THE REASONER

CONTENTS

EDITORIAL

With the seasonal festivities just behind the corner it's time to get started on New Year's resolutions. Forget about the gym, correcting all the mistakes on Wikipedia or re-reading 1984, and make "Contribute to The Reasoner" top of your list!

Why should you consider doing this? Well, because not everything worth reading can go through the lengthy and costly process of academic writing. Sometimes good ideas need to be jotted down quickly, otherwise they will be lost, possibly forever! THE REASONER SPECULATES is the place for ideas that are too good to be snowed under the next hundred of posts on facebook or twitter, but which aren't quite fully baked for a paper. I discussed this (partly baked!) idea in my May 2017 editorial, but bear with me if I repeat once more the key message by I.J. Good "It is often better to be stimulating and wrong than boring and right".

NEWS are of course always welcome. You can report on workshops, seminars, summer/winter schools and all sorts of reasoning activities that you find exciting. Not only the reasoning community will be updated on your field – your funding body will be delighted to read about how you used their money!

If you are running an important project, then you may also consider reporting regularly about it on the DISSEMINATION CORNER. We are delighted to host updates about the ERC Consolidator Grant the Logic of Conceivability and we hope to host many more.

Two sections evolved into being the most recognisable features of The Reasoner for the past decade. The first is AN INTERVIEW WITH . . . in which guest editors introduce the background and work of a reasoner, who is then asked to share their insights with the readers. Topics of interest span the history and foundations of reasoning as well as its applications, from artificial intelligence to medicine to economic theory – reasoners can be found in all playgrounds. The second very recognisable feature of our gazette is WHAT'S HOT IN . . . . A number columnists have recently joined The Reasoner. In addition to the columns on Evidence-Based medicine and Uncertain Reasoning which have been running for years, recent regular additions include (Formal) Argumentation Theory, Medieval Reasoning and Philosophy & Economics. The Reasoner constantly welcomes proposals for new interviews, reviews and columns – see the submit page on the website for more details.

HYKEL HOSNI
Università degli Studi di Milano

Alice is not impressed by the Sorites Paradox

Bob, in order to impress Alice, decides to amuse her with the Sorites Paradox. The conversation goes like this:

Bob: See that tree over there. It's far away right?

Alice: Sure.

Bob: But if I was standing right in front of it it would not be far away, it would be near.

Alice: For sure.

Bob: And from points in between the tree may be far or near.

Alice: Sounds reasonable.

Bob: And if you're at some point in between which is far from the tree and you move 1mm forward towards the tree then clearly you'll still be far from the tree.

Alice: Hmm, I guess.

At this point Bob plays his trump card pointing out that starting where they are and moving 1mm at a time towards the tree and the tree will remain 'far' throughout, so will still be 'far' even when they arrive right next to the tree. Unfortunately Alice doesn't seem quite as impressed as Bob hoped. The resulting conversation goes like this.

Alice: Well obviously then you can't be right, it must change from far to near at some point. Unfortunately we don't have time to actually do your experiment to find out where it is but we can if we try it another way. Let's walk half way. If I still think it's far then this point must be between that point and the tree. On the other hand if I think it is then near we know the point must be between our start and this mid-point. So now we've trapped the point in an interval half what we started with. Repeating it we can go down to a quarter of the original distance, and so on. Since the tree is at most 100m away we will determine this point in about $\log_2(10,000) \leq 14$ steps, which we do have time for.

Bob: Oh.

When they do attempt this experiment there are now two possibilities. The first is that they capture the point.

Alice: OK, so I was wrong not to object to your assertion *And if you're at some point in between which is far from the tree and you move 1mm forward towards the tree then clearly you'll still be far from the tree* at the time, we now see it is is false.

The other possibility is that at some point Alice simply isn't able to say if the tree is far away or not.

