In a paper entitled “Scientist’s Understanding of Propositional Logic: an Experimental Investigation”, Leslie Kern and co-workers (Social Studies of Science 13, pp. 131–146, Sage Publications, 1983) report an investigation into the logical acumen of 72 psychologists, biologist, and physicists from a large US state university. They found that “Across academic disciplines the participants’ performance reflected substantial deficits in the appreciation of straightforward logical propositions”.

We might think that it is the business of philosophers of science to remedy this sorry state of affairs. And indeed, much good work in this discipline concerns methodological advice. But despite the findings of Kern, some philosophers persist in the opinion that they can also learn a lot from scientists. Even stronger, they propose to adopt scientific methods in philosophy!

This edition of the Reasoner features an interview with a number of such scientific philosophers, all working at the Tilburg Center for Logic and Philosophy of Science, or TiLPS for short. In a relatively short time, the center has built quite a name for itself, and this is to a large extent due to Stephan Hartmann, the center’s director, who has managed to attract a very strong group. Enough reason to pay a visit and speak with Hartmann and some of his crew.

Jokes about the logical acumen of scientists aside, it seems that the scientific philosophers have a point. Below you find some carefully crafted answers to questions about norms and descriptions, formal methods, linguistics and social science, philosophical engineering, and more. As David Lynch of the Interview Project would say: “Enjoy the interview”.

Jan-Willem Romeijn
Philosophy, Groningen
§2
Features

Interview with TiLPS

Holding an interview with an entire centre is easier than it may sound. What follows is a slightly restructured and considerably abbreviated version of a conversation with coffee, cookies, Stephan Hartmann (SH), Reinhard Muskens (RM) and Jan Sprenger (JS). Eric Pacuit (EP) joined us over email.

JWR: Can you tell me some more about the Tilburg Center for Logic and Philosophy of Science? What is TiLPS’ core business?

SH: Some five years ago Tilburg University decided to build up the research profile of the Philosophy Department, by investing in two areas in which it was traditionally well represented: logic and philosophy of science. Because the university has a strong name in the social sciences, they became a focal point for TiLPS. And because the Faculty of the Humanities, which houses the Philosophy Department, has a strong Linguistics Department too, natural ties grew between TiLPS and the linguists. While logic and philosophy of science are our core business, we all take pride in our connections with various sciences.

JWR: What exactly do the logicians and linguists have in common? Do the logicians carry out actual experiments?

RM: The challenge of our linguistic research is to clarify people’s language use by means of formal, primarily logical structures. An example is research into general quantifiers: what do people mean with “Some” when they say “Some bears are white”? Such systematic questions can often be answered by taking recourse to logic, without doing any empirical research into collections of spoken or written language. And in turn, the answers trigger further developments in logic.

JWR: What exactly do the logicians and linguists have in common? Do the logicians carry out actual experiments?

RM: The challenge of our linguistic research is to clarify people’s language use by means of formal, primarily logical structures. An example is research into general quantifiers: what do people mean with “Some” when they say “Some bears are white”? Such systematic questions can often be answered by taking recourse to logic, without doing any empirical research into collections of spoken or written language. And in turn, the answers trigger further developments in logic.

JWR: On the other side of TiLPS we find philosophers reaching out to the social sciences. What exactly is the connection there?

JS: For a large part we are concerned with a traditional problem from the philosophy of science: methodology. So we study statistical inference, model selection, and so on, employing the standards of logic and philosophy to scrutinise and improve scientific inference. But we also take insights and techniques from statistics to apply them to epistemological questions. On top of that we have some wonderful PhD students with various disciplinary backgrounds. They play a large role in creating and sustaining the links to the sciences.

JWR: This is clearly not a one-way street: both linguistics and the social sciences are employed to initiate and inform philosophical research.

RM: Indeed, the actual human reasoning that sits behind language use invites the development of new concepts within logic. The many possibilities of distinguishing between meanings in ordinary language for example leads to interesting developments in type logic, proof theory, and so on.

SH: In the same way the study of human reasoning and of social behaviour impacts on epistemology and philosophy more generally, leading to an improved understanding of central philosophical concepts. This ranges from psychological research into evidential reasoning, to sociological research on consensus formation and the emergence of norms. And there are even bridges to linguistics: right now we are developing a Bayesian analysis of Montague grammar.

JWR: At the end of the day the sciences aim for descriptive adequacy, but many philosophical projects have a normative nature. Doesn’t that lead to conceptual tensions?

SH: We don’t think so. We think there are differences of degree, but no principled distinctions between the normative and the descriptive side of modelling belief, language, or inference. Our strategy is to tentatively adopt a general framework, as for instance Bayesianism, for the epistemological domain, and then to use this framework, integrating also empirical findings. Normative claims are not a priori, and must eventually be informed by the world we live in. The result will be a reflective equilibrium, appropriated to our world, but normative and guiding good reasoning.

JWR: So this is not just the patchwork approach to rationality that Gigerenzer and others champion. Should we expect a framework that unites logic, linguistics, epistemology, and the sciences rolling out of TiLPS in the next few years?

RM: To the best of our knowledge life is finite . . . we’d better make some progress in our respective fields first before cooking up grand schemes and common frameworks.

JS: On the other hand, we all share this idea of combining empirical and systematic considerations. There is a common approach to philosophy we all share.

JWR: That last thing sounds familiar . . . At the conference on the Future of Philosophy of Science in Tilburg, earlier this year, there seemed to be a revival of the idea of “Scientific Philosophy”.

SH: We are indeed in favour of a scientific approach to philosophy. Some philosophers—I think Clark Gly-
mour’s position comes close to it—suggest that we should just forget about philosophy entirely and do science instead: the science of causality, the science of belief, and so on. But we locate ourselves within philosophy proper, addressing genuine philosophical questions using the tools from science.

JWR: Luc Bovens once called this type of work “philosophical engineering”. Is that the right expression?

