THE REASONER

VOLUME 10, NUMBER 11 NOVEMBER 2016

thereasoner.org

ISSN 1757-0522

94

95

97

CONTENTS

Editorial
Features
News
What's Hot in
Events
Courses and Programmes
Jobs and Studentships

EDITORIAL

Hello everyone! I had a chance to be a visitor at the vibrant Eidyn Centre of the

University of Edinburgh since last spring. The Centre runs a very rich program of research events in many areas of philosophy and cognate fields, it includes a very lively community of researchers, and it is constantly visited by leading philosophical scholars. Also, Eidyn hosts a range of projects, many of them international and interdisciplinary, and most of them funded by external research



grants. All this has been a blessing for the monograph I'm

presently writing (Liberals and Conservatives in Epistemology) in terms of intellectual stimulation and feedback received. As a sign of gratitude, I decided to devote this issue of The *Reasoner* to the *Eidyn Centre*. It was a great pleasure for me to 87 interview its Director, Prof Duncan Pritchard. This issue also 87 encloses the research profiles of many of the Eidyn members. I would like to thank all of them for giving me this great opportunity.

> LUCA MORETTI University of Aberdeen

FEATURES 97

98 **Interview with Duncan Pritchard**

Luca Moretti: I remember I saw you for the first time in the Department of Philosophy of St Andrews University. That must have been before 2000, I think. You were a PhD student when I was doing my MLitt. Crispin Wright was your supervisor. Could you tell us a bit about the topic your PhD thesis?

Duncan Pritchard: I had originally planned to write about Davidson's work on truth, and how this related to the realism/anti-realism debate, but a few things altered my course. The first was taking a class of Crispin's on the later Wittgenstein, which prompted me to read, and be blown away by, On Certainty. The second was reading three excellent books on radical scepticism: Barry Stroud's The Significance of Philosophical Scepticism, Michael Williams' Unnatural Doubts, and Marie McGinn's Sense and Certainty. Collectively they convinced me both that the problem of radical scepticism is a deep and important issue and that Wittgenstein can help us to resolve this difficulty. Accordingly, I wrote my thesis about how one might understand the Wittgensteinian notion of a hinge proposition such that it enables us to answer the radical sceptical problem.

LM: Could you say more about the understanding of the Wittgensteinian notion of a hinge proposition proposed in your PhD thesis? Do you still accept it?

DP: Back then I was convinced that the source of the

sceptical problem was epistemic internalism. My aim was to try to find a way reading Wittgenstein of which would support this Wittgenstein clearly view. thought that one cannot have rational support for one's most basic commitments (i.e., the 'hinges') and the standard line is to infer from this that one therefore lacks knowledge of them too. But if one is an epistemic externalist-in particular, if



one holds that knowledge can be possessed even in the absence of supporting rational support-then there is scope to reject this entailment. In particular, perhaps the hinge commitments can be known in virtue of purely externalist epistemic support. My PhD thesis tried to make good on this claim, and thereby offer a way of thinking about hinge commitments such that they were in the market for knowledge, albeit never rationally grounded knowledge. There are many advantages to this proposal, particularly in the context of radical scepticism, not least that it enables the proponent of a hinge epistemology to retain the closure principle for knowledge. I developed this view further in my first book, Epistemic Luck (Oxford UP, 2005), where I tried to motivate it within a more general methodology that I called anti-luck epistemology, but since then my position on hinge commitments has altered in various ways. Very roughly, I'm no longer convinced that our hinge commitments enjoy any epistemic support, whether internalist or externalist. On the plus side, however, I think there is a way of thinking about how our hinge commitments can be essentially unknown such that this notion can nonetheless make an important contribution to solving the sceptical problem.

LM: That's really interesting. I'm actually working on hinge propositions and trying to formulate a view that puts together a notion of acceptance (in van Fraassen's sense) with a form of externalism. We should talk more about this. But let's go back to your research. It seems to me that you are involved in several research projects presently...

DP: My most recent project was completing my book on radical scepticism, which appeared a few months ago, entitled *Epistemic Angst: Radical Scepticism and the Groundlessness of Our Believing* (2015: Princeton UP). There are four key parts to this book. The first part claims that the Cartesian sceptical problem is really two logically distinct problems in disguise, which each trade upon a distinctive sceptical source. The second part claims that there is a way of understanding hinge commitments such that although they are essentially unknown (at least with regard to rationally grounded knowledge at any rate), they can nonetheless offer us the antidote to one aspect of the Cartesian sceptical problem (but not the other). The third

part revisits the epistemological disjunctivism that I developed in a previous book—see *Epistemological Disjunctivism* (2012: Oxford UP)—and shows how this account presents us with the antidote to the other aspect of the Cartesian sceptical problem (but only that aspect). Finally, the fourth part argues that epistemological disjunctivism and hinge epistemology, despite being apparently competing responses to the Cartesian sceptical problem, are in fact not only compatible but also mutually supportive in lots of interesting ways. The result is what I call a *biscopic* treatment of the sceptical problem, one that recognises its dual nature and responds accordingly.

LM: And do you have other projects, apart from the one on radical scepticism? Once we had a chat about risk...

DP: Yes. Aside from radical scepticism, I've been working on a bunch of other inter-related topics. For a long time now I've been working on the nature of luck, a topic that grew out of the anti-luck epistemology that I mentioned earlier. These days I also defend a related view of risk (see my 2015 Metaphilosophy paper, 'Risk'). While I think luck and risk are two notions that are closely related, I also think that there are some important differences, and that this has implications for a number of domains. For example, I now believe that we should replace an anti-luck epistemology with an anti-risk epistemology, and that this enables us to deal with certain objections that have been levelled against the former (see my paper, 'Epistemic Risk', forthcoming in the Journal of Philosophy, for details). I've also been applying my account of risk to particular domains, such as law and aesthetics (e.g., see my paper 'Legal Risk, Legal Evidence, and the Arithmetic of Criminal Justice', forthcoming in Jurisprudence).

On a related front, I've been developing a theory of knowledge that arises out of anti-luck/risk epistemology, what I call anti-luck virtue epistemology (though it is probably better labelled as anti-risk virtue epistemology these days). The core statement of the view is in my paper, 'Anti-Luck Virtue Epistemology' (Journal of Philosophy, 2012), but recently I've been extending the view along a number of fronts. This has involved explaining how it can meet objections, showing how knowledge on this proposal relates to other epistemic standings (such as understanding, knowledge-how etc.), and developing a stance on some related epistemic notions that are rooted in this proposal, such as epistemic dependence. A key paper in this regard is one that I co-authored with my colleague Jesper Kallestrup where we develop what we call an *epistemic* twin earth argument ('Virtue Epistemology and Epistemic Twin Earth', European Journal of Philosophy, 2014). This is basically a refinement of my earlier critique of so-called robust virtue epistemic treatments of knowledge (i.e., views that try to analyse knowledge exclusively in terms of the manifestation of virtue, as proposed by Sosa, Greco, Zagzebski and others).

