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Contents

§1 Editorial

A Philosopher's Holidays: Travel Impressions from Africa

Dear Jan, I am glad you seem to have enjoyed your trip to "Mama Africa". I

hope you have also learned something about the courage of very poor people and the overwhelming odds people in Africa have to overcome in order to educate themselves. Mostly I hope you have had an inkling at times of the fact that this does not necessarily mean that education is of a low standard and of the cost at which this is achieved. You live in paradise quite frankly.

These lines reach me after sending the first draft of my travel report for *The Reasoner* to one of my hosts during the journey, a philosophy professor in South Africa. The sad thing about the above quote is that it is true, as I could experience on my African journey, tracing the education of young philosophers in several places in sub-Saharan Africa. When philosophers talk about developing countries in their subject area, they typically mean places in Eastern Europe, East Asia or Latin America. For political or cultural reasons, modern Western philosophy did not play a major role in those regions, but they have recently invested a lot of resources into the discipline, closing the gap to the leading departments in North America, Europe, and Australia. They host exciting conferences, become increasingly popular with young post-docs, and are the prime examples of a developing place with a promising future. News from Africa appears much less frequently on the philosophy mailing lists. To some extent, this can be expected on a continent where many countries struggle to get students beyond primary schools, and to educate enough medical doctors for the needs of the population. The benefits of offering students an education in philosophy seem to be negligible when compared to having engineers, doctors and school teachers. But is the lack of presence of Western philosophy in Africa just a tale of economic poverty?

Concluding my African journey in the bustling port of Dar-es-Salaam, Tanzania, I am looking for an answer. The most significant East African university is located there—unfortunately not in the city center, but somewhere outside, on a hill overlooking the city's natural harbor. After being stuck two hours in a *dala-dala* minibus that struggles with rush hour traffic, and strolling some time over the vast campus, I finally manage to find the philosophy unit. The researchers are surprised by my arrival, but incredibly hospitable and keen to enter a conversation. The story they tell me is different: Of course, the lack of immediate applications and jobs for philosophers with university degrees does not encourage students to choose the subject. But there is also a political component: modern philosophy is, by many people, considered to be anti-religious, if not atheist. (Certainly there is a grain of truth in this prejudice, as witnessed by the large number of atheists that populate Western philosophy departments.) They do not offer a philosophy major, but they have managed to make a specific course—critical thinking

and argumentation—compulsory for all arts and social sciences students.

Another obstacle for philosophy is the fact that the very development of critical thinking and argumentation is not appreciated by all political parties and leaders. Therefore, the increasing political stability and pluralism in Africa contributes directly to the flourishing of philosophy. In what Popper calls an open society, it is much easier to convince political and administrative decision-makers of the need for critical reflection, a virtue that is central to philosophy. The need to put philosophy on the map of people and politicians also shapes the research activities of many faculty members. They spend much time overcoming the aforementioned prejudices, promoting their discipline and bringing philosophy to the people, e.g. by writing philosophy textbooks in Swahili and other non-European languages. On the other hand, these activities imply that less resources can be spent on individual research, international get-togethers, and large scale events. Moreover, many departments lack properly trained faculty members. Since proper philosophy (as opposed to, say, theology) can be studied at few places in sub-Saharan Africa, let alone that a Ph.D. can be completed, there is a lack of skilled staff in African philosophy departments. This makes it difficult to set up new programs and to offer courses to other departments and faculties. Probably, only an increased educational exchange with overseas universities in Europe, Australia and America can eventually remedy these problems. And this exchange should go both ways: Of course, African universities do not play in the Ivy League, but first-hand examination of different societies from those they are used to can be of great benefit for a lot of philosophical research.