SH: “Philosophical engineering” captures quite well that we are, in the first place, interested in answering specific problems. And we do so by constructing and analysing detailed philosophical models. Here we differentiate us from those who see analytic philosophy as a kind of game where bold claims are confronted with counterexamples, which are followed by a reply, and so forth. We do not want to add other epicycles to this literature. But “philosophical engineering” may also be a bit misleading. It seems to imply that the questions we are addressing are small-scale, more applied than really philosophical, and this is not correct, or so we think. We are in fact intrigued by the bigger questions, such as rationality, but we address them in a piecemeal fashion, starting from the bottom-up, with specific examples, and then moving our way up, typically within a given theoretical framework, such as Bayesianism. We take this methodology to be much in line with how good science works, hence Scientific Philosophy. If you want to have a name for my approach, I prefer to call it the physicists’ approach to formal philosophy and contrast it with the mathematicians’ approach to formal philosophy, which is nicely exemplified in the work of Hannes Leitgeb who was recently interviewed by this gazette. But that’s a longer story and there is certainly much to the engineering idea.

JS: Ironically, we do have lots of joint projects within TiLPS, as well as with people from other places, much like engineers work together! This is a productive way of doing research, and also a lot of fun.

JWR: I wonder if, when you say “Scientific Philosophy”, you actually mean “formal philosophy”. Do you think it a good idea to squeeze philosophical topics in a formal straightjacket?

JS: Never for its own sake, but it just so happens that the formal sciences provide excellent tools for many of the philosophical questions that we are interested in.

SH: It often happens that the formal tools allow one to push on where a discussion carried out in natural language has grinded to a complete halt. The epistemological debate over coherence is a case in point. I should say, though, that our work is not confined to formal tools at all. We always start with a problem, be it philosophical or scientific with a philosophical aspect, and then select the tool that is best suited for it. And so we are also conducting experiments, as for instance on contextualism or social norms, use computer simulations, and so on. Just like scientists do.

JWR: Yes. But the worry may be that formalisation, simulation and experimentation push traditional philosophical topics out of the picture.

RM: Of course, we need to look at our tools critically, every time we bring them out. But as with the opposition between normative and descriptive, the distinctions here are not so sharp. Formal methods in particular often just help us to express things that could also be expressed informally.

JWR: At this point in the interview, the Gods of Email permitted Eric Pacuit, member of the centre, to speak from a distance.

EP: Indeed, it is important to not always view our formal models as an end in and of themselves. A detailed logical analysis can help us understand how different formal models can be used to enhance our philosophical discourse. And this often raises very interesting technical questions. But it is important to see different mathematical and logical analyses as part of a larger philosophical discussion. Sometimes a formal analysis can initiate a discussion while other times they help us see relationships between seemingly different philosophical analyses.

JWR: Speaking of formal methods … Tilburg University is quite famous for research in game theory, a mathematical theory that seems highly relevant to philosophical research.

EP: Yes, game theorists have provided us with a very sophisticated language for describing and reasoning about social interactions. One sees game theoretic concepts showing up in many areas of philosophy: ethics, interactive rationality, evolutionary perspectives on knowledge and norms, and so on.

JWR: It is almost time to watch football … so let’s skip the questions about God, our life, and the universe. What will the centre be remembered for in 100 years time?

JS: Let’s pretend we will not be forgotten … then I think we will be remembered for contributing to what might be called the Aristotelian project in philosophy, emphasizing that science and philosophy are two end points in a continuum.

SH: I think it would be nice to be remembered for having been part of a movement in the beginning 21st century that systematically approached and successfully tackled philosophical problems, as well as scientific
problems with a philosophical dimension, in a way scientists approach their problems. We will perhaps have shown that progress in philosophy is possible, at least within a certain framework, and that our work has been of relevance for science and society.

JWR: And why would people strive for things like this to begin with?
RM/SH/JS: Because it’s fun! Where else in academia can you be active not only in your home discipline, but also in linguistics, economics, political science, psychology, environmental science, computer science, mathematics, physics, and logic, all at the same time?

Diagonalization fails in natural language

Hartley Slater has recently reminded us (The Reasoner 4(4), p. 57–58) of his claim in The Reasoner 2(9), p. 7–8) that there is a kind of indexicality in formal arithmetic language due to the fact that the formulas of that language support a variety of interpretations. If I have understood him right, in The Reasoner 2(9) Slater uses the existence of such interpretations to make the claim that the language of arithmetic would avoid paradox even if it contained a truth predicate for propositions, not for sentences. After describing how the paradox obtains for a sentential truth predicate as a consequence of the fixed point theorem, he asks:

Cannot something similar be proved when truth is taken to be a property of propositions? (The Reasoner 2(9), p. 7)

He rejects that possibility because:

There is no Fixed Point Theorem for propositions. (The Reasoner 2(9), p. 8)

The reason for this is that propositions cannot be given Gödel numbers; and the reason they can’t is, according to Slater, that sentences in the formal language of arithmetic cannot be injected with arithmetical propositions because of the kind of indexicality mentioned above.

I will show that even propositional truth predicates would lead to paradox in the language of arithmetic.

The language of formal arithmetic admits many interpretations but for the purpose of defining a truth predicate for propositions we can pick one out; for instance, the standard one. The standard interpretation makes closed formulas of that language express arithmetical propositions in a univocal way. Let’s consider the predicate ‘x expresses a true proposition under the standard interpretation of the language of formal arithmetic’ and call it T. This predicate is propositional in the relevant sense, i.e., in the sense that it complies with the propositionalist thesis that propositions and not sentences are the truth value bearers. Assume T can be expressed in the language of arithmetic by an open formula T(x). By the diagonal lemma there is a formula ϕ and a gödelizing function g, that is, a recursive function assigning to each different formula a different natural number, such that Peano arithmetic proves:

ϕ ↔ T(g(ϕ))

that is, intuitively, ϕ if and only if ϕ is not true.

Hence, ϕ would be an arithmetical formulation of the Strengthened Liar, which, of course, cannot exist. As a consequence, there is a propositionalist version of Tarski’s theorem: the language of arithmetic does not contain a representation of the propositionalist truth predicate T.

What about natural language? This is quite another question. On Slater’s line, I believe propositionalism can be used to show that diagonalization fails in natural language. Let us say that a language L is capable of diagonalization if for any incomplete (or open) formula ϕ() of L there is a proposition P and a name *p* for P in L such that ϕ(*p*) ↔ P. This is generally accomplished by inserting in ϕ() a name d such that ϕ(d) is the referent of d in L. Then ϕ(d) is the diagonalization of ϕ().

It appears that natural language easily complies with this requirement: it suffices to substitute ‘the current expression’ for the gap in each ϕ() in order to get the corresponding diagonalization. For instance, the predicate ‘expresses no true proposition’ yields the diagonalization ‘the current expression expresses no true proposition’, which is a formulation of the Strengthened Liar.