LM: I know that you are also working in applied epistemology. Can you expand on this?

DP: Yes, I'm increasingly working on topics in applied epistemology. I've already noted that I've been getting interested in legal epistemology. Another topic that I've been working on a lot concerns the epistemological ramifications of recent movements in cognitive science, particularly with regard to technologically-extended (and embedded) cognition, and also

group cognition. This was something that we have been exploring at Eidyn as part of the AHRC-funded 'Extended Knowledge' project that I've been leading since 2013 (the co-investigators on this project are Andy Clark and Jesper Kallestrup). I think this is very much applied epistemology, particularly once one starts to think through the practical implications of recent technological developments (e.g., the extent to which information is now so easily accessible and often seamlessly incorporated into our cognitive practices). This topic dovetails nicely with another applied epistemology interest of mine, which is the epistemology of education. In broad terms, the overarching question in this field is what the fundamental epistemic goals of education are, and how might one achieve them. My concern has been to motivate a conception of the epistemology of education that has the intellectual virtues at its core. In terms of the specific question of extended knowledge, the issue in epistemology of education is how best to make sense of our educational practices from an epistemic point of view given that students are increasingly technologically extended in their cognitive capacities, or else (or in addition) occupy technologically embedded environments. We've recently been putting these ideas into practice as part of a number of *Eidyn's* impact initiatives, particularly our philosophy in prisons project, which is devoted to exploring how teaching prisoners critical thinking skills, via the teaching of philosophy (and often in virtual learning environments, and hence via technologically embedded educational contexts), can enhance their intellectual character (and thereby their character more generally).

LM: You are the Director of the *Eidyn* Research Centre of the University of Edinburgh. Could you please tell us a bit about the *Eidyn*?

DP: Getting approval for a research centre is no easy feat, at least not at the University of Edinburgh anyway. But after the research evaluation exercise in 2008 ('RAE2008', as it was known), it seemed like the natural next step for Philosophy at Edinburgh, in preparation for the next research evaluation exercise ('REF2014'). The strategy that we developed was for a research centre that in the first instance showcased our research in the specific areas of ethics, epistemology and philosophy of mind and cognitive science, but which, if successful, would then broaden its remit to represent Edinburgh's philosophical research as a whole, at least post-REF2014. Eidyn was eventually established in 2012. I'm pleased to say that it has far exceeded the goals that we set for it when it was proposed. We have hosted over 30 projects, with most of these externally funded (the rest were pilot projects, many of which have led in due course to large externally funded projects). The centre is currently directed by myself, with Jesper Kallestrup and Michela Massimi as Deputy Directors.

There are three distinctive features of *Eidyn*. The first is the extent to which the research projects we host are often highly interdisciplinary, taking in such subject areas as Psychology, Informatics, Classics, History, Linguistics, and so on. The second is that from the off *Eidyn* had a strong concern for finding ways for the research we produce to have impact beyond the academy, not just in terms of public engagement but also more specifically in terms of concrete effects on, for example, public policy (the 'Philosophy in Prisons' project that I mentioned earlier, and which I lead, is a good case in

point). The third distinctive feature of Eidyn is that it was (unusually, for a research centre) part of its remit to contribute to innovative ways of developing research-led teaching, and to cascade this expertise throughout the curriculum at all levels. So, for example, *Eidyn* has been at the vanguard of developing online educational initiatives, such as high-profile MOOCs (massive open online courses)-our 'Introduction to Philosophy' MOOC is one of the world's most popular online courses, and will soon pass 1M enrolments-and a highly successful distinctive research-led online MSc in 'Epistemology, Ethics, and Mind'. In developing this new kind of pedagogy, we've compiled a database of online resources which are available for anyone to use, particularly schools, thereby further enhancing the impact of what we do outside of the academy. Thanks to generous funding from the Templeton foundation, we are now working on creating a suite of new MOOCs, and also a new online MSc (joint with the School of Divinity) on 'Philosophy, Science, and Religion'.

LM: Final question: can you describe some of the projects that the *Eidyn* is running presently?

DP: We're currently hosting over 20 projects, so I will need to be selective! Eidyn has recently been awarded two major ERC grants, so I'll start with those. Michela Massimi leads an ERC Consolidator Grant (c. £1.6M) entitled, 'Perspectival Realism: Science, Knowledge, and Truth From a Human Vantage Point'. This project develops a novel view in philosophy of science called perspectival realism, via a three-pronged highly interdisciplinary approach, which combines the philosophy of science, with scientific practice, the history of science and the history of philosophy. In addition, we've recently heard that Andy Clark has been awarded an ERC Advanced Grant (c. £1.4M) entitled, 'Expecting Ourselves: Embodied Prediction and the Construction of Conscious Experience' (or 'XSPECT' for short). This project examines the philosophical implications of an important new movement in cognitive science, predictive coding. Other projects that we host include Laura Candiotto's Marie Curie Individual Fellowship ('Emotions First: The Role of Emotions in Reasoning', c. £185K), Mark Sprevak's large AHRC project in collaboration with colleagues in English and Classics ('A History of Distributed Cognition', c. £600K), and the Edinburgh wing of a major new European Commission Marie Skłodowska-Curie ITN European Training Network ('DIAPHORA: Philosophical Problems, Resilience and Persistent Disagreement', c. £3.7M). You can find out more about *Eidyn's* projects on our webpage.

Michela Massimi

I was awarded a PhD in philosophy from LSE in 2002. Since then, I had research

and teaching positions at Cambridge (Girton College) and UCL. I'm currently Full Professor in Philosophy at the University of Edinburgh, where I have worked since 2012.

My PhD resulted in my first monograph, Pauli's Ex-



clusion Principle. The origin and validation of a scientific

principle (2005: CUP). I then edited Kant and Philosophy of Science Today (2008: CUP). I was the lead author of the popular book, Philosophy and the Sciences for Everyone (2015: Routledge), and the project leader for the University of Edinburgh's MOOC "Philosophy & the Sciences". I am currently co-editing with Angela Breitenbach a collection on Kant and the Laws of Nature (resulting from the homonymous Leverhulme Trust-funded international network, for which I was the PI). I have just embarked on a 5-year ERC Consolidator Grant entitled "Perspectival realism. Science, knowledge and truth from a human vantage point," part of the European Commission Horizon2020 programme.