That said, immersing into the culture of those countries and experiencing the openness and friendliness of the local students and staff members is an unforgettable experience that is quite different from a sterile European or North American campus. One country on the continent does not fit the scheme, though: South Africa. The former British colony is probably the most Western of all African countries, it hosts a vivid philosophy landscape with serious research and international conferences. I enjoyed, during my travel, a wonderful discussion when giving a talk at the University of Witwatersrand, although the talk's subject—decision theory—did not match the research

areas of the faculty members. South African philosophy departments have amounts of undergraduate students that their European counterparts can only dream of. The University of Johannesburg—one of the country's bigger higher education institutions—has, for example, about 350 first year undergraduates within a three-year BA program with Philosophy as a major subject. (This number declines, though, in the second and third year, due to the fact that many of these students follow several subjects and start to specialize at some point.) The program consists mostly of standard Western philosophy, both analytic and continental, and aims at giving students a balanced overview of the subject—as most programs in South Africa do. If you read the curricula, you could as well feel like being in the UK or the US. And if you discuss the state of the art of social choice theory in Cape Town's botanical garden with some South African colleagues, you feel like at home—with the subtle difference that the African winter feels like a pleasant Central European spring day. Notably, South African philosophy departments succeed in interesting black students who traditionally favor business, law, medicine, etc. for the subject matter. For the first time of my life, I felt, as a white male, in a minority, when sitting in a philosophy class.

Being a guest at an Ethics lecture where the concept of ubuntu from African philosophy was discussed, it became clear to me that the heritage of colonization and apartheid shapes some discussions in a way that is different from Europe: The discussion about whether there is (or should be) a specifically African philosophy visibly moved the students. For instance, when a (Black) student bolstered an argument with the remark "Africa being a poor continent", the girl sitting next to me felt immediately compelled to add "*economically* poor". Students spend, apparently, a lot of time on thinking about the relationship between their country, their continent and the rest of the world, although these questions are not part of the philosophy curriculum proper. Finally, I asked the question of why in spite of a policy of affirmative action, the South African philosophy departments are dominated by Whites. The answer I got was revealing: it is hard to find young black or coloured academics that do not prefer a good offer from overseas to a job at home. On the other hand, for any internationally advertised job in South Africa, there are a lot of overseas applications, most of which are, unsurprisingly, submitted by Whites. That Blacks, Coloureds and Indians are poorly represented in the departments needs therefore not be seen as a failure of affirmative action and black educational empowerment, but as a reflection of the tendency some of the best of those communities to leave the country. Finally, what are the prospects for the future of philosophy in Africa? I like to recall an episode that occurred to me when I was sitting one evening in the Forodhani Gardens in Zanzibar, enjoying some local food and the warm tropical night. Some kids of maybe 10 to 15 years approached me. They did not

ask for money (something that quite often occurs to travellers in Africa), nor for food. Instead, they sought advice on what they could do to improve their English and to get a proper education. I felt ashamed when recalling our own European youths who often see higher education more as a burden than as a privilege. A continent where people are so eager to work on themselves, in spite of still dire economic prospects, must be the right place for philosophy—a discipline that is, according to some, more about the journey than the destination.

This article is based on a travel through several African countries that I did in July/August 2010. I spoke to students and faculty from the University of Cape Town, the University of the Witwatersrand, the University of Johannesburg, the State University of Zanzibar, and the University of Dar-es-Salaam. It would not have been possible without the help of the many philosophers and other people whom I encountered while travelling. In this non-exhaustive list where many names that I have forgotten should be included figure Lucy Allais, Catherine Botha, Michele Bocchiola, Nicole Caunter, Gregory Fried, Ali Khamis, Robert Kowalenko, David Martens, Mmanga Mjawiri, Adolf Simon Mihanjo, Emma Ruttkamp, and Mpho Tshivhase.

Jan Sprenger
Philosophy, Tilburg

§2
Features

On Terminology in the Theory of Inconsistency

The Theory of Inconsistency has an extended lineage; from Herakleitos, through Hegel and Marx, to modern paraconsistent logic and inconsistent mathematics. In this note, I aim to correct two terminological infelicities about the theory. One mistake is to say "inconsistent logic", or "contradictory logic", the second mistake is to say "paraconsistent mathematics". Both usages are to be found. Let me explain.