In order to argue against that appearance, I’ll argue there is no sentence for the Liar in natural language. This sounds odd but it all depends on the criterion for ‘sentenceness’ we adopt. Let me first propose a criterion C for ‘expressionness’ in natural language:

(C) A string of symbols s is an expression of natural language L iff the semantic rules of L assign a meaning to s.

The rationale for C is that a natural language is an inherently interpreted language and a meaningless expression can hardly be an expression of such a language.

Applied to sentences, criterion C should yield the following criterion for ‘sentenceness’:

(Cs) A string of symbols s is a sentence in natural language L iff the semantic rules of L make s express a truth-apt object.

For instance, in Kripke’s account (“Outline of a theory of truth”, The Journal of Philosophy, 1975, p. 690-
no English version of the Liar expresses a truth-apt object, so that, according to $C_5$, no version of the Liar is an English sentence. As a consequence, according to $C_3$, in Kripke’s theory diagonalization fails in English for the predicate of falsity. I think this is to some extent akin to Slater’s position that the Liar cannot refer attributively.

If we define propositions to be the only truth-apt objects, then stating that a sentence expresses no truth-apt object is the same as stating that it corresponds to no propositional attitude. The propositional attitude corresponding to ‘snow is white’ is the assertion that snow is white. The propositional attitude corresponding to the Liar should be something like the assertion that the assertion one is currently making is false. Now, I contend, there can be no such assertion because no assertion can be about itself.

I have argued (The Reasoner 2(9), p. 5-7) that the principle that no intentional act can be its own intentional object is an essential (*eidetic*) phenomenological limit on self-reference. If this principle is correct, the Liar cannot express a self-referential assertion. But if the English Liar sentence is to count as an instance of diagonalization, it must express a truth-apt object and, in English, it can only do so by expressing a self-referential assertion. Hence, according to $C_5$, the impossibility stated by the principle above is enough to make diagonalization fail in natural language.

Laureano Luna
Philosophy, Siles, Spain

§3

News

*Philosophy & Technology, a new journal by Springer, Editor-in-Chief: Luciano Floridi*

Technologies profoundly affect human life. Today, they are changing the world at an increasing pace, with ever expanding scope and unprecedented impact. They are radically modifying how we interact with, shape, and make sense of our world, but also how we look at ourselves and understand our position and responsibilities in the universe. Technologies have brought enormous benefits and opportunities, but they also have raised new and pressing challenges, whose complexity and global dimensions are rapidly expanding and evolving. *Philosophy & Technology* addresses such challenges, in order to improve our critical understanding of the conceptual nature and practical consequences of technologies, and hence provide the conceptual foundations for their fruitful and sustainable developments. It aims to publish the best research produced in all areas where philosophy and technology meet. It welcomes high-quality submissions, regardless of the tradition, school of thought or disciplinary background from which they derive.

Every year, *Philosophy & Technology* offers up to two prizes, worth €500 each (€250 in cash and €250 in books published by Springer), awarded to the authors of unpublished research papers that make an outstanding contribution to the field of philosophy and technology broadly conceived. The winning papers are published in *Philosophy & Technology*.

For further information please see: the journal’s website and the editorial manager for the submissions.

Luciano Floridi
Philosophy, Hertfordshire & Oxford

COST-ADT Doctoral School on Computational Social Choice, 9–14 April

The COST Action IC0602 “ADT (Algorithmic Decision Theory)” is a collaborative project to build European-wide capability in algorithmic decision theory. A COST-ADT Doctoral School on Computational Social Choice was held in Estoril, Portugal from 9 to 14 April 2010. The participants included more than 45 PhD students spanning more than twenty countries and the following research areas: computational social choice theory, multiple criteria decision analysis, decision under risk and uncertainty, algorithmic decision theory and welfare economics. The main local organizer of the school was José Rui Figueira. The school was based on a series of tutorials:

- **Christian Klamer** (Institute of Public Economics at Graz University) lectured on the mathematical aspects of voting theory. In the first lecture he outlined the commonly used voting rules. In the second lecture, he was successful in his ambitious goal of explaining the proofs of three classic impossibility results in social choice theory: Arrow’s impossibility theorem, the Gibbard Satterwaite theorem and Sen’s Liberal Paradox. His third lecture was based on Saari’s Geometry of voting.

- **Ulle Endriss** (ILLC, University of Amsterdam) presented clear and well organized lectures on fair division aspects of social choice theory. In his first
lecture, he introduced social welfare theory. The second and third lectures were on fair division of divisible objects (cake cutting problems) and indivisible objects respectively.

- Jérôme Lang (CNRS-LAMSADE, Paris) presented interactive lectures on computational and communication complexity aspects of social choice theory including complexity of computing winners, agenda control and voting insincerely.

The tutorial lecturers not only introduced the material but discussed recent results and future research directions. Apart from the three main tutorials, invited senior researchers also gave single lectures. José Rui Figueira presented the history of social choice theory and its contributors. Felix Brandt surveyed important axiomatic results in social choice theory and discussed three possible escape routes from Arrow’s impossibility theorem. Stefano Moretti presented the application of simple coalitional games and Shapley value to bioinformatics. Sébastien Konieczny and Thierry Marchant presented lectures on ‘Information Fusion and Social Choice’ and ‘From Social Choice to Multi-criteria Decision Analysis’ respectively.

During the school, PhD students and postdocs also gave contributed talks. The highlights of the student talks were the following: Markus Brill’s presentation on Tournament Equilibrium Sets; Britta Dorn’s outline of complexity aspect of scoring rules with incomplete preferences; Christian Geist’s impressive results on using SAT solvers and induction arguments to generate new and old impossibility results; and Paul Dütting’s talk on the state of the art of combinatorial auctions.

The school was organized in a relaxed manner with plenty of opportunities for participants to mingle and socialize. This included an enjoyable concert by a local band and an excursion. Apart from the COST Action and its relevant committees which were the driving force behind the school, the following sponsors of the school should also be acknowledged: CEG-IST, NANO-Risk Project, IST (TagusPark) and BPI (Banco Portugus de Investimentos). The talks and lectures are planned to be uploaded on the following website.

Haris Aziz
Department of Informatics,
Ludwig-Maximilians-University Munich

Entia et Nomina, 13–16 May

A four-day-long logico-philosophical workshop “Entia et Nomina”, organized by Rafał Urbaniaik, was held at the University of Gdańsk in Poland. It brought together young researchers from a range of different sub-domains of analytic philosophy: logic, ontology, philosophy of language and philosophy of mathematics.