From 2012 to 2015 I was in the Governing Board of the PSA. As of December 2016, I step down from being Co-Editorin-Chief for *The British Journal for the Philosophy of Science* (covered together with Steven French since August 2011). In September 2015, I have been elected Vice President of the *European Philosophy of Science Association*.

My research has always been in the broad area of history and philosophy of science. I'm interested in tackling important questions about scientific methodology and epistemology by looking at scientific practice, the history of science, and the history of philosophy. This multi-disciplinary approach is evident in my current ERC project on *Perspectival realism*. The idea behind it is simple and has a long philosophical pedigree: can we be realist about science, while acknowledging that our knowledge is situated and contextual, i.e., from a specific vantage point? The specific vantage point can be that of the modelling practice scientists are using; or the broader theoreticalexperimental context of the scientific community at the time.

To tackle this overarching question, I will be studying both modelling practices in contemporary particle physics and observational cosmology, as well as relevant scientific practices in given historical periods (e.g., the Chemical Revolution and the electromagnetic worldview of the end of the nineteenth century).

In this first part of the project, I am doing fieldwork at CERN and at the Dark Energy Survey to gain a better grasp of the frontiers of scientific methodology. I think there is simply no substitute for engaging directly with scientists and their very own work. Often enough in philosophy of science we tend to either indulge in philosophical speculations or fall prey to oversimplified images of science with no counterpart in actual practice. That's why philosophy occasionally gets bad press among scientists. But it would be wrong to conclude that philosophy is to science like ornithology is to birds (to quote Feynman's infamous analogy). After all, birds cannot tell good stories about themselves! That is what ornithologists are for.

The other main dimension behind my research and my current project is properly historical. I don't just look at the history of science but also at the history of philosophy. After all, it was Kant who placed centre-stage the idea of knowledge from a human vantage point. It is no wonder that philosophical traditions that share with perspectival realism a similar commitment to the situated nature of knowledge, share with it also the Kantian roots (from Putnam's internal realism, to various forms of pragmatism). Most philosophical confusions about perspectivalism (i.e., as being contiguous with relativism or constructivism), originate from a deeper confusion concerning the Kantian roots of the move. By clarifying those Kantian roots, I hope to dispel the persistent source of caricatures surrounding Kantianism and related murky opinions about what is really at stake in "knowledge from a human vantage point". The final outcome is a scientifically and historically informed novel image of scientific knowledge that aims to redefine key philosophical notions, such as truth, progress and natural kinds.

Please watch this space, and stay tuned!

MICHELA MASSIMI University of Edinburgh

Jesper Kallestrup

I'm a Professor in philosophy at the University of Edinburgh and a member of the Steering Committee of the *Eidyn*. My previous managerial roles include being the Head of Philosophy, as well as the Head of School of Philosophy, Psychology and Language Sciences. My research interests are in philosophy of mind, philosophy of language and epistemology.

I'm the author of Semantic Externalism (2011: Routledge),

and I have published many articles in leading journals on various topics in these areas of philosophy. I'm currently working on an advanced textbook called *Methods and Skills for Philosophy*, as well as a monograph entitled *Epistemic Anti-Individualism*.



The latter is building on previously published work in epistemology and the metaphysics of mind. Traditionally, knowledge has been understood individualistically as an exclusive property of individuals in isolation from their physical and social environment. More precisely, the acquisition and retention of knowledge by individuals have typically been viewed as being entirely down to abilities, states and processes occurring inside their bodily boundaries. For example, virtue epistemologists account for knowledge in terms of a belief being true because of cognitive ability of the knower, but much of our knowledge is acquired via relying on the cognitive abilities of others. Think of testimonial knowledge. The aim of the monograph is to systematically explore interconnected ways in which environmental circumstances influence how individuals attain and sustain their knowledge. Through a series of novels, so-called epistemic twin-earth arguments, the monograph argues for a thoroughgoing epistemic anti-individualistic outlook. The resultant view has implications for how we should understand the metaphysics of knowledge, e.g., how states of knowledge are physically realised, and what causal powers such states must have.

Within the *Eidyn*, in the last few years I have worked as a co-investigator on the Extended Knowledge project, which was a major AHRC-funded programme of research. The project offered, for the first time, a systematic exploration of the various different ways of 'externalizing' knowledge, one that drew on cutting-edge research in epistemology and the philosophy of mind and cognition. It then built on this systematic exploration to offer a new perspective on two particularly significant ways in which knowledge could be thought to be 'extended'—viz., the extended cognition and distributed cognition research programmes as they apply to knowledge. In both cases the result was a form of extended knowledge, where what is unique to the former is that the vehicle of the extension involves envi-

ronmental resources, and what is unique to the latter is that the extension is distinctively social.

The project team included Prof Duncan Pritchard as PI, Prof Andy Clark as the other CI, and two postdoctoral fellows, Dr Adam Carter and Dr Orestis Palermos. A number of very successful research events were organised during the project period such as major international conferences, workshops, seminars, public lectures and other impact events. The research led to the publication of a large number of research articles, many with joint authorship, in leading journals.

> JESPER KALLESTRUP University of Edinburgh

Laura Candiotto

Hi! I'm a Marie Curie Research Fellow at the University of

Edinburgh. I joined the Department of Philosophy in January 2016. My project "Emotions First" is hosted by the Eidyn Research Centre.

I have eight years of research experience: first, as doctoral student in the Department of Philosophy and Cultural Heritage at the Ca' Foscari University of Venice (in collaboration with the CNRS and Sorbonne University of Paris), then as an Assistant Researcher and a



Postdoctoral Fellow in Theoretical Philosophy in the same Department.

My PhD thesis, which focused on the collective inquiry in Plato's Socratic dialogues, gave me material for my first monograph, Le vie della confutazione. I dialoghi socratici di Platone (Ways of refutation. Plato's Socratic dialogues) (2011: Mimesis, Milano). In this book I defend the necessity thesis about the role of shame in refutations and the shared motivational states of the interlocutors in the dialogical inquiry.

My postdoctoral research focused on the notion of relation. I worked extensively on this topic within history of philosophy, social ontology and epistemology.

A further area of my accomplishments pertains to contemporary Socratic Dialogue and its practice in educational contexts. I designed a model of Socratic Dialogue that emphasises the cognitive role of emotions in group knowledge, and I have shown it to be effective in the health-care sector.