A *logic* is a set of deductive rules (I confine myself here to deductive logics). The rules are closed under uniform substitutions, which expresses the ideal that logic is universal, independent of subject-matter. A logic is generally also taken to have a collection of *theorems*, that is statements provable with all assumptions discharged. In contrast, a *theory* (of a logic) is a set of statements closed under the deductive rules of the logic, but *not* in general closed under uniform substitution. This fact expresses the ideal that theories are used to investigate the consequences of particular subject-matters, such as the theory of evolution, theory of relativity, number theories etc.

Two-valued Boolean logic contains the rule *Ex Contradictione Quodlibet* ECQ: from contradictory premisses, everything follows, i.e. $A, \neg A \vdash B$. A theory is said to be *trivial*, if it contains every statement. Hence, Boolean logic has just one inconsistent theory, the trivial theory. In contrast, *paraconsistent* logics are characterized as logics

which are *inconsistency tolerant*. This means that it is not the case that from contradictory premisses, everything follows. That is, the rule ECQ fails; so that paraconsistent logics have at least one non-trivial inconsistent theory. Paraconsistent logics flowered in the late twentieth century, when many were discovered. Note that paraconsistency is defined in terms of inconsistency, not the other way around. The primary concept, both explanatorily and historically, is inconsistency. Paraconsistency is a derived concept.

Now it must be conceded that there are also logics appropriately described as "inconsistent", not just paraconsistent, but they are a narrow class. An inconsistent logic is a logic which has theorems A and $\neg A$ and all substitution instances thereof, for some A. However, most paraconsistent logics are not inconsistent logics. Indeed, logics are seldom inconsistent. Among the rare examples of inconsistent logics are those that result from adding Aristotle's Thesis $\neg(A \rightarrow \neg A)$ to Anderson and Belnap's E, the resultant logic being known as EA. This has as theorems both $(A\neg A) \rightarrow \neg(A\neg A)$ and its negation. (Note in passing that EA is *also* a paraconsistent logic: this is because it contains contradictory formulae but not every formula.)

Some decades after the inception of paraconsistent logic, came inconsistent mathematics. This is the study of inconsistent mathematical theories, that is theories containing pairs of statements A and $\neg A$. Inconsistent mathematics includes inconsistent versions of number theory, calculus, analysis, linear algebra, topology, geometry, and more. Early on, it was discovered that inconsistent theories are dual to incomplete theories, including in the latter the significant special case of intuitionist mathematics. This duality demonstrated convincingly that inconsistent mathematics has equal legitimacy *qua* mathematics, to incomplete mathematics. On these matters, see e.g. Mortensen, *Inconsistent Mathematics*, Kluwer 1995.

Paraconsistent logic and inconsistent mathematics depend on one another. Inconsistent mathematics needs a background logic which is inconsistency-tolerant, otherwise all inconsistent mathematical theories are trivial. Conversely, if paraconsistent logic were unable to find a rich class of inconsistent mathematical applications, then it would be doomed to remain forever a pimple on the corpus of mathematics. (Mind you, inconsistent mathematics does not depend *much* on paraconsistent logic, all it really needs is to be assured that ECQ fails, the rest is fairly invariant under wide variation in background logics: thus paraconsistency is a *weak constraint* on a viable logic for mathematics.)

Unfortunately, a second widespread error is made in speaking of "paraconsistent mathematics", and by people who should know better. A reason sometimes offered, explains this as meaning "any mathematical theory of a paraconsistent logic". But this is erroneous. It is easy to show that a theory of a logic is automatically a theory of any weaker logic. Since there are many paraconsistent logics weaker than Boolean logic, which has only consistent (nontrivial) theories, then we would have to say that any consistent mathematical theory in Boolean logic would automatically be paraconsistent mathematics. That is an absurd consequence.

This also shows up the oddity of attempting to define and explain what inconsistent mathematics is, if one were to appeal to the concept of paraconsistency and *not* the concept of inconsistency. In contrast, the preferred description given above is straightforward, in terms of the presence of mathematical inconsistency. Paraconsistent logic

is then the assurance that studying the rich structures available within inconsistent theories, is not immediately ruled out as impossible by *logic*. More to the point, it has always seemed to me to be a bit mealy-mouthed to speak of paraconsistent mathematics, as if the strong inconsistent stuff has to be concealed from faint hearts.