Some speakers were invited to deliver longer workshops:

Tadeusz Ciecierski from Warsaw University focused on the relation between logic and philosophy. He discussed a few examples of bad and good formalizations of philosophical arguments, especially in philosophy of language.

Marek Czarnecki from Warsaw University presented basic negative results in computability theory and elaborated on the philosophical malpractice concerning them.

Krzysztof Poslajko from Jagiellonian University was concerned with the difficulties that normative theories of meaning run into, compared this approach to a different one, based on the notion of interpretation, and argued that they aren’t in fact opposite.

Fabien Schang from Dresden University discussed many-valued oppositions and the application of their algebraic representation to a question-based theory of meaning.

Adam Trybus’s (University of Manchester) talk concerned logics of space. He gave a historical review of the topic, presented some modern results, described his sound and complete axiomatization of the theory of convex spaces and indicated the price that has to be paid to obtain it (namely, an omega-rule has to be employed).

Piotr Wilkin from Warsaw University talked about Lambda calculus as a philosophical tool. He presented the simple typed lambda-calculus, gave a brief description of more complicated versions, and described some philosophical applications thereof.

Leszek Wroński from Jagiellonian University analyzed the main problems of probabilistic theories of causality. The speaker later on focused on current controversies surrounding the rule of common cause.

A talk by A. C. Zielińska from University of Gniezno concerned methodology of modern moral philosophy. She focused on the newest works of Jonathan Dancy and John Skorupski.

Apart from the invited guests, the workshop featured talks and commentaries by other participants.

Daniel Chlastawa (Warsaw University) presented an “Argument against mathematical constructivism”. In his presentation, after a short description of constructivism, he analyzed some arguments given for constructivism and argued that they run into serious difficulties. In his commentary, Stanislaw Dercz from Gdańsk University gave a few examples of more advanced mathematical results which are not constructively provable.

Stanislaw Dercz in his own presentation titled “Set theory we talk about and set theory we talk within”, constructed an example of a first-order formula expressing the existence of an uncountable set and explained how the impression of paradox results from a confusion
of languages. This talk was commented on by Agata Orłowicz from Jagiellonian University.

Michał Tomasz Godziszewski (Warsaw University) in his talk “Against descriptive theory of names” looked at some recent attempts to save descriptivism, and argued against them. Zuzanna Gnatek from Gdańsk University commented on this talk.

Bartosz Gostkowski from Jagiellonian University presented an argument for semantic externalism which is based on a certain semantics for indexicals, especially focusing on Searle’s approach. The presentation was commented on by Agata Orlowicz from Jagiellonian University.

Tomasz Kakol from University of Gdańsk argued against the substantialist theories of identity through time, focusing on the mereological change paradox and division paradox. Bartosz Gostkowski gave a comment.

Agata Orłowicz from Jagiellonian University talked about Gödel’s original proof of his completeness theorem. Marek Czarnecki in his commentary observed that compared to the standards that Gödel’s proof of the incompleteness theorem meets, his completeness proof is rather sloppy at some points and it tacitly assumes some things that were only explicaded in Tarski’s semantics. He conjectures that had completeness been as surprising as incompleteness, Gödel might have focused on working out more details of his proof and invented formal semantics sooner, just like his attempt to lay out all the details of the incompleteness proof led to the arithmetization of syntax.

Zuzanna Gnatek from University of Gdańsk criticized David Braun’s “unfilled proposition view” of empty names within direct reference theory. The work was commented on by Bartosz Wcisło from Warsaw University.

The workshop was slightly unusual for European standards. Acceptance was based on double-blind double review process of full papers, each accepted paper was followed by a commentary prepared by another participant, and each presentation took at least one hour.

Rafal Urbania{

Philosophy Department, Gdańsk University

Magda Kamińska
Philosophy Department, Gdańsk University

Zuzanna Gnatek
Philosophy Department, Gdańsk University

St. Louis Annual Conference on Reasons and Rationality, 23–25 May

The Department of Philosophy at UM-St. Louis organized the first St. Louis Annual Conference on Reasons and Rationality (SLACRR) on May 23–25. The conference program featured 10 papers (selected from over 100 submitted abstracts) with commentators, and a keynote address from Michael Bratman. The conference was well-attended, and brought together many philosophers working on practical and theoretical reasons, reasoning, and rationality. A full schedule of presenters and commentators is available here. Here’s a summary of the presented papers:

Michael Bratman’s “Agency, Time and Sociality” argues that we can understand both shared agency and temporally extended agency in terms of our capacities as planners.

Mark Schroeder’s “What Makes Reasons Sufficient?” considers practical and epistemic reasons and argues that reasons are sufficient when they are at least as weighty as the reasons for the alternatives.

Agnes Callard’s “The Reason to Stay Angry Forever” argues that a reason to be angry is eternal in the sense that whatever reason there was to be angry in the first place will still be a reason to be angry later on, even after attempts are made at apology and restitution.

David McNaughton and Piers Rawling’s “Reasons, Benefits and the Good: A Framework” develops a view that ties reasons to benefits, but, unlike simple consequentialism, is able to accommodate the reasons provided by special relationships and promise-making, without embracing the deontologist’s problematic appeal to constraints.

Michael Titelbaum’s “Not Enough There There: Evidence, Reasons, and Language Independence” argues against the existence of an objective evidential favoring relation by drawing from considerations related to Goodman’s “grue” problem.

Ruth Chang’s “Do We Have Normative Powers?” argues that we can sometimes confer normativity through an act of the will—specifically, when all the other reasons for choosing one option over another have run out.

Anton Ford’s “Reasoning as the Form of Intentional Action” offers an interpretation of Elizabeth’s Anscombe’s claim that practical reasoning is the form of intentional action.

Eric Marcus’s “On the Peculiar Character of the Efficacy of Reasons” argues, through an analysis of Moore-paradoxical statements, that the causal relation between one’s beliefs and one’s reasons for those beliefs is known spontaneously, not on the basis of evidence or observation.

Stephen Kears and Daniel Star’s “Weighing Reasons” defends their reason-as evidence thesis (necessar-
consider the enjoyment resulting from a broadcast of a torturing to a Sadist convention—and explores the significance of this explanation for ethical theory.