The field of my present research is philosophy of emotions. I work on the role of emotions in reasoning, focusing on ancient (mainly Socrates and Plato) and contemporary epistemology and philosophy of mind. My supervisor is Prof Dory Scaltsas. Arguably, internalism isn't a good framework to understand ancient epistemology. I think the embodied and distributed cognition hypothesis is the best candidate to replace it. In my "Aporetic State and Extended Emotions" (2015: Ethics and Politics 17, 233-248) I present my first findings from the research I'm currently carrying out at the Eidyn.

I'm presently working on the role of extended emotions in visual perception and memory processes. I intend to assess the hypothesis of the extended emotions as a model to understand Plato's group knowledge. I also work on enactive emotions: I assess the similarities and the differences with the extended ones, in order to frame my approach (I call this 'extended affectivity') in relation to primary intersubjectivity.

The contribution I intend to provide to Eidyn is developing a consistent account of the epistemic role of emotions framed into the extended and distributed cognition hypothesis and drawn in its theoretical and historical aspects. I hope that my investigation could be suitable for further outreach activities too, mainly in educational contexts.

I'm organising an international two-day workshop titled "Feeling Reasons: the role of emotions in reasoning", funded by the Scottish Philosophical Association. The workshop will be hosted by the Eidyn in May 2017. See the details and the CFA here.

I have many plans for the future. I think my multidisciplinary investigation is very promising in terms of further developments. I hope to find funds to keep sustaining my research activities and establish fresh academic collaborations. Some specific goals for the next few years are these: writing a monograph on the epistemic role of emotions in Plato's group knowledge, editing a volume from "Feeling Reasons" and a special issue for the Italian philosophy journal Studi di Estetica (here is the CFP) on the epistemic role of emotions.

Please feel free to contact me.

LAURA CANDIOTTO University of Edinburgh

Matthew Chrisman

Hill in 2006. I'm currently a Reader in Philosophy and the Head of Department at the University of Edinburgh, where I have worked since 2006. I was a visiting fellow in the Centre for Time at the University of Sydney, and a visiting scholar in the Philosophy Department at Harvard University. I have published a monograph, *The Meaning* of 'Ought' (2016: OUP), on metaethics and the semantics of normative modals, and a textbook, What Is This Thing

I was awarded a PhD in philosophy from UNC-Chapel



Called Metaethics? (2016: Routledge). I was also a lead author of the popular book, Philosophy for Everyone (2014: Routledge), and the co-editor of Deontic Modality (forthcoming: OUP). I helped to develop the University of Edinburgh's MOOC: "Introduction to Philosophy".

I am currently working mainly on three topics:

Normativity in general. I am interested in the nature, origin, and foundations of norms, laws, and rules. Stemming from my research on one of the core normative terms 'ought', I became convinced that it is fruitful to view various normative systems in parallel, and ask what they have in common such that they all count as rule-involving. This means focusing not just on ethical normativity, as metaethics classically did, but rather keeping an

eye on other kinds of norms, such as epistemic, legal, prudential, aesthetic, etc., One of my core ideas in this arena is the one that normative concepts are often a kind of modal concept, and we can use insights from modal logic and semantics to make progress on understanding normative thought and language.

Epistemic normativity and cognitive agency. I am interested in the way the sorts of epistemic norms satisfaction of which is crucial for knowledge seem to govern things that we don't control in the same way that we control our actions. More specifically, they seem in the first instance to govern *beliefs*, but we don't believe at will. Indeed belief itself is a mental state and so (in my view) not active in the way characteristic of exercises of agency. This raises an interesting question: should we view epistemic norms as actually governing some other part of our cognitive lives, something active and under our voluntary control; or should we instead relax the traditional idea that genuine norms demand something active of those who they govern?

Political speech and civil disobedience. Sometimes it seems appropriate to violate laws to make a point or bring some injustice to the attention of one's political community, even when these laws are legitimately formed. This is a traditional way to conceive of civil disobedience, and I am interested in when this particular kind of law-breaking is justified. There are traditional answers in political philosophy, but in my view they have not been well enough informed by speech-act theory, where civil disobedience might be viewed as a particular kind of speech-act with felicity conditions that can be probed for criteria of justification.

I have collaborated with several different people on several different projects. The Edinburgh philosophy department has a wealth of people working on normative and metanormative issues, and I often work with those people. I recently began an interdisciplinary project called "The Foundations of Normativity" with Kieran Oberman (Edinburgh Politics) and Luis Duarte D'Almieda (Edinburgh Law). This project involves an annual workshop, masterclass, distinguished visitors, and mini-workshops. My collaborator for work so far on political speech is Graham Hubbs (Idaho Philosophy).

I never really know where my research and ruminations are going to take me, but I'm hoping that the project on political speech provides a springboard for more work in political philosophy informed by philosophy of language and metanormative theory. I'd also like to do some more work on the nature of belief, deliberation, investigation, and their normative relations to knowledge and understanding.

> MATTHEW CHRISMAN University of Edinburgh

Adam Carter

My name is Adam Carter, and I'm a postdoc at the *Eidyn*, working mainly in epistemology. Since 2013, I've been affiliated with *Eidyn's* AHRC Extended Knowledge Project, where my collaborators (and frequent co-authors) have been Andy Clark, Jesper Kallestrup, Orestis Palermos and Duncan Pritchard. (See Jasper's presentation for a description of this project.)

Beginning in August 2016, I'll be working on a new *Ei-dyn* project, which is the Templeton-funded Philosophy, Science and Religion Online initiative, where I will be assisting in the creation and development of a MOOC on the project's theme. In addition to these *Eidyn* roles, I am also director

for *Eidyn's* Epistemology of Education pilot project, which has hosted (and will continue to host) workshops and conferences with the objective of bringing into contact mainstream epistemology and the philosophy of education. I also facilitate *Eidyn's* Epistemology Research Group, a bi-weekly seminar series featuring leading and up-and-coming scholars working on cutting-edge themes in epistemology, broadly construed.

Prior to joining the *Eidyn*, I was Visiting Assistant Professor of Philosophy at Eindhoven University of Technology, a Visiting Lecturer in Philosophy at Queen's University Belfast, and a postdoctoral Research Fellow in Epistemology at the University of Geneva.

My published work spans many topics in epistemol-



ogy (including virtue epistemology, epistemic luck, epistemic value, defeasibility, epistemic relativism, knowledgehow, understanding, social epistemology, collective epistemology, metaepistemology), and increasingly, topics at the intersection of epistemology and other areas, including the philosophy of mind (e.g., epistemology and extended cognition), the philosophy of language (e.g., relativist approaches to knowledge-ascriptions, epistemic norms governing assertion), and bioethics (especially cognitive enhancement, its epistemology and connections with moral enhancement).