There is one final complication. It is well-known that formal mathematical theories can be defined *proof-theoretically* (with axioms and rules), or instead *model-theoretically* (with interpretation functions). Now Robert K. Meyer, one of the founders of inconsistent mathematics, referred to his ground-breaking arithmetic R# as "relevant arithmetic" (see his "Relevant Arithmetic", *Bulletin of the Section of Logic*, 5 (1976), 133-137). This was an axiomatic number theory, specifically Peano's axioms, but using a relevant logic, namely Anderson and Belnap's logic R. R# was consistent, but had many nontrivial inconsistent (model-theoretic) extensions. So Meyer's usage might give ammunition to someone who wanted to say that "paraconsistent mathematics" refers to any mathematical theory *axiomatically presented* with a paraconsistent logic. I can accept this complication to the terminology, as long as it is realized that paraconsistent mathematics so conceived is often enough consistent. Thus, it is not a *substitute* for "inconsistent mathematics".

In a (slightly oversimplified) slogan: paraconsistent logic and inconsistent mathematics, si; but inconsistent logic and paraconsistent mathematics, non.

Thanks for useful comments to Greg Restall, Zach Weber and referees.

Chris Mortensen
Philosophy, The University of Adelaide

§3
News

Argentine Symposium on Artificial Intelligence, 30–31 August

ASAI, the Argentine Symposium on Artificial Intelligence, is an annual event intended to be the main forum of the Artificial Intelligence (AI) community in Argentina. The symposium aims at providing a forum for researchers and AI community members to discuss and exchange ideas and experiences on diverse topics of AI. Previous ASAI editions stimulated presentations on both applications of AI and new tools and foundations currently under development.

The XI Argentine Symposium on Artificial Intelligence (ASAI 2010) was held during 30th - 31th August 2010, in Buenos Aires, Argentina. ASAI 2010 was part of the 39th JAIIO, the 39th Argentine Conference on Informatics, organized by the Argentinean Society of Informatics (SADIO).

ASAI 2009 received 40 papers, each evaluated by 3 experts in the paper's main topic. Members of the program committee selected 20 out of the 40 papers for presentation at the symposium, plus 7 selected to be presented as posters. The program committee was formed by around 30 renowned researchers from around the world, with expertise

covering a wide spectrum of areas in the field of Artificial Intelligence. In addition to the PC members, 14 reviewers collaborated in the evaluation process.

The topics addressed at the symposium were wide and rich. Aspects such as dealing with semantic knowledge in robotics with a Probabilistic Description Logic, computing admissible set of arguments in timed contexts and giving operational semantics to multi-context systems using DEVS were discussed. Also, topics related to natural language processing such as learning the costs for a string edit distance-based similarity measure for abbreviated language were presented.

Areas such as text and data mining were covered with talks about mining experts in technical online forums, classification rules to identify context and preference information from tourist's reviews, learning rules for the generation of arguments by observing how other agents argue.

Within evolutionary computation authors offered talks regarding constraint-handling in an evolutionary tool for scheduling in oil wells, an evolutionary approach for project planning and evolutionary search of metabolic pathways.

Topics about user modeling were covered with presentations about the consideration of contextual preferences in e-learning sites, analysis of discrete sequences for detecting design patterns and detection of roles in knowledge management systems.

All the presentations showed a wide variety of AI techniques, allowing a good interaction with the audience.

In addition to these presentations, the Symposium had two invited talks. Dr. Cristina Conati from the University of British Columbia, Canada, talked about new challenges and directions in Intelligent Tutoring Systems. Intelligent Tutoring Systems is the interdisciplinary field that integrates research in Artificial Intelligence, Cognitive Science and Education. Dr. Conati presented a variety of projects that illustrate efforts in her research group to extend the scope of intelligent tutors to both support novel forms of pedagogical interactions (e.g., example-based and exploration-based learning) and adapt to student's traits beyond knowledge (e.g., student's meta-cognitive abilities and affective states). She discussed the challenges of this research, the results that they have achieved so far and future opportunities.