Paul Weirich’s “Collective Rationality’s Roots” considers the rationality of group action and argues that a group’s action is rational if the individual actions constituting the group action are themselves rational.

John Brunero
Department of Philosophy, University of Missouri, St. Louis

Eric Wiland
Department of Philosophy, University of Missouri, St. Louis

Calls for Papers

**Joint Action: What is Shared?**: special issue of the *Review of Philosophy and Psychology*, deadline 15 August.

**Philosophical Explorations Essay Prize**: on all aspects of the philosophy of mind and action, deadline 30 August.

**Biological and Economic Modelling**: special issue of *Biology and Philosophy*, deadline 31 August.

**Logic and Natural Language**: special issue of *Studia Logica*, deadline 3 September.

**The Extended Mind**: special issue of *Teorema*, deadline 1 October.

**Recurrence, Provability and Truth**: special issue of *Logos Architektton*, deadline 15 October.

**AILACT Essay Prize**: in *Informal Logic / Critical Thinking / Argumentation Theory*, with publication on *Informal Logic*, deadline 31 October.

**Philosophical History of Science**: special issue of *The Monist*, deadline 31 October.

**Philosophy & Technology Best Paper Prizes**: winning papers are published in *Philosophy & Technology*, deadline 1 November.

**Concepts of Tradition in Phenomenology**: special issue of *Studia Phaenomenologica*, deadline 15 November.

**Experimental Philosophy**: special issue of *The Monist*, deadline 30 April 2011.

**Formal and Intentional Semantics**: special issue of *The Monist*, deadline 30 April 2012.

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§4

**What’s Hot in . . .**

We are looking for columnists willing to write pieces of 100-1000 words on what’s hot in particular areas of research related to reasoning, inference or method, broadly construed (e.g., Bayesian statistical inference, legal reasoning, scientific methodology). Columns should alert readers to one or two topics in the particular area that are hot that month (featuring in blog discussion, new publications, conferences etc.). If you wish to write a “What’s hot in . . .?” column, either on a monthly or a one-off basis, just send an email to features@thereasoner.org with a sample first column.

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**…Logic and Rational Interaction**

Epistemology, Economics, Multi-Agent Systems, and Logic and Cognition were among the topics covered recently on lorieweb.org.

Sebastian Sequioa-Grayson wrote a report on the *Formal Philosophy Seminars* held as part of the Formal Epistemology Project at the University of Leuven in April.

AAMAS’10, the 2010 edition of the International Conference on Autonomous Agents and Multiagent Systems, took place in Toronto in May. Davide Grossi reports on the talks relevant for the LORI community.

Rineke Verbrugge held her inaugural lecture as full professor of Logic and Cognition at the University of Groningen on May 25. The text of the lecture can now be obtained on her website. Rineke has also recently made many of her journal and conference papers available for download.

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The first Synthese conference (organized by Johan van Benthem, Vincent Hendricks, and John Symons) took place in New York in mid-April. The topic of the conference was epistemology and economics. On LORIWEB, Giacomo Sillari gives summaries of the talks.

LORIWEB invites anyone to contribute news relevant to the area of Logic and Rational Interaction. News items of interest include, but are not limited to, workshop announcements, reports about past events, or published papers. Please contact Rasmus Rendsvig, our web manager or write to the loriweb address.

Ben Rodenhaeuser
Philosophy, Groningen

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**…Formal Epistemology**

What’s hot (and what’s not) in formal epistemology.

Handy tips and helpful advice from the Formal Philosophy Seminar series at the Formal Epistemology Project, University of Leuven.

Alan Hayek spoke to us on conditional paradoxes. Several examples demonstrated that the intuitive response from most questionees contravened the fact that probability cannot decrease through entailment. Hajek
also presented another related problem, and then offered solutions to that shed light on the semantics of the indicative conditional. Hajek also targeted the material conditional analysis, the ‘Or-to-If’ inference, two ‘Export’ principles for iterated conditionals, and McGee’s ‘counterexample to modus ponens’. Hayek then traced their downfall to a common source. So another of Hajek’s goals was to unify a number of seemingly disparate phenomena in the literature on conditionals.

Jon Williamson argued that Carnap’s theory of degree of confirmation contains certain shortcomings, and that a new approach based on objective Bayesian epistemology can overcome these shortcomings. Williamson argued that there is a wrong move by Carnap: his original construal inhibits his degree of confirmation formulation from capturing the phenomenon of partial entailment. There also remains the problem of learning from experience. Williamson argued that this problem is best solved by revisiting a different step of that Bayesian scheme than was revisited by Carnap, and that objective Bayesianism offers the crucial insight as to how this step can be rectified. This lead to an objective Bayesian confirmation theory that can capture both partial entailment and learning from experience.

Michael Blome-Tillman proposed a dual-layer semantics for definite descriptions. Blome Tillmann argued that important insights of both Fregean and Russellian/Strawsonian approaches can be combined in a unified account of the semantics of definite descriptions. To this end, he briefly laid out the debate between Russellians and Fregeans, and explicated the notion of what he called an ‘intuitive sentence presupposition’ and its relations to more received conceptions of semantic presupposition. Blome-Tillmann then employed this notion in order to develop a two-dimensional lexicon entry for the definite article. Once the formal semantics for ‘the’ was in place, Blome-Tillmann investigated some interesting implications of the emerging view and responded to possible objections. The conclusion was that the emerging account was not only surprisingly simple, but also extraordinarily powerful: it combines the advantages of both Russellian and Fregean theories while avoiding their respective disadvantages.

Photos of our fun may be found here.

The full FPS programme is available here.