Recently, two epistemological topics which I've given a lot of thought to are *epistemic relativism* and *knowledge-how*. My first monograph, *Metaepistemology and Relativism*, was published earlier this year by Palgrave MacMillan. In this book, I criticise traditional argument strategies for epistemic relativism on the grounds that such arguments ultimately fail to motivate relativism over scepticism. However, I argue that contemporary, linguistically-motivated forms of epistemic relativism (e.g., MacFarlane 2014) don't succumb to this objection. I then raise some epistemologically oriented objections to MacFarlane-style epistemic relativism, and I do so against a wider background of thinking about the tacit metaepistemological presuppositions that often underlie our most basic projects in mainstream epistemology.

Regarding practical knowledge: I'm in the process of finalising a co-authored monograph with Ted Poston on knowledgehow. Ted and I are *anti-intellectualists*, which means we don't think that knowledge-how is a kind of propositional knowledge. In our book (forthcoming with Continuum) we defend an antiintellectualist approach to knowledge-how based primarily on thus far unexplored epistemological considerations.

I like to work on a lot of different topics in epistemology, sometimes, many different topics at once. I simply can't stand having an idea and not at least attempting to write it up. This is probably a blessing and a curse. It inspires me to write a lot of different things, though it also leads me to perpetually feel like I have much more to do. One such item on the 'to do' list is a monograph project on the epistemology of understanding, co-authored with Emma C. Gordon. Understanding (especially, objectual understanding, as when one understands a subject matter or body information) is surely as (if not more) epistemically valuable as knowledge is. Yet, by comparison, the epistemology of understanding is much less well understood. I look forward to thinking much more about this topic than I have thus far, and how it connects with other topics in epistemology whose connections with understanding have not yet been explored.

> ADAM CARTER University of Edinburgh

Mark Sprevak

I'm Mark Sprevak. I'm on the steering committee of *Eidyn* and also Senior Lecturer in School of Philosophy, Psychology and Language Sciences at

the University of Edinburgh. Previously, I was a Research Fellow at King's College Cambridge.

My research focuses on foundational issues in the sciences of the mind (cognitive science, AI, neuroscience, and so on). My un-



dergraduate training was in mathematics and natural sciences. I've always loved science, but I was most drawn to questions about how we should interpret scientific theories, which commitments those theories involve, and how to identify the tipping points that could resolve long-running disputes. I later recognised these questions as having a distinctively philosophical stripe. I have worked on a broad range of topics (including mental representation, realism in cognitive science, probabilistic modelling in cognitive science). Most of my research, however, falls under one of two big headings: the distributed turn in cognitive science (considering, e.g., whether and how cognition extends beyond the head), and philosophical issues arising from using computation to explain the mind (considering, e.g., what commitments such computational explanation of the mind involves).

It is a commonplace nowadays to say one's memory is offloaded ('distributed onto') an iPhone. 'Distributed cognition' is used an umbrella term for the (rather hazy) idea that environmental resources, like iPhones, are more than mere inputs to, or outputs from, our mental lives. Those external resources are, in some sense, part of our mental lives. It is non-trivial to make this more precise. Excellent philosophical work has been done in recent years making progress on this; today, we are actually in a pretty good position in this respect. As one might expect, that position is complex: there are many-often incompatible-ways fleshing out the basic claim of distributed cognition. But here's another thought. Nearly all cited instances of distributed cognition come from modern technology (iPhones, computers, and so on). However, the basic ideathat an environmental resource may do mental work-is an old one. How was human cognition distributed in different historical times? How did folks in those times theorise about cognition and the boundaries of the mind? What might have caused them to assume a brain-bound versus distributed mental life?

Together with Douglas Cairns (Classics), Miranda Anderson (English Literature) and Mike Wheeler (Philosophy) we are trying to answer these questions. We have an *Eidyn*-hosted 600,000 AHRC grant, 'A History of Distributed Cognition', on this project. What is really exciting is that there is potential for a productive two-way exchange across the humanities and sciences here, with philosophy acting as kind of a mediator. Psychologists stand to gain access to new and enlightening paradigm cases of distributed cognition and an appreciation of how their current ideas have been historically conditioned. Historians stand to gain a new set of theoretical tools that would enable them to see episodes in a new light and allow them to draw new conclusions.

Our major outputs so far include a set of eight online seminars that provide an introductory state-of-the-art' on distributed cognition for a wide audience of researchers. If you know anyone curious about distributed cognition, they could do worse than starting with these seminars. Our next major output is a big one: a set of four volumes (A History of Distributed Cog*nition*), that aims to answer the research questions above. We have recruited a large number of scholars across the humanities for these volumes, and we organised intensive workshops to iterate on chapter drafts. Regarding intellectual exchange in the other direction, Mike Wheeler and myself are preparing a paper that will introduce some lessons learned so far from the project to the philosophy and psychology community. We hope our project will stimulate other researchers, in the humanities and sciences, to explore the vast and interesting research topics opened up by seeing the past through the theoretical framework of distributed cognition.

> MARK SPREVAK University of Edinburgh

James Collin

My name is James Collin. I completed my PhD in Philosophy from the University of Ed-

inburgh in 2013. After that, I was a postdoc in the *Kant and the Laws of Nature* project, headed up by Michela Massimi. My PhD thesis was a defence of nominalism; the focus was on mathematical nominalism, but the idea was to



defend it in such a way that the project could be naturally rolled out to other related areas of metaphysics that typically get less attention in the nominalism literature. The broadly Quinean arguments against nominalism (though Quine's *own* views about metaphysics are weirder and more radically deflationary than they're often taken to be) focused on semantic issues. These of course are hugely important, but I thought that some *pragmatic* issues, to do with the way mathematics is actually *used* in the sciences, were being overlooked, and that these had an important bearing on the metaphysics.

A consequence of this pragmatic approach was that what started out as research in pure metaphysics became research in philosophy of science. Furthermore, I became interested in pragmatism, in particular semantic inferentialism and the research programme of analytic pragmatism more generally. This cluster of topics (which I see as being deeply entangled) is what my research has centred around. Research programmes in metaphysics always come bundled with presuppositions in the philosophy of language, which are sometimes made explicit but are often bubbling away under the surface. The metaphysics that comes along with semantic inferentialism is an area that's still wide open and needs to be explored. My own hunch is that semantic inferentialism produces metaphysically deflationary results with regard to mathematical objects, properties, propositions, possible worlds and types, but not with regard to the nomological and the normative. It also has a lot to tell us about scientific representation and the application of mathematics.

Within the *Eidyn*, I work on *Philosophy, Science and Religion Online*, which is a collaborative project between *Eidyn* and the School of Divinity and that's being led by Duncan Pritchard and Mark Harris but involves a large number of people in Philosophy and Divinity. Our goal is to launch a series of MOOCs which are introductory and free, and an online MSc in Philosophy, Science and Religion, which is an intensive, research-led programme designed to ready people for doctoral work.