Dr. Pedro Larrañaga from the Technical University of Madrid, Spain, gave an interesting talk about synergies between probabilistic graphical models and evolutionary computation. First, he showed how to use evolutionary computation in inference and in learning from data problems within probabilistic graphical models. The search for the maximum a posteriori assignment and the optimal triangulation of the moral graph exemplified inference problems. In a second part of the talk, Dr. Larrañaga illustrated how to use Bayesian networks and Gaussian networks for developing estimation of distribution algorithms in discrete and continuous domains, respectively. Finally, recent advances were presented, covering regularization methods for learning probabilistic graphical models from data, multi-label classification with multidimensional Bayesian network classifiers and estimation of distribution algorithms based on copulas and Markov networks.

Both talks had enough time for discussion, resulting in a fluid exchange of opinions and questions. The invited speakers' clear presentations and their deep knowledge and expertise in their respective subject areas were highly appreciated by the audience, who

felt grateful for having such interesting talks in our symposium.

As chairs of ASAI 2010 we are proud of successfully providing a place for discussion and direct contact of AI experts and the general audience.

Marcelo G. Armentano
ISISTAN, Universidad Nacional del Centro de la Provincia de Buenos Aires

Pablo M. Granitto
CIFASIS, Rosario, Argentina

Principles and Methods of Statistical Inference with Interval Probability, 1–6 September

The 3rd Workshop on Principles and Methods of Statistical Inference with Interval Probability (WPMSIIP) was held in Durham from 6-10 September 2010, following (and overlapping for one day) the 4th biennial Summer School of SIPTA (1-6 September), the Society for Imprecise Probability: Theories and Applications (http://www.sipta.org). The WPMSIIP workshops are an initiative by researchers at Durham University and at Ludwig-Maximilians University Munich (Germany), and were held before at Durham (May 2008) and Munich (September 2009). They are explicitly aimed at work, in particular discussion of challenging open problems, so have a very different nature to conferences. The workshop is relatively small-scale (about 15-20 participants at most sessions), providing a good setting for detailed discussions and exchange of ideas. In addition to participants from Durham and Munich, topic experts attended from Belgium, Slovenia, Spain, and Switzerland, while the summer school was attended by students and researchers from many European countries and further afield.

WPMSIIP started with one day of presentations by the summer school participants, mostly young researchers who presented their projects, ideas, and problems, many followed by stimulating discussions and helping the presenters through feedback and suggestions, and likely to lead to further collaborations. This was followed by three specific topic days on prior-data conflict, sequential decision making, and classification. The workshop concluded with a final day on open topics.

During the first topic day, focus was on the effect of prior-data conflict on interval probabilistic models, whilst also conflict between multiple data sources was addressed. The possibility for models to reflect such conflicts by increased imprecision was also noted to be an attractive feature for automated learning routines.

Sequential decision making is particularly challenging with interval probabilities. The issue of strategic equivalence with extensive form solutions was extensively explored. Approaches to modelling act-state dependence were discussed. Furthermore opportunities for development of game theory with interval probability and the importance of heuristic methods were discussed.

In classification, interval probabilistic methods have already proven to be attractive as they provide robust methods for classification, with specific advantages in cases of

low feature or class counts including zero-counts. New developments in this field were discussed, including likelihood-based imprecise probability models.

The programme of the final day consisted of many short contributions on very recent results and challenges. These included new general results on Markov chains and suggestions for their classification, a new approach to estimation of lower and upper probabilities, suggestions for an imprecise EM algorithm, exact algorithms for regular extension and extreme full conditional probabilities, and a discussion of the main challenge towards a fully workable theory of imprecise stochastic processes.

The success of a meeting like WPMSIIP is measured in resulting new ideas and results, publications, and collaborations. The two previous WPMSIIPs have already proven to be successful in these respects, and the lively discussions and exchanges of ideas at WPMSIIP'10 also make us very optimistic about the longer-term success of this very pleasant meeting. Plans for WPMSIIP'11 and even WPMSIIP'12 were also discussed, we will report more detailed information to *The Reasoner* when available.