Sebastian Sequoiah-Grayson
Formal Epistemology Project, University of Leuven

§5 EVENTS

JULY

THINKING OF EVENTS. PERSPECTIVES FROM PHILOSOPHY, LINGUISTICS, AND NEUROSCIENCE: Ruhr University Bochum, Germany, 1 July.
AAL: Australasian Association for Logic Conference, Sydney, Australia, 2–4 July.
METHODS OF APPLIED PHILOSOPHY: St Anne’s College, Oxford, 2–4 July.
MAXENT: 30th International Workshop on Bayesian Inference and Maximum Entropy Methods in Science and Engineering, Chamonix, France, 4–9 July.
AISC: 10th International Conference on Artificial Intelligence and Symbolic Computation, CNAM, Paris, France, 5–6 July.
LOFT: 9th Conference on Logic and the Foundations of Game and Decision Theory, University of Toulouse, France, 5–7 July.
THE PROBLEM OF UNIVERSALS IN CONTEMPORARY PHILOSOPHY: Pisa, Scuola Normale Superiore, 5–7 July.
IWAP: 5th International Workshop on Applied Probability, Universidad Carlos III de Madrid, Colmenarejo, Madrid, Spain, 5–8 July.
IWSM: 25th International Workshop on Statistical Modelling, Department of Statistics, University of Glasgow, 5–9 July.
CONFERENCES ON INTELLIGENT COMPUTER MATHEMATICS: Paris, France, 5–10 July.
INC: 8th International Network Conference, Heidelberg, Germany, 6–8 July 2010.
WoLLIC: 17th Workshop on Logic, Language, Information and Computation, Brasilia, Brazil, 6–9 July.
BEYOND RATIONALITY: University of Mississippi, 7–9 July.
DEON: 10th International Conference on Deontic Logic in Computer Science, Florence, 7–9 July.
ASPDC: 9th International Symposium on Parallel and Distributed Computing, Istanbul, Turkey, 7–9 July.
GECCO: Genetic and Evolutionary Computation, Portland, Oregon, 7–11 July.
BSPS: British Society for the Philosophy of Science Annual Conference, University College, Dublin, 8–9 July.
UAI: 26th Conference on Uncertainty in Artificial Intelligence, Catalina Island, California, 8–11 July.
LICS: Logic in Computer Science, Edinburgh, Scotland, 9–11 July.
FLoC: 5th Federated Logic Conference, University of Edinburgh, 9–21 July.

**Metaphysics and Epistemology in Chinese Philosophy:**
School of Philosophy, Renmin University of China, Beijing, China, 10–11 July.

**IDTGT:** Interactive Decision Theory and Game Theory, Atlanta, USA, 11–12 July.

**LICS:** Logic in Computer Science, Edinburgh, Scotland, UK, 11–14 July.

**SCSC:** 2010 Summer Computer Simulation Conference, Ottawa, ON, Canada, 11–14 July.

**TMFCS:** International Conference on Theoretical and Mathematical Foundations of Computer Science, Orlando, FL, USA, 12–14 July.

**Uncertainty in Computer Models:** Sheffield, UK, 12–14 July.

**WORLDCOMP:** World Congress in Computer Science, Computer Engineering, and Applied Computing, Las Vegas, Nevada, 12–15 July.

**Emergence in Physics:** Institute of Philosophy, London, 13–14 July.

**CBR-MD:** International Workshop Case-Based Reasoning on Multimedia Data, Berlin, Germany, 14 July.

**BICS:** Brain-Inspired Cognitive Systems Conference, Madrid, Spain, 14–16 July.

**IP/NIP Graduate Conference:** University of Aberdeen, 16–18 July.

**WCCI:** IEEE World Congress on Computational Intelligence, Barcelona, Spain, 18–23 July.

**ICCBR:** 18th International Conference on Case-Based Reasoning, Alessandria, Italy, 19–22 July.

**WCCM/APCOM:** 9th World Congress on Computational Mechanics and 4th Asian Pacific Congress on Computational Mechanics, Sydney, Australia, 19–23 July.

**Reduction Workshop:** Centre for Philosophy of Natural and Social Science, LSE, 20 July.

**SIGIR:** Feature Generation and Selection for Information Retrieval, Geneva, Switzerland, 23 July.

**Structure and Identity:** University of Bristol, 23–25 July.

**NACAP:** Simulations and Their Philosophical Implications, Carnegie Mellon University, 24–26 July.

**KDD:** 16th ACM SIGKDD Conference on Knowledge Discovery and Data Mining, Washington, DC, 25–28 July.

**FUSION:** 13th International Conference on Information Fusion, Edinburgh, Scotland, United Kingdom, 26–29 July.

**Julian Jaynes Conference on Consciousness:** Charlotte-town, Canada, 29 July.

**BWGT:** Brazilian Workshop of the Game Theory Society, University of São Paulo, 29 July–4 August.

**Philosophy, History, Sociology of Mathematics:** UCL, London, 30 July.

**August**

**FLINS:** 9th International FLINS Conference on Foundations and Applications of Computational Intelligence, Chengdu (Emei), China, 2–4 August.

**Thought in Science and Fiction:** 12th International Conference of the International Society for the Study of European Ideas, Ankara, 2–6 August.

**Metaphysics of Science Conference:** Kyung Hee University, Seoul, South Korea, 3–5 August.

**MSN-DS:** 2nd International Workshop on Mining Social Network for Decision Support, Odense, Denmark, 9–11 August.

**ICNC-FSKD:** the 6th International Conference on Natural Computation and the 7th International Conference on Fuzzy Systems and Knowledge Discovery, Yantai, China, 10–12 August.

**Compositional Connectionism in Cognitive Science II:**
The Localist / Distributed Dimension: Portland, Oregon, USA, 11 August.

**ICCP:** 10th International Conference on Philosophical Practice, Leusden, Netherlands, 11–14 August.

**Making Decisions:** Singapore Multidisciplinary Decision Science Symposium, Nanyang Technological University, Singapore, 12–13 August.

**Conference on Mathematical Logic and Set Theory:** Chennai, India, 15–17 August.

**ARCOE:** Automated Reasoning about Context and Ontology Evolution, Lisbon, 16–17 August.

**ECAI:** 19th European Conference on Artificial Intelligence, Lisbon, Portugal, 16–20 August.

**European Meeting of Statisticians:** Department of Statistics and Insurance Science, University of Piraeus, Greece, 17–22 August.

**Truth Matters:** Toronto, 18–20 August.

**Artificial Life:** 12th International Conference on the Synthesis and Simulation of Living Systems, Odense, Denmark, 19–23 August.

**COMPSTAT:** 19th International Conference on Computational Statistics, Paris, France, 22–27 August.
CIPP: Collective Intentionality VII, Perspectives on Social Ontology, University of Basel, Switzerland, 23–26 August.

CSL: Annual Conference of the European Association for Computer Science Logic, Brno, Czech Republic, 23–27 August.


ESPP: Meeting of the European Society for Philosophy and Psychology, Bochum and Essen, Germany, 25–28 August.

AiML: 8th International Conference on Advances in Modal Logic, Moscow, 25–29 August.