Alice: OK, so I was wrong not to object to your assertion *And if you're at some point in between which is far from the tree and you move 1mm forward towards the tree then clearly you'll still be far from the tree* at the time. For how could I agree to it if in general I cannot even tell if a point is far or near to the tree? I was clearly wrong to go along with this assumption of yours.

Bob: So you don't think there's a paradox here?

Alice: No.

Bob to himself: Don't know why I ever wanted to impress her in the first place.

Jeff Paris

Ampliative Reasoning in the Sciences - 5th Workshop on Logic, Reasoning, and Rationality, May 18–19

The workshop on *Ampliative Reasoning in the Sciences* (May 18-19, 2017, Ghent) is the 5th in the series on *Logic, Reasoning and Rationality*, organized by the scientific research network *Logical and Methodological Analysis of Scientific Reasoning Processes*. The network is funded by the Flemish Research Foundation (FWO). It consists of nine research centers within Belgium, the Netherlands, Germany, Poland, and the UK. The workshop series includes two workshops per year (see here for more info on the workshop series, the network, and upcoming events).

The workshop was organized by two partner centers of the network: the *Centre for Logic and Philosophy of Science* at Ghent University and the *Research Group for Non-Monotonic Logic and Formal Argumentation* at Ruhr-University Bochum. The aim of the workshop was to bring together scholars investigating ampliative reasoning in the sciences, working in different philosophical sub-domains. In particular, the focus was on three central perspectives on this topic: the formal perspective (philosophical logic, probability theory), the methodological perspective (philosophy of science, epistemology) and the historical perspective (integrated history & philosophy of science). Three keynote speakers each addressed the topic of ampliative reasoning from one of these three angles. In addition, there were 17 contributed talks ranging over a variety of topics from these three perspectives, leading to fruitful cross-disciplinary discussions.

The first keynote speaker, Chiara Ambrosio (University College London), gave a talk covering the historical perspective. The topic of her talk was "Ampliative reasoning from an integrated HPS perspective: Some insights from Peirce and Whewell". The talk focused on the status of ampliative reasoning in 19th century scholarship and, in particular, in the works of Peirce and Whewell. Ambrosio suggested that the notion of ampliative reasoning in this time period should be understood against the backdrop of the reformation of science, characterized by its divergence from natural philosophy and by the process of specialization. She suggested that ampliative reasoning played a central role in the understanding of the notion of scientist, by offering a remedy against the fragmentation of science into particular domains. This was argued for with reference to Whewell's influence on Peirce.

The second keynote speaker, Jon Williamson (University of Kent), gave a talk on the topic "Establishing causal claims in medicine", covering the second, methodological, perspective on ampliative reasoning. Williamson started from an epistemological thesis, previously developed by Russo and Williamson, that establishing a causal claim in medicine requires establishing (i) that the putative cause and putative effect are appropriately correlated, and (ii) that there is some underlying mechanism that can account for this correlation. Williamson argued that even though this thesis conflicts with some approaches rooted in contemporary evidence-based medicine, it offers a better explanation of (a) the role of clinical studies in establishing causal claims, and (b) the extrapolation from causal claims about the source population to causal claims about the target population. In particular, the thesis accounts for the cases in

which causal claims can be established even in the absence of clinical studies, as well as the cases in which evidence from clinical studies is trumped by the evidence of mechanisms underlying the phenomenon in question.

The third keynote speaker, Ulrike Hahn (Birkbeck—University of London and LMU Munich), covered the first, formal perspective on ampliative reasoning. In her talk entitled "Bayesian reasoning for non-statistical contexts" she discussed normative standards of argument quality in contexts that are not statistical in nature. Hahn presented a Bayesian framework for ampliative reasoning, focusing on argument forms that are in some contexts (though not in others) considered fallacious, such as the circular argument or petitio principii. She argued that this probabilistic framework can provide a normative standard by which to assess the strength of a range of everyday arguments. The framework can also be used to complement the argumentation scheme approach in informal argumentation theory. In the latter approach arguments are evaluated with reference to critical questions. Answers to such questions are often a matter of degree, so a Bayesian framework provides for their natural representation.

