paper Session 21 Paper Session 28	Saturday Sunday	15:30 15:30
Zeman	Dan	zeman@ufal.mff.cuni.cz	Paper Session 16	Friday	16:30
Ziegler	Fenja	fenja.ziegler@nottingham.ac.uk	Paper Session 27	Sunday	14:30
Zinchenko	Elena	elenaz@uchicago.edu	Paper Session 20	Saturday	14:30
Zwarts	Joost	j.zwarts@uu.nl	Invited Symposium 3	Saturday	10:45

Cafés, restaurants and bars around CEU

	$$$	Name	Address	Open
		Sandwich/Salad		
1	$	*Duran Sandwich*	Október 6. u. 15.	Mon-Fri 8.00-17.00 Sat: 09.00-13.00
2	$	*Sundance Sandwich Salad*	Október 6. u. 9.	Mon-Fri 8.00-16.30
3	$	*Fruccola*	Arany J. u. 32.	Mon-Fri 7.00-19.00
4	$	*Hummus Bar*	Október 6. u. 19.	Mon-Sat 11.30-22.00
		Fast Food		
5	$	*Burger King*	Arany J. u. 34.	8.00-22.00
6	$	*Chinese*	Október 6. u. 6.	10.00-22.00
7	$	*Italian*	Nádor u. 5.	11.00-24.00
		Pastry/Café/Bakery		
8	$	*István Pastry*	Október 6. u. 17.	Mon-Fri 8.00-18.00 Sat-Sun 9.00-17.00
9	$	*Sir Morik Coffee*	Nádor u. 5.	Mon-Fri 7.30-19.00 Sat 9.00-17.00
10	$	*California Coffee*	Szent István tér 5.	8.00-24.00
11	$	*Café Montmartre*	Zrinyi u. 18.	10.00-23.00
12	$	*Café Kafka*	Sas u. 9.	10.00-23.00
13	$	*Baguettini Bakery*	Vigyázó F. u. 7.	Mon-Fri 7.00-19.00
		Eateries		
14	$	*Kisharang*	Október 6. u. 17.	Mon-Fri 11.30-21.00 Sat-Sun 11.30-17.30
15	$	*Kis Kukta*	Mérleg u. 10.	Mon-Fri 11.00-15.30
16	$	*Feinkost*	Nádor u. 17.	Mon-Fri 7.30-17.00

	$$$	Name	Address	Open
		Self-Service		
17	$	*Roosevelt*	Roosevelt tér 7-8.	Mon-Fri 8.00-17.00
		Indian		
18	$	*Govinda* (vegetarian)	Vigyázó F. u. 4.	Mon-Fri 11.30-20.00 Sat 12.00-20.00
19	$$	*Salaam Bombay*	Mérleg u. 6.	12.00-15.00 18.00-23.00
20	$-$$	*Kashmir*	Arany J. u. 13.	Tue-Sun 12.00-23.00
21	$$	*Pirro*	Hercegpr. u. 18.	Mon-Sat 11.00-23.00
		Restaurants		
22	$$	*Café Kör* (cash only)	Sas u. 17.	Mon-Sat 10.00-22.00 (reservation: +36 1 311 0053)
23	$$$	*Dio*	Sas u. 4.	12.00-24.00
24	$$	*Mokka Café*	Sas u. 4.	12.00-24.00
25	$$	*Stand Bistro*	Sas u. 3.	Mon-Sat 11.00-22.30 (reservation: +36 1 411 0909)
26	$$	*Kheiron*	Aarany J. u. 17.	10.00-24.00
27	$$	*Kyoto*	Roosevelt tér 7-8.	12.00-22.00
28	$$$	*TG Italiano*	Október 6. u. 8.	12.00-24.00
29	$$	*Strudel House*	Október 6. u. 22.	11.00-23.00
30	$$	*Tigris*	Mérleg u. 10.	Mon-Sat 12.00-24.00
		Bars		
31	$$	*Negro Bar*	Szent István tér 11.	8.00-01.00
32	$$	*BOB Bacardi*	Szent István tér 6.	Sun-Wed 12.00-24.00 Thu-Sat 12.00-02.00
33	$	*Terv*	Nádor u. 19.	09.00-24.00