RESPONSE-DEPENDENT CONCEPTS: University of Oslo, Norway, 26–28 August.

SYMPOSIUM ON MICHAEL S. MOORE’S CAUSATION AND RESPONSIBILITY: Rutgers University School of Law-Camden, 27 August.

ASAI: 11th Argentine Symposium on Artificial Intelligence, Ciudad Autónoma de Buenos Aires, 30–31 August.

BECAUSE II: Humboldt-Universität zu Berlin, Germany, 30 August - 1 September.

MALLOW: Multi-Agent Logics, Languages, and Organisations Federated Workshops, Lyon, France, 30 August - 2 September.

SEPTEMBER

ICTAC: 7th International Colloquium on Theoretical Aspects of Computing, Natal, Brazil, 1–3 September.

KSEM: 4th International Conference on Knowledge Science, Engineering and Management, Belfast, Northern Ireland, UK, 1–3 September.

FEW: 7th Annual Formal Epistemology Workshop, Konstanz, 2–4 September.

CMM GRADUATE CONFERENCE: University of Leeds, 3 September.


CAUSATION AND METHODS OF STATISTICAL INFERENCE WITH INTERVAL PROBABILITY: Durham, 6–10 September.


LOGIC, ALGEBRA AND TRUTH DEGREES: Prague, Czech Republic, 7–11 September.

PLURALISM IN THE FOUNDATIONS OF STATISTICS: University of Kent, Canterbury, UK, 9–10 September.

ECONOMICS AND NATURALISM: Kazimierz Dolny, Poland, 11–15 September.

CNL: 2nd Workshop on Controlled Natural Languages, Maretittmo Island, Sicily, Italy, 13–15 September.

PGM: 5th European Workshop on Probabilistic Graphical Models, Helsinki, Finland, 13–15 September.

EPISTEMIC ASPECTS OF MANY-VALUED LOGICS: Prague, 13–16 September.


GAMES: Annual Workshop of the ESF Networking Programme on Games for Design and Verification, St Anne’s College, Oxford, UK, 19–23 September.

WORDS AND CONCEPTS: AN INTERDISCIPLINARY WORKSHOP ON PHILOSOPHY, PSYCHOLOGY, AND LINGUISTICS: University of Granada, Spain, 20–21 September.


LRR: Logic, Reason and Rationality, Centre for Logic and Philosophy of Science, Ghent University, Belgium, 20–22 September.

WORLD COMPUTER CONGRESS: International Federation for Information Processing, Brisbane, Australia, 20–23 September.

ECML: European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases, Barcelona, Spain, 20–24 September.

ATES: 8th German Conference on Multi-Agent Systems Technologies, Karlsruhe, Germany, 21–23 September.

ACTUAL CAUSATION: University of Konstanz, Germany, 23–24 September.


&HPS3: Integrated History and Philosophy of Science, Indiana University, Bloomington, 23–26 September.

LOGIC AND LANGUAGE CONFERENCE: Northern Institute of Philosophy, University of Aberdeen, 24–26 September.

SMPS: 5th International Conference on Soft Methods in Probability and Statistics, Mieres (Asturias), Spain, 28 September - 1 October.

TRUTH, MEANING, AND NORMATIVITY: Department of Philosophy, Institute for Logic, Language and Computation, Universiteit van Amsterdam, 30 September - 2 October.

OCTOBER


E-CAP: 8th European Conference on Computing and Philosophy, Muenchen, Germany, 4–6 October.

OBJECTIVITY AND THE PRACTICE OF SCIENCE: Tilburg Center for Logic and Philosophy of Science, 5 October.

**Causality in the Biomedical and Social Sciences**
Erasmus University Rotterdam, 6–8 October

**LPAR:** 17th International Conference on Logic for Programming, Artificial Intelligence and Reasoning, Yogyakarta, Indonesia, 10–15 October.

**Philosophy of Mind, Reduction, Neuroscience:** University of Lausanne, Switzerland, 12–16 October.

**SEFA:** 6th Conference of the Spanish Society for Analytic Philosophy, University of La Laguna, Tenerife, 14–16 October

**Philosophy of Scientific Experimentation: A Challenge to Philosophy of Science:** Center for Philosophy of Science, University of Pittsburgh, 15–16 October.

**The Nature of Belief:** The Ontology of Doxastic Attitudes, University of Southern Denmark, Odense, 18–19 October.


**ADT:** 1st International Conference on Algorithmic Decision Theory, Venice, Italy, 21–23 October.

**Workshop on Bayesian Argumentation:** Department of Philosophy & Cognitive Science, Lund University, Sweden, 22–23 October.

**Field Science:** 26th Boulder Conference on the History and Philosophy of Science, University of Colorado at Boulder, 22–24 October.

**NonMon@30:** Thirty Years of Nonmonotonic Reasoning, Lexington, KY, USA, 22–25 October.

**IJCCI:** 2nd International Joint Conference on Computational Intelligence, Valencia, Spain, 24–26 October.

**BNAIC:** 22nd Benelux Conference on Artificial Intelligence, Luxembourg, 25–26 October.

**ICTAI:** 22th International IEEE Conference on Tools with Artificial Intelligence, Arras, France, 27–29 October.

**November**

**ICMSC:** IEEE International Conference on Modeling, Simulation and Control, Cairo, Egypt, 2–4 November.

**LogKCA:** International Workshop on Logic and Philosophy of Knowledge, Communication and Action, Donostia, San Sebastián, Spain, 3–5 November.

**MICAI:** 9th Mexican International Conference on Artificial Intelligence, Pachuca (near Mexico City), Mexico, 8–12 November.

**Causation, Coherence, and Concepts:** Konstanz, 11–13 November.

**P-NPMW:** 2nd Paris-Nancy PhilMath Workshop, Paris, 17–19 November.

**LENLS:** Logic and Engineering of Natural Language Semantics, Tokyo, 18–19 November.

**TAII:** Conference on Technologies and Applications of Artificial Intelligence, Hsinchu, Taiwan, 18–20 November 18-20.

**KICS:** 5th International Conference on Knowledge, Information and Creativity Support Systems, Chiang Mai, Thailand, 25–27 November.

**ISDA:** International Conference on Intelligent Systems Design and Applications, Cairo, Egypt, 29 November - 1 December.