Dunja Seselja
Ruhr-University Bochum
Mathieu Beirlaen
Ruhr-University Bochum & Heinrich Heine University Düsseldorf
Erik Weber
Ghent University

Summer School in Social Epistemology, 28 August–1 September

The *Summer School in Social Epistemology*, August 28th-September 1st 2017, a five-day summer school at La Cristalera, in the Autonomous University of Madrid, brought together researchers from all over the world to explore some views and debates on recent topics in social epistemology. The Summer School was organized by the Epistemology and Society Network (EpiSoc), based in the Autonomous University of Madrid, in collaboration with the Social Epistemology Research Group, based in the University of Copenhagen. Each day was devoted to a central topic and included a plenary talk by a keynote speaker, a pre-read session with prepared comments and presentations by selected speakers.

The first day was dedicated to *What is Social Epistemology* and *Epistemic Injustice*. The first talk of the session was Sanford C. Goldberg's *Against Epistemic Partiality in Friendship: Value-Reflecting reasons*. He presented an account on how the appearance of unwarranted epistemic partiality in friendship dissipates once we acknowledge a new category of reasons. On the pre-read session, Chris Kelp commented Goldberg's *Proposed Research Program for Social Epistemology*, which was a thorough and programmatic presentation of the challenges that Social Epistemology faces. One of the central parts of the discussion revolved around the question whether there is something entirely new and unique about this project or whether traditional epistemology can cover the new challenges, despite its alleged individualism. The day included presentations about identity prejudices, epistemic silencing, testimonial injustice and epistemic inclusion and fruitful reflections on the different harms that can be done to someone in her capacity as a knower.

Tuesday, 29th was devoted to *Trust* and Katherine Hawley was the leading voice. She presented her work on *Trust and Gettier*. She carefully pointed out that there is some asymmetry in our reactions to Gettiered trust and Gettiered distrust. She suggested that it seems worse to distrust on a fragile basis than to trust on a fragile basis. The cases she presented supported the idea that when it comes to trust, as long as it is accurate and justified, Gettiered scenarios do not worry us as much. Jesús Navarro introduced the discussion on Hawley's work *Trustworthiness*. Long story short, according to her view, in order to be trustworthy, we must ensure that our commitments are matched by action. The presentations covered a wide variety of topics, including trust and its relation to epistemic paternalism and authority, instruments, sincerity and blame.

Wednesday the 30th was dedicated to *The epistemology of groups* and Berit Brogaard opened the day with a talk on *Social Media and Knowledge degradation*. She presented research on crowd manipulation and group polarization, an interesting (and potentially worrisome) phenomenon where a group ends up having a view that is more radical than the one held by the most radical of its individual members. Her pre-read session on the topic included some experiments from social psychology and was commented by Fernando Broncano-Berrocal who introduced the discussion session. The day included interesting presentations and debates concerning group epistemology (from intergroup biases to group polarisation), epistemic practices and rationality.

The fourth day was *Testimony* day and Paul Faulkner presented his account of the phenomenon of *Giving the Benefit of Doubt*, where he offered an interesting argument for the view that it can be rational to give the benefit of the doubt and believe in the innocence of your friend, even in the face of incriminatory evidence. On the pre-read session Jesús Vega presented and opened the discussion concerning Faulkner's work in progress *On Conversion*. The debate was specially hot concerning the limit and scope of the practical engagement of conversion. Lies, testimonial dogmatism and luck were some of the topics discussed during the day.

Friday 1st of September was devoted to *Disagreement*. Jonathan Matheson gave a stimulating talk on *Disagreement and the Rationality of Religious Belief*. He first took up the question of whether disagreement on religious matters is of a special or unique kind. His conclusion was that it is not and that the conciliationist stance that he advocates could also apply to this type disagreement. His work on *Deep Disagreements and Rational Resolution* was commented by Klemens Kappel and the debate revolved around the question whether a conciliationist position is compatible with the existence of disagreement on basic epistemic principles and thereby scrutinized the very nature of those principles. Conciliationism, epistemic injustice and assertion were some of the topics presented and discussed during the rest of the sessions.