One of the challenges of the project, which also gives it huge scope and potential, is that it's genuinely interdisciplinary. Take one of the core philosophy, science and religion questions: whether there is a conflict between science and religion. There's only so much you can say about this at this level of generality. Most of the really interesting questions have to do with whether there is conflict between particular sciences and particular religions, or subgroups within those religions. So to address this question sensibly, you need everyone around the table. An ancient Greek Patristic theologian doesn't necessarily interpret the Bible in the same way as a contemporary American evangelical, and Muslims and subgroups within Islam will approach Quranic interpretation in yet other ways. You need theologians who actually know about these things to even start answering these questions. You need scientists to communicate the relevant scientific results. And you need philosophers and the tools of philosophy to then tease out the relationship between the two. This project brings practicing philosophers, scientists and theologians into one place, both to drive forward research on these issues and to teach a new generation of thinkers how to approach them.

> JAMES COLLIN University of Edinburgh

News

CADILLAC Workshop, 23–25 May

The CADILLAC workshop was a logic workshop organized by the Technical University of Denmark and CIBS, University of Copenhagen. It consisted of three days of continuous discourse on the logics of social interactions as well as social interactions amongst continuously discoursing logicians. The workshop took place at a former movie theatre 'Byens Lys' (Danish: The Light of Town) in the free city of Christiania, Denmark, this bohemian backdrop providing an unusual and cozy atmosphere in which academic discussion could easily thrive. The three keynote talks by Sonja Smets, newly appointed director and professor at the ILLC, University of Amsterdam, Rineke Verbrugge, professor of logic and cognition at the University of Groningen, and Patrick Blackburn, professor of philosophy at Roskilde University, highlighted three equally important aspects of the scientific enterprise: novel scientific insight of the highest quality (Smets), Public outreach at an engaging, entertaining and informative level (Verbrugge) and innovative visions for the future of the field (Blackburn). Here I will limit myself to commenting on Blackburn's talk which took place at the third day of the workshop, May 25, 2016.

Patrick Blackburn's talk was partly about teaching logic to humanities students, particularly at a university such as Roskilde, where the education is based upon student led projects. There are temporal constraints as well as initial mental barriers and habits among students to be encountered when attempting such a thing. Blackburn's project seems to be to get humanities students to think critically about critical thinking using logic and formal modeling as both a tool and a medium; the latter Blackburn referred to as *conceptual cartooning*. However, more importantly to me (though this cautionary qualification can be applied anywhere in this text) the talk was about where logic has gone the past decades and where it might go in the future.

Blackburn tells a story in which the protagonist, logic, starts out from the humanities, in particular philosophy, explores areas of mathematics, computer science and, recently, the social sciences, and now may return to its home in the humanities, seeking new insights and further areas to explore. Thus, it is really a classical fairy tale with the hero starting at home, venturing out to explore the world, and in the end returning home again. We might see the beginning of this home coming trend in what van Benthem dubbed "the cognitive turn", where logicians focus on psychological experiments and data, naturalizing logic, paying attention to empirical data.

At the workshop Blackburn's own work with computer scientist Torben Bruner, and psychologist Irina Polyanskaya, on the abilities of recursive reasoning by children, beautifully exemplifies this line of inquiry. This work combines the social scientific aspects of psychology (quantitative and qualitative interviews, theoretical models of reasoning), with the machinery of hybrid logic playing the role of a specific reasoning mechanism explaining the phenomena. One issue with this general approach is what happens to the normative aspect of logic as a standard of correct reasoning? If you go very naturalistic, this tension will build. Another tenet of Blackburn's view is logical pluralism. Now, from his talk, it was not exactly clear to me what he meant by this term, but if is going to have any bite, it will have to mean more than simply many logics allowed-Quinean first-order logic fundamentalism is hardly a serious position to take these days. However, as is the case with naturalism, the further we go pluralist, logic loses more and more of its claim to be foundational, a role which I suppose Blackburn still wishes to ascribe to logic, assuming that logic is part of the new trivium referred to in the title of the talk, and that this new trivium will play a role similar, if updated, to that of its medieval counterpart. Towards the end of the talk, Blackburn restated the claim that the next great insights in logic may come from a return to the humanities. Even to the extent of getting insights from schools of thought seemingly quite foreign to logic, such as deconstructivism and social constructivism.

In the discussion following the talk, Vincent Hendricks, University of Copenhagen, laconically pointed out that this would require that the humanities got interested in what logic has to offer. This remark points to something deeper than the attitudes to logic of individual researchers, i.e. a number of more or less conscious and intended splits in the history of philosophy away from logic. To start in Denmark, one can mention Kierkegaard's dismissal of the logical aspects of Hegel, and moving on, Nietzsche's dismissal of Kant (and almost anything else, certainly anything formal), Heidegger's negligence of the

logical aspects of his two great sources of inspiration, Aristotle and Husserl, the latter Wittgenstein's ambiguous relationship to his younger self, the social constructivists failure to take up Kuhn's challenge of providing a theory of meaning befitting of paradigm theory. Although these splits by no means constitute an impenetrable wall between logic and other parts of philosophy, and although there are exceptions to the rule to be stated next, a major part of the philosophy upon which current humanities thinking is based is not just alogical, but anti-logical in its foundations. This goes for new left critical philosophy, existentialism, major parts of social constructivism (focus on the unformalizable complexity of individual case studies, and so on), and for mainstream thought experiment driven analytic philosophy (although to a much lesser extent now than when I started as a student 20 years ago). This should not be taken to mean that I disagree with Blackburn. Just considering the German tradition, I think there are important insights to be gained from Heidegger, Gadamer, the later Wittgenstein and others. Martin Stokhof, University of Amsterdam, has pointed this out in several publications as well as showed us what kind of specific historical analyses of, e.g., logical form could be fruitful. However, it remains an open question how these insights can be transferred into actual formal work, e.g., as done by Sonja Smets.

Blackburn did not provide an answer, nor was he required to. One obvious answer, which I think has only been partly successful, we might dub rational reconstruction. We have seen a lot of this kind of work, Blackburn, Bruner, and Polyanskaya's work in cognitive science is of this nature. In the same line, we can imagine a logical formalization of aspects of Heidegger's Sein und Zeit or of Gadamer's historical analyses. However, whereas such efforts widen the scope of logic, which has a lot of value, they do in my view not tend to significantly deepen our understanding of logic itself. The logical paradigm is usually presupposed or only changed incrementally in order to fit the application area. Again, this is fine and should be considered scientific progress. But, in my view, if we want to really change the foundations of logic this is where we should look again: at the foundations of logic. I have no idea at present of how to proceed so as not to just repeat the work of previous generations, but I suggest we start looking there-Gödel, Tarski, Turing, Church, Kleene. This does not mean that we should not look to other traditions, but our own tradition in logic is a treasure trove of deep philosophical insight, which should not be forgotten, but critically questioned in the spirit of Patrick Blacburn's amazingly inspiring talk!