**December**

**MINDGRAD:** Warwick Graduate Conference in the Philosophy of Mind, University of Warwick, UK, 4–5 December.

**CACS:** International Congress on Computer Applications and Computational Science, Singapore, 4–6 December.

**NIPS:** 24th Annual Conference on Neural Information Processing Systems, Vancouver, B.C., Canada, 6–11 December.

**From Cognitive Science and Psychology to an Empirically-informed Philosophy of Logic:** Amsterdam, 7–8 December.

**ICDM:** International Conference on Data Mining, Sydney, Australia, 13–17 December.

**SILFS:** International Conference of the Italian Society for Logic and Philosophy of Sciences, University of Bergamo, Italy, 15–17 December.

**International Conference on Recent Advances in Cognitive Science:** Varanasi, U P, India, 18–20 December.

§6

**Courses and Programmes**

**Courses**

**Model Theory:** LMS/EPSRC Short Course, University of Leeds, 18–23 July.

**AII:** Asian Initiative for Infinity, Graduate Summer School in Logic, National University of Singapore, 28 June - 23 July.

**ISSSEO:** International Summer School in Social and Ecological Ontology, Castello Tesino and Cinte Tesino, Italy, 5–9 July.

**The Science of the Conscious Mind:** Vienna, 5–16 July.

**PASCAL2 MACHINE LEARNING BOOTCAMP:** Pattern Analysis, Statistical modelling and Computational Learning, Marseille, France, 5–13 July.

**UCLA Logic Center:** Undergraduate Summer School in Mathematical Logic, Los Angeles, USA, 5–23 July.
NN: Summer School on Neural Networks in Classification, Regression and Data Mining, Porto, Portugal, 12–16 July.


ANALYTIC PRAGMATISM, SEMANTIC INFERENTIALISM, AND LOGICAL EXPRESSIVISM: 2nd Graduate International Summer School in Cognitive Sciences and Semantics, University of Latvia, Riga, 19–29 July.

MEANING, CONTEXT, INTENTION: Central European University (CEU), Budapest, Hungary, 19–30 July.

ESSLLI: European Summer School in Logic, Language and Information, University of Copenhagen, Denmark, 9–20 August.


LOGIC OR LOGICS??: Mini-course and Workshop, Arché Research Centre, St Andrews, Scotland, 27 September–1 October.

BLT: Bochum-Lausanne-Tilburg Graduate School: Philosophy of Language, Mind and Science on Calculation, Intuition, and A Priori Knowledge, Tilburg University, The Netherlands, 5–8 October; Philosophy of Mind, Reduction, Neuroscience, University of Latvia, Zurich, Switzerland, 12–16 October.

SELLC: Sino-European Winter School in Logic, Language and Computation, Guangzhou, China, 3–18 December.

Programmes

DOCTORAL PROGRAMME IN PHILOSOPHY: Language, Mind and Practice, Department of Philosophy, University of Zurich, Switzerland.

HPSM: MA in the History and Philosophy of Science and Medicine, Durham University.

MASTER PROGRAMME: Philosophy of Science, Technology and Society, Enschede, the Netherlands.

MA IN COGNITIVE SCIENCE: School of Politics, International Studies and Philosophy, Queen’s University Belfast.

MA IN LOGIC AND THE PHILOSOPHY OF MATHEMATICS: Department of Philosophy, University of Bristol.

MA IN METAPHYSICS, LANGUAGE, AND MIND: Department of Philosophy, University of Liverpool.


MA IN PHILOSOPHY: by research, Tilburg University.

MA IN PHILOSOPHY OF BIOLOGICAL AND COGNITIVE SCIENCES: Department of Philosophy, University of Bristol.

MA IN RHETORIC: School of Journalism, Media and Communication, University of Central Lancashire.

MA PROGRAMMES: in Philosophy of Language and Linguistics, and Philosophy of Mind and Psychology, University of Birmingham.

MRES IN METHODS AND PRACTICES OF PHILOSOPHICAL RESEARCH: Northern Institute of Philosophy, University of Aberdeen.

MSc in APPLIED STATISTICS AND DATAMINING: School of Mathematics and Statistics, University of St Andrews.

MSc in ARTIFICIAL INTELLIGENCE: Faculty of Engineering, University of Leeds.

MA in REASONING

An interdisciplinary programme at the University of Kent, Canterbury, UK. Core modules on logical, causal, probabilistic, scientific, mathematical and machine reasoning and further modules from Philosophy, Psychology, Computing, Statistics, Social Policy, Law, Biosciences and History.

MSc in COGNITIVE & DECISION SCIENCES: Psychology, University College London.

MSc in COGNITIVE SCIENCE: University of Osnabrück, Germany.

MSc in COGNITIVE PSYCHOLOGY/NEUROPSYCHOLOGY: School of Psychology, University of Kent.

MSc in MATHEMATICAL LOGIC AND THE THEORY OF COMPUTATION: Mathematics, University of Manchester.

MSc in PHILOSOPHY OF SCIENCE, TECHNOLOGY AND SOCIETY: University of Twente, The Netherlands.

MASTER OF SCIENCE: Logic, Amsterdam.

§7

JOBS AND STUDENTSHIPS

Jobs

ONE LECTURESHIP AND ONE PROFESSORSHIP: in Psychology, School of Psychology, University of Plymouth, deadline 1 July.

TWO ASSISTANT PROFESSORSHIPS: in Logic and Philosophy of Language and in Mathematical Philosophy, LMU Munich, deadline 2 July.

THREE LECTURESHIPS: in Logic and Metaphysics, Philosophy of Science or Epistemology, Philosophy of Language, Birkbeck College, University of London, deadline 8 July.

ASSISTANT PROFESSORSHIP: in Philosophy of Mind, University of Osnabrueck, deadline 13 July.

RESEARCH AND TEACHING POSITION: in Philosophy of Science, UNAM, Mexico City, deadline 6 August.


WAGNER RISK FELLOWSHIP: Center for Philosophy of Science, University of Pittsburgh, deadline 15 November.
Studentships

PhD Fellowship: in contemporary philosophy of science/philosophy of biology, University of Oslo, Norway, deadline 15 July.

PhD Studentships: in Psychology, School of Psychology, London Metropolitan University, deadline 15 July.

PhD Position: in Theoretical Philosophy, as part of the research project ‘What is really possible? Philosophical explorations in branching-history-based real modality’, Department of Philosophy, Utrecht University, deadline 26 July.

BSPS Doctoral Scholarship: in Philosophy of Science, deadline 1 August.