Overall, the event was insightful and called attention to significant challenges to social epistemology. It also offered the opportunity to bring together people, open new spaces for discussion and engage in high-quality debates concerning the current state of Social Epistemology. As a nice corollary, I would like to point out that all of the topics that Goldberg presented in his proposed research program on the first day were addressed throughout the days of the summer school. This might be read as a sign that social epistemology is a cohesive, flourishing project.

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GLORIA ANDRADA
Autonomous University of Madrid

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Calls for Papers

FORMAL MODELS OF SCIENTIFIC INQUIRY: special issue of *Journal for General Philosophy of Science*, deadline 1 December.

NEW DIRECTIONS IN THE EPISTEMOLOGY OF MODALITY: special issue of *Synthese*, deadline 31 December.

CONNEXIVE LOGICS: special issue of *Logic and Logical Philosophy*, deadline 31 December.

DISAGREEMENT: PERSPECTIVES FROM ARGUMENTATION THEORY AND EPISTEMOLOGY: special issue of *Topoi*, deadline 31 January.

DECISION THEORY AND THE FUTURE OF ARTIFICIAL INTELLIGENCE: special issue of *Synthese*, deadline 15 February.

DEFEASIBLE AND AMPLIATIVE REASONING: special issue of *International Journal of Approximate Reasoning*, deadline 15 February.

NON-CLASSICAL MODAL AND PREDICATE LOGICS: special issue of *Logic Journal of the IGPL*, deadline 30 April.

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WHAT'S HOT IN . . .

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(Formal) Argumentation Theory

Imagine a search engine that in response to the search term "Economic arguments for and against Brexit" returns ranked arguments consisting of claims and supporting reasons. It's a moot point as to whether or not such an argument search engine would have made a difference to the outcome of the UK referendum. After all, the leave campaign explicitly encouraged voters to reject arguments supported by facts (with one of the leading campaigners, Michael Gove, issuing a clarion call to the effect that we should ignore the arguments of experts), and instead largely relied on appealing to those with an emotional attachment to an antiquated notion of an island state at the centre of an economic empire. I would not want to give up on the admittedly utopian ideal of such a search engine improving the quality of public and political discourse, but in such contexts, the challenge of redressing the balance in favour of *logos* over *pathos* is an enormous one. However, one can certainly envisage the utility of such argument searches in domains such as policy making, medicine and law. For example, retrieval of arguments for and against medical treatment options, or legal precedents from vast archives that are then synthesised into robust arguments.

The prospect of argument search engines has fuelled rapid growth in research on "argument mining", which is a relatively new challenge in corpus-based discourse analysis that involves developing Machine Learning and Natural Language Processing techniques to automatically identify argumentative structures within text. Indeed, there are regular workshops dedicated to advances in argument mining (e.g., `https://argmining2017.wordpress.com` and `https://sites.google.com/site/argdiapen/12th-argdiap`). Moreover, there is considerable industrial interest and investment in this research area. For example Noam Slonim at the IBM Haifa Research Lab in Israel is leading a team of forty researchers in the development of debating technologies. IBM has set successive grand challenges that have historically resulted in *Deep Blue*'s victory over Kasparov and *Watson*'s victory over human champion contestants in the American quiz show Jeopardy. One of two current grand challenges is to develop debating technologies capable of supporting human decision makers by mining massive corpora for relevant arguments. Slonim anticipates being able to pose a query such as "Should violent video games be sold to children?", and instead of being presented with links to people's opinions, facts would be synthesised into arguments for and against the idea. Slonim's team are initially working on using Wikipedia to train their algorithms to identify what constitutes a claim and counter-claim, and they then later plan to focus on identifying, and indeed even weighting, evidence in support of claims, as well as distinguishing between anecdotal data and expert testimony. This is clearly a hugely ambitious enterprise, and inevitable questions arise as to how users would decide which arguments to trust, and, closely related, how to rank the arguments retrieved. It is here that work on computational models of argumentation may play a role. After all, these models evaluate the extent to which a given argument can be considered justified, not only in terms of the internal coherence of an individual argument, but also in terms of the extent to which they emerge as victorious when subject to the dialectical cut and thrust of argument and counter-argument (with notable recent developments also assigning more fine grained rankings to arguments, than just 'winning' and 'losing'). One would therefore not only want to mine arguments, but to also then send them into battle, with the spoils of victory being higher rankings.