All in all, I think it is safe to say that the CADILLAC workhop was a testemony to the fact that logic is still very much alive and kicking, also in Scandinvia.

MARTIN MOSE BENTZEN Technical University of Denmark

Calls for Papers

THE BACKGROUND OF CONSTITUTIVE RULES: special issue of *Argumenta*, deadline 10 November.

MODELLING AND REPRESENTATION: How TO MAKE WORLD(S) WITH SYMBOLS: special issue of *Synthese*, deadline 31 December.

EPISTEMIC DEPENDENCE: special issue of *Synthese*, deadline 31 December.

THE SCIENTIFIC TURN: STUDIES IN MATERIALISM AND METAPHYSICS:

special issue of Synthese, deadline 31 December.

SOFT METHODS IN PROBABILITY AND STATISTICS: special issue of *International Journal of Approximate Reasoning*, deadline 31 December.

INTELLIGENT MACHINES AND HUMAN BEINGS: CHALLENGES OF A NEW RELATIONSHIP: special issue of *Journal of Ethics and Information Technology*, deadline 15 January.

EVIDENCE AMALGAMATION IN THE SCIENCES: special issue of *Synthese*, deadline 17 February 2017.

INFERENCES AND PROOFS: special issue of *TOPOI*, deadline 31 March.

INFINITE IDEALIZATIONS IN SCIENCE: special issue of *Synthese*, deadline 15 April.

FORMAL AND TRADITIONAL EPISTEMOLOGY: special issue of *MANUSCRITO*, deadline 1 July 2017.

WHAT'S HOT IN ...

Uncertain Reasoning

Every now and then we realise how much we take for granted

in our work. In a recent project meeting I was asked a question I definitely did not expect: *I see, but what does uncertainty actually mean*? Ehm, well, y-you know...

I took that home. If I knew that an economist was asking, I could run the standard risk vs. uncertainty distinction, adding maybe ambiguity just to signal I'm not stuck in the Sixties of Luce and Raiffa's *Games and Decisions*. But in that case, the person would simply not ask.



Similar reasoning led me to discard all quantitative backgrounds. Pure maths wasn't ruled out, and if I knew that, I could reply that uncertainty is pretty much coextensive with probability, though I don't quite believe this. But I just didn't know the persons' background, *that* was uncertainty and *that* led to my inability to provide a quick and smart answer, or any answer at all for that matter.

In hindsight, I should have replied along the following lines: Uncertainty is to do with forecasts. We deal with forecasts every day, we read and hear about forecasts in virtually every bit of printed or broadcasted news. And true to the bigger picture, not all of forecasting is probabilistic. To say that uncertainty is the subject matter of forecasts appears now as a decent, widely understandable, and honest answer to the uncanny question.

It turns out, quite interestingly, that this can be pushed further. In his arXiv preprint Complex Systems: a Physicist's Viewpoint, (revised in 2013) Giorgio Parisi offers his take on how the recent interest of physicists in complex systems has been shaping significantly the whole subject. Indeed he suggests that one can get a clearer understanding of what physics *is*, by being specific about the meaning of forecasts, or predictions. For he defines physics as "an experimental science in which theoretical predictions are compared to experiment", where "predictions are obtained by mathematical reasoning." The paper then elaborates on the centrality of prediction for the actual definition of physics, and in particular how a number of changes in the very meaning of 'prediction' is related to an equal number of "conceptual revolutions" in the subject.

Parisi traces the origins of the modern meaning of physical prediction in the beginning of modern physics. The paradigmatic example being classical mechanics, the deterministic world in which, for a limited class of phenomena, one can submit definite Yes/No predictions to experimental testing. Observation will do the rest. This meaning of prediction can taken for granted, but it is just the beginning of the story.

Things get more exciting when the problem of interest escapes the Laplacian setting. Cases of this sort, says Parisi, led to a new "general philosophy", one centered around the notion of *probabilistic predictions*. For this concept, the author reviews three distinct meanings, corresponding to three "revolutions". The first took place during the mid 1800s, with the introduction of statistical mechanics. The second started at the beginning of the 1900s with the discovery of quantum mechanics. The third, which is coming of age, relates to the investigation of complex systems.

Parisi suggests that this four-stepped development caused alterations in the meaning of scientific predictions. More precisely they became increasingly weaker in the sense that predictions in a newly emerging sense need not count as such in previous contexts. In this sense I find the suggestion for a possible role for *imprecise probabilities* in formulating predictions about complex systems particularly interesting. This is certainly in line with the physicist's remarks to the effect that the upside of increasingly weaker notions of forecasts, is the extension of the applicability of physics to a wider set of problems, and in particular for this note to biology. I refer interested readers to Parisi's paper for more details.

I now also realise that no physicist took part in the project meeting. For otherwise they would have probably superseded my silence shouting out loud that uncertainty is what physics is all about!

> HYKEL HOSNI Philosophy, University of Milan

Evidence-Based Medicine

The December issue of Studies in History and Philosophy of Science Part C: Studies in History and Philosophy of Biological and Biomedical Sciences is currently in progress. However, a number of papers from that issue are already available. In particular, there is a paper by Veli-Pekka Parkkinen on Robustness and evidence of mechanisms in early experimental atherosclerosis research. The paper takes a close look at the early experimental evidence for the hypothesis that high cholesterol causes atherosclerosis, sometimes called the *cholesterol hypothesis*. The early experimental evidence looked to provide strong evidence for the cholesterol hypothesis. However, despite this evidence, the medical community did not initially look for interventions based on lowering cholesterol. As a result, it looks like the medical community did not respond appropriately to the experimental evidence.

Against this, Parkkinen gives a detailed case study to argue that the response of the medical community to this early evidence was at that time defensible. He argues that although the early experimental evidence did establish that there was



smbc-comics.com

a mechanism linking high cholesterol and atherosclerosis, this alone does not provide reason to believe that lowering cholesterol will be an effective intervention. This is because there can be a mechanism linking high cholesterol and atherosclerosis even though there is no corresponding correlation, so that lowering cholesterol will not reduce the population-level rates of atherosclerosis.