Frank Coolen
Department of Mathematical Sciences, Durham University

Matthias Troffaes
Department of Mathematical Sciences, Durham University

Calls for Papers

The Extended Mind: special issue of *Teorema*, deadline 1 October.
Recurrence, Provability and Truth: special issue of *Logos Architekton*, deadline 15 October.
From Embodied Cognition to Free Will: special issue of *Humana.Mente*, deadline 30 October.
AILACT Essay Prize: in Informal Logic / Critical Thinking / Argumentation Theory, with publication on *Informal Logic*, deadline 31 October.
Philosophical History of Science: special issue of *The Monist*, deadline 31 October.
Categorical Logic: special issue of *Logica Universalis*, deadline 1 November.
Philosophy & Technology Best Paper Prizes: winning papers are published in *Philosophy & Technology*, deadline 1 November.
Concepts of Tradition in Phenomenology: special issue of *Studia Phaenomenologica*, deadline 15 November.
Social Cognition: Mindreading and Alternatives: special issue of the *Review of Philosophy and Psychology*, deadline 1 December.
Statistical Computing and Statistical Graphics Sections: American Statistical Association, Student Paper Competition 2011, deadline 13 December.
Visual Reasoning with Diagrams: special issue of *Logica Universalis*, deadline 15 December.
Experimental Philosophy: special issue of *The Monist*, deadline 30 April 2011.

C. L. Hamblin and Argumentation Theory: special issue of *Informal Logic*, deadline 30 June.
Formal and Intentional Semantics: special issue of *The Monist*, deadline 30 April 2012.

§4
What's Hot in . . .

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

. . . Logic and Rational Interaction

This month, LORIWEB featured three reports on events in the area of Logic and Rational Interaction. *Logica 2010*, an annual symposium devoted to logic, was held at Hejnice (Czech Republic) in June. The invited speakers gave talks about perspectives in general proof theory (Kosta Dosen, Serbian Academy of Sciences, University of Belgrade), the definability of belief simpliciter in terms of subjective probability (Hannes Leitgeb, University of Bristol) and the problem of the Ramsey test (Hans Rott, University of Regensburg).

The University of Carnegie Mellon has established a Center for Formal Epistemology directed by Kevin Kelly and Horacio Arló Costa. The center was inaugurated with a two-day *conference* in June, featuring invited talks by world-class researchers working in the area, including, e.g., Hans Kamp, Rohit Parikh, James Woodward and Wolfgang Spohn.

Finally, the workshop *Degrees of Belief vs Belief* was held already in May at the University of Stirling, with the aim of bringing together formal and "traditional" epistemologists and focusing on a topic lying within the overlap between their two research fields: how are beliefs and degrees of belief related?

In case you have news to share about topics related to the area of Logic and Rational Interaction, we invite you to contact Rasmus Rendsvig, our web manager or to write to the loriweb address.

Ben Rodenhäuser
Philosophy, Groningen

INTRODUCING . . .

If you would like to write one or more short introductions to concepts, topics, authors or books connected with reasoning, inference or method, or if you have an editorial project to collate such pieces and would like to print some of them here, please email features@thereasoner.org with your proposal.

§5
EVENTS

OCTOBER

AP-CAP: Asia-Pacific Computing and Philosophy Conference, Wellington Institute of Technology (WelTec), Petone, Wellington, New Zealand, 1–2 October.
BAYES ON THE BEACH CONFERENCE: Queensland University of Technology, Brisbane, Australia, 4–5 October.
E-CAP: 8th European Conference on Computing and Philosophy,Muenchen, Germany, 4–6 October.
OBJECTIVITY AND THE PRACTICE OF SCIENCE: Tilburg Center for Logic and Philosophy of Science, 5 October.
AIAI: 6th IFIP International Conference on Artificial Intelligence. Applications & Innovations, Ayia Napa, Cyprus, 5–7 October.
CALCULATION, INTUITION, AND A PRIORI KNOWLEDGE: Tilburg University, The Netherlands, 5–8 October.
AIAI: 6th IFIP International Conference on Artificial Intelligence Applications & Innovations, Larnaca