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SANJAY MODGIL
Informatics, King's College London

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Medieval Reasoning

Next spring, the Arché Centre for Logic, Language, Metaphysics and Epistemology at the University of St Andrews is going to host a workshop, organised by Stephen Read and Barbara Bartocci, on "Medieval Logic and its Contemporary Relevance" – or in other words on What's Hot in Medieval Logic. What better place to share the open Call For Papers than our monthly What's Hot in Medieval Reasoning column? Here it is:

"George Santayana once observed that those who do not re-

member the past are doomed to repeat it. Of course, history can be studied for many reasons, even for its own sake. But studying medieval logic, in particular, can make us aware of the consequences of certain ideas in at least two ways. First, the problems that medieval logicians were tackling are in many cases still with us today and still unresolved, more so than in some more recent periods. Secondly, though medieval academia was small in comparison to its modern counterpart, logic played a key role in the medieval curriculum and was the object of close attention by some remarkably perceptive thinkers. So the study of medieval logic has particular contemporary relevance and can yield many insights into contemporary puzzles in philosophy of logic. The object of the workshop is to encourage investigation into these connections and to showcase notable examples. Invited Speakers: Bianca Bosnan (Groningen, The Netherlands); Graziana Ciola (Pisa, Italy); Catarina Dutilh Novaes (Groningen, The Netherlands) ; Spencer Johnston (Cambridge, England); Graham Priest (CUNY Graduate Center, USA); Sara Uckelman (Durham, England).

We hope to include at least half a dozen Contributed Talks, each allotted one hour (including discussion). Contributed Talks should preferably both contain historical material from the middle ages and relate it to contemporary concerns in philosophical logic. To submit a talk for the workshop, please send an abstract of around 500 words to slr@st-andrews.ac.uk by 1 February 2018. We intend to let successful contributors know the result by 15 February.

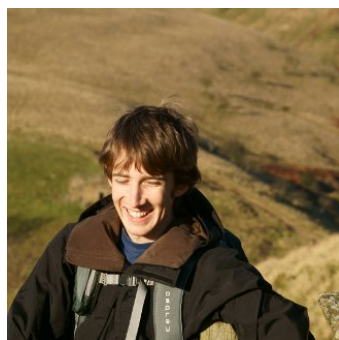Enquiries about the workshop and registration should be addressed to arche@st-andrews.ac.uk. Further details will be published shortly. Interested? Get in touch with the organisers. We hope to see you in St Andrews next spring!

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Graziana Ciola
Philosophy, Scuola Normale Superiore, Pisa

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Uncertain Reasoning

Richard Bradley (no relation) has recently published a book: "Decision Theory with a Human Face" (DTHF). I have reviewed the book elsewhere so what I want to do here is pick up on one interesting aspect of the book, and use that as a starting point for a suggestion for topics I think deserve more attention. One topic covered in DTHF is rational agents' attitudes to conditional sentences. Such attitudes towards conditionals are constrained by but not determined by the agent's attitudes towards the antecedent and consequent of the conditional. So in order to develop a formal theory of rational attitude in conditionals, Bradley develops a theory of probability and utility functions defined over a conditional algebra: an algebra of propositions containing a conditional connective that needn't be the material conditional. He then connects this to the idea of conditional belief, and to updating and conditionalisation in a neat and attractive theory of rational belief and desire.