Parkkinen argues that it was necessary to also establish that there is an appropriate correlation between lowering cholesterol and the population-level rates of atherosclerosis before the medical community could rightly look for interventions based on lowering cholesterol. And he thinks that a close case study suggests that at the time there simply did not exist this required evidence of correlation. He concludes that the response of the medical community to this evidence was appropriate because "when the evidence from laboratory experiments is taken on par with the population-level evidence available at the time, the researchers had reason to believe that the cholesterol route to atherosclerosis was not an effective target for clinical intervention, even though cholesterol was by many considered a component in the pathophysiology of the disease." It is an interesting case that suggests the importance of both evidence of mechanisms and evidence of correlation in helping to establish the effectiveness of an intervention.

> MICHAEL WILDE Philosophy, Kent

xkcd.com

REDUCTIONISM • n. 1. "R" IS A LETTER UITH ORIGINS IN EGYPTIAN HIEROGLYPHICS, "E" STANDS FOR A VOUEL SOUND NORMALLY REPRESENTED RY "T" UNTIL THE ISTOC "D" IS

Events

NOVEMBER

CLEM: Cologne-Leuven Epistemology Meeting, University of Cologne, 4–5 November.

SFM: Symposium on Formal Methods, Limassol, Cyprus, 7–11 November.

IMC: Intentionality, Modality, and Constitution, Turin, 10–11 November.

SM&SE: Scientific Misconduct and Scientific Expertise, Barcelona, 11 November.

S&EIPT: Structure and Equivalence in Physical Theories, University of Cambridge, 12 November.

RISAT: 5th International Conference on Research in Science and Technology, London, 15 November.

LogiCIC: The Logical Structure of Correlated Information Change, Amsterdam, 17–19 November.

SoCALML: The Southern California Machine Learning Symposium, California Institute of Technology, 18 November.

RLFHR: The Relevance of Logic for Human Reasoning, Munich Center for Mathematical Philosophy, 18–19 November.

WoPL: Workshop on Philosophical Logic, Buenos Aires, 23–25 November.

December

CIR: Creativity, Imagination, and Rationality, University of Bristol, 8–9 December.

FILM: Future of Interactive Learning Machines, Barcelona, 9 December.

ML4HC: Workshop on Machine Learning for Health, Barcelona, 9 December.

OrO: Optimizing the Optimizers, Barcelona, (9–10 December. **IDM:** Imperfect Decision Makers: Admitting Real-World Rationality, 9–10 December.

ASNM: Adaptive and Scalable Nonparametric Methods in Machine Learning, Barcelona, 10 December.

PodFAS: Perspectives on Determinism From Across the Sciences, University of Sydney, 13 December.

JANUARY

MT: Model Theory: Philosophy, Mathematics and Language, Munich, 9–12 January.

RRRoDSN: Risk, Resilience and Robustness of Dynamic Supply Networks; Bridging Mathematical Models and Practice, International Centre for Mathematical Sciences, Edinburgh, January 11–13.

COURSES AND PROGRAMMES

Programmes

APHIL: MA/PhD in Analytic Philosophy, University of Barcelona.

MASTER PROGRAMME: MA in Pure and Applied Logic, University of Barcelona.

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: in Statistics, University College Dublin. LoPhISC: Master in Logic, Philosophy of Science and Epistemology, Pantheon-Sorbonne University (Paris 1) and Paris-Sorbonne University (Paris 4).

MASTER PROGRAMME: in Artificial Intelligence, Radboud University Nijmegen, the Netherlands.

MASTER PROGRAMME: Philosophy and Economics, Institute of Philosophy, University of Bayreuth.

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 PROGRAMMES: in Philosophy of Science, University of Leeds.

MA IN LOGIC AND PHILOSOPHY OF SCIENCE: Faculty of Philosophy, Philosophy of Science and Study of Religion, LMU Munich.

MA IN LOGIC AND THEORY OF SCIENCE: Department of Logic of the Eotvos Lorand University, Budapest, Hungary.

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

MA IN MIND, BRAIN AND LEARNING: Westminster Institute of Education, Oxford Brookes University.

MA IN PHILOSOPHY: by research, Tilburg University.

MA IN PHILOSOPHY, SCIENCE AND SOCIETY: TiLPS, 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 Birm-ingham.

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

MSc IN APPLIED STATISTICS: Department of Economics, Mathematics and Statistics, Birkbeck, University of London.

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

A programme at the University of Kent, Canterbury, UK. Gain the philosophical background required for a PhD in this area. Optional modules available from Psychology, Computing,

Statistics, Social Policy, Law, Biosciences and History.

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

MSc IN COGNITIVE SYSTEMS: Language, Learning, and Reasoning, University of Potsdam.

MSc IN COGNITIVE SCIENCE: University of Osnabrück, Germany. MSc IN COGNITIVE PSYCHOLOGY/NEUROPSYCHOLOGY: School of Psychology, University of Kent.

MSc IN LOGIC: Institute for Logic, Language and Computation, University of Amsterdam.

MSc IN MIND, LANGUAGE & EMBODIED COGNITION: School of Philosophy, Psychology and Language Sciences, University of Edinburgh.

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

MRES IN COGNITIVE SCIENCE AND HUMANITIES: LANGUAGE, COM-MUNICATION AND ORGANIZATION: Institute for Logic, Cognition, Language, and Information, University of the Basque Country (Donostia San Sebastián).

OPEN MIND: International School of Advanced Studies in Cognitive Sciences, University of Bucharest.

JOBS AND STUDENTSHIPS

Jobs

UNIVERSITY TEACHER: in Logic & Metaphysics, University of Glasgow, deadline 6 November.

PROFESSOR: in Machine Learning, Aalto University, Finland, deadline 6 November.

ASSISTANT PROFESSOR: in Logic and Scientific Methodology, London School of Economics and Political Science, deadline 7 November.

RESEARCH ASSOCIATE: in Statistical Machine Learning, Imperial College London, deadline 14 November.

Associate Professor: in Philosophy of Neuroscience, University of Virginia, deadline 15 November.

Post-doc: in Cognitive Anthropology, University of Oxford, deadline 18 November.

ASSISTANT PROFESSOR: in Value Theory, Loyola University Chicago, deadline 20 November.

Post-doc: in Theoretical Philosophy, University of Groningen, deadline 30 November.

DIRECTOR: in Integrative Thinking Program, Shantou University, deadline December 11.

Studentships

PhD POSITION: mathematical statistics, Tilburg University, Netherlands, Deadline 10 November.

PhD STUDENTSHIPS: in Philosophy of Science, Epistemology and Metaphysics, Lingnan University, Hong Kong, Deadline 1 December.