Now, I don't want to talk here about the topic of attitude towards conditionals specifically – interesting though it is – but about the general strategy Bradley has employed here. We have attitudes towards propositions that have structure. We're happy enough with the idea that propositions have logical structure, and that attitudes towards, for example, disjunctions are determined in part by attitudes to their disjuncts. The basic idea is that rational constraints on attitudes to logically complex propositions depends on the attitudes to the parts. Bradley extends this idea to conditional connectives. What I want to suggest is that there are promising avenues for research where we do the same sort of thing for other aspects of the logical structure of the propositions we have have attitudes towards.

For example, there's a great deal of work in philosophy on beliefs conditioned on claims about chance, and on claims about an expert's testimony or beliefs. Obviously, propositions about chance or expert testimony have logical structure: if a chance claim says that "the chance of X is x" then it is the belief in X that is constrained by learning such a claim, not (directly) beliefs in other propositions. The logical structure of chance claims is normally appealed to in an ad hoc unsystematic way. This is unsatisfactory. We know roughly what logical structure the chance propositions have (for example, Gaifman and Snir, "Probabilities over Rich Languages" Journal of Symbolic Logic 1982) so why not explore systematically what constraints ought to be in place for rational beliefs over this richer language?

Unreliable testimony brings in another wrinkle. We don't want to completely defer to experts we don't wholly trust, and the "amount" of deference ought to correlate with how much we trust them. Again, this systematic link should be investigated more fully and more formally than is typically done. Various debates in formal epistemology might benefit from this study: self-defeating probabilities, rational disagreement...

Henry Kyburg developed two kinds of rich languages over which rational agents could have rational beliefs. In "Theory of Measurement" (Cambridge University Press, 1984) he discusses several increasingly complex languages describing the structure of measurement. And in various places Kyburg develops a logical language of statements about relative frequency, and a system of rules for rational beliefs over this rich language ("Rational Belief" Behavioral and Brain Sciences 1983; Kyburg and Teng "Uncertain Inference" Cambridge University Press 2001).

In writing this, I realise that this is closely related to something I have written about before in this venue: in September I wrote about how I think we need a theory of evidence and evidential import. That proposal and the current one – that we need theories of rational belief and desire over richer languages – are closely related and could well be pursued together.

So, what I want to suggest is that there is interesting formal work to be done along the lines of the above mentioned projects: take some class of propositions about which rational agents could have beliefs and/or desires, formally characterise the logical structure of that class of propositions, and then use that structure to try to say something interesting about the rational constraints on attitudes towards those sorts of propositions. I think this could well be a promising method for producing interesting new research projects in formal philosophy.

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Seamus Bradley
Philosophy, University of Tilburg

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Philosophy and Economics

Numbers occupy a special place in our reasoning. Partly this is because how we react to them: as soon as an idea, reason, or position can be backed up by a number, it has more credibility. In the sciences, numbers are the result of successful measurement: they are the product of a measurement process that succeeds in numerically representing a certain phenomenon. Measurement has been a staple topic in the history and philosophy of science for many decades. It has gradually become more important in the philosophy of the social sciences, and indeed in the philosophy of economics.

A recent addition to the literature on measurement related to economics and the social sciences is Marcel Boumans' (2015) book "Science outside the Laboratory: Measurement in Field Science and Economics" (Oxford University Press). I won't use this space to sneak in a book review, for two reasons. The first reason is this: I have already reviewed the book, and it seems unseemly to repeat myself, or, perhaps even more questionable, do it over. The second reason is this: there are *many* reviews of this book. That is to say, if you are curious about what the latest thinking about the latest thinking about measurement in economics is, you do not have to take one reviewer's word for it.

Here then, are reviews by: Alessandra Basso (in the Erasmus Journal for Philosophy and Economics), Catherine Herfeld (in the British Journal for Philosophy of Science), Attilia Ruzzene in the (Journal of Economics Library), Roel Visser (in the Journal of Economic Methodology), and myself (in Philosophy of Science) - and this might not be an exhaustive list, because I may have overlooked other reviews, or more reviews are still to come. At any rate, those reviews connect Boumans' book to many different topics in the philosophy of economics, social science, and science. Together they are a nice introduction into some of the current and unresolved problems in measurement. Go check them out!

Conrad Heilmann
Erasmus Institute for Philosophy and Economics (EIPE)
Erasmus University Rotterdam

Evidence-Based Medicine

A special philosophy thematic issue has recently been published by the *Journal of Evaluation in Clinical Practice*. It begins with a number of papers on aspects of decision-making, covering issues to do with evidence, context, and wisdom. It also contains a section on reasoning in mental health, as well as a section on identity over time and mental disorder. There are some reviews of recent books on the philosophy of medicine. And the issue concludes with a debates section, in which some responses are given to arguments put forward in this and past issues of the journal. A detailed overview of included papers is given in an editorial by Michael Loughlin, Robyn Bluhm, Stephen Buetow, Kirstin Borgerson and Jonathan Fuller.

The editors point out that in previous editions of the special philosophy issue 'critical questioning of underlying assumptions, regarding such crucial issues as clinical decision making, practical reasoning, and the nature of evidence in health care, was still derided by some prominent contributors to the literature on medical practice'. But they now think that things have changed:

> Far from being derided or dismissed as a distraction from practical concerns, the discussion of such fundamental questions, and their implications for matters of practical import, is currently the preoccupation of some of the most influential and insightful contributors to the on-going evidence-based medicine debate.

And they hope that this issue will continue to 'illustrate how underlying philosophical commitments can make a substantive difference to our understanding of the right ways to approach and improve practice.'

The practical implications of philosophy for healthcare is nicely shown by a number of papers that come from a recent workshop by the group CauseHealth. These papers contribute to an ongoing programme which looks at applying insights from the philosophy of causality in order to resolve practical problems in healthcare. One of these papers is by Rani Anjum and Stephen Mumford. They argue against evidence-based policy on the grounds that it is a version of rule utilitarianism, and insufficiently sensitive to individual cases. A response to this approach is given in the debates section by David Norris. It's an interesting exchange. And the issue is definitely worth a look much more generally.

Michael Wilde
Philosophy, Kent
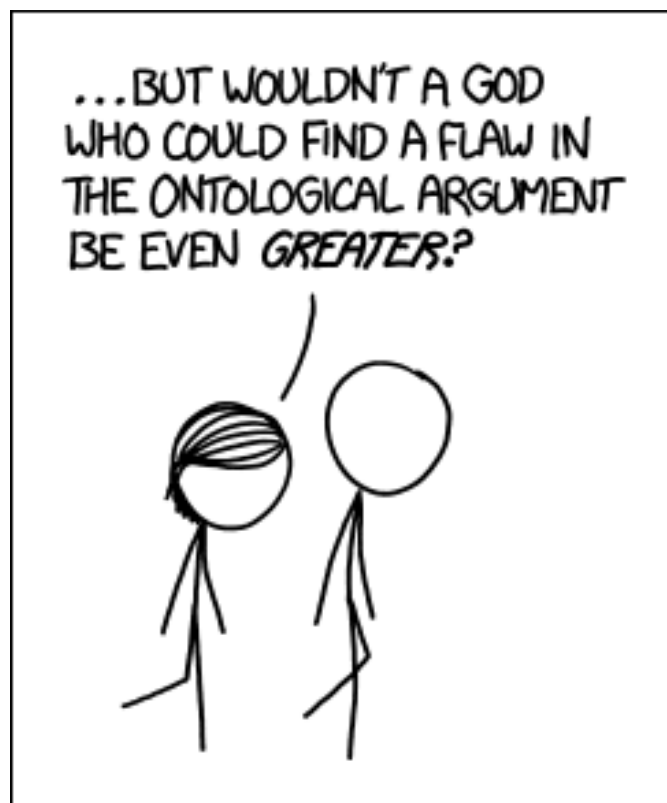
Events

December

NW: Fourth Normativity Workshop, Uppsala University, Sweden, 4–5 December.

TCiL: Theory-Choice In Logic, Munich, 7–8 December.

ApxBaysInf: Advances in Approximate Bayesian Inference, Long Beach, California, 8 December.

CIaML: Workshop on Causal Inference and Machine Learning, Long Beach, California, 8 December.

AKBC: Automated Knowledge Base Construction, Long Beach, California, 8 December.

AMER: Applicability of Mathematics: Explanation and Representation, University of Leeds, 12 December.

MultiMod: Multilevel Modelling, London, 12–13 December.

GenoReg: Genomic Regulation: Experiments, Computational Modeling and Philosophy, Ben-Gurion University of the Negev, Israel, 12–13 December.

TKT: Technology, Knowledge, Truth, Melbourne, 13–15 December.

TaT: Thinking about Thinking, The Royal Swedish Academy of Sciences, Stockholm, 14–15 December.

MaME: Mathematical and Metaphysical Explanation II, Explanation, Grounding and Dependance, Pavia, Italy, 14–16 December.

HLaTS: Workshop on Hyperintensional Logics and Truthmaker Semantics, Ghent University, 15 December.

PEW: Political Epistemology Workshop, University of Copenhagen, 18–19 December.

ForEpi: Kent Formal Epistemology Conference, University of Kent, 18–19 December.

January

ASET: 6th World Conference on Applied Science, Engineering and Technology, India, 2–3 January.

SEaC: The View from Above: Structure, Emergence and Causation, University of Oxford, 11–12 January.

PhiloMaLogi: Cambridge Graduate Conference on the Philosophy of Mathematics and Logic, University of Cambridge, 20–21 January.

BigDat: 4th International Winter School on Big Data, Romania, 22–26 January.

TaD: New Perspectives on Truth and Deflationism, University of Salzburg, 26–27 January.

February

AppMath&ComSci: International Conference on Applied Mathematics and Theoretical Computer Science, India, 1–3 February.

PresDat: Presenting Data, London, 6 February.

MathStatCompSci: International Conference on Advances in Mathematics, Statistics and Computer Science, Dubai, 9–10 February.

Courses and Programmes

Courses

Computer Simulation Methods: Summer School, High Performance Computing Center Stuttgart (HLRS), 25–29 September.

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.

Doctoral Programme in Philosophy: Department of Philosophy, University of Milan, Italy.

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 Birmingham.

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, Communication 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.

Research Master in Philosophy and Economics: Erasmus University Rotterdam, The Netherlands.

Jobs and Studentships

Jobs

Assistant Professor: in Epistemology, California State University, Fullerton, open until filled.

Assistant Professor: in Cognitive Science/Epistemology, Utica College, New York, deadline 1 December.

Associate Professor: in Critical Thinking, Manhattan Community College, New York, deadline 2 December.

Assistant Professor: in Analytic Philosophy, Bilkent University, deadline 15 December.

Professor/Associate Professor: in Metaphysics, National Taiwan University, deadline 18 December.

Scientific Collaborator: in Philosophy of Physics or Metaphysics, University of Geneva, deadline 31 December.

Lecturer: in Statistical Data Science, University College London, deadline 31 December.

Associate Professor (two): in Statistics, University of Warwick, deadline 10 January.

Professorship: in Theoretical Philosophy, University of Greifswald, Germany, deadline 10 January.

Lecturer: in Medical Statistics, University of Leicester, deadline 11 January.

Studentships

PhD: in Statistics and Probability, University of Sussex, deadline 1 December.

PhD: in Machine Learning, University of Edinburgh, deadline 5 January.

Nobody liked Bertrand Russell's scavenger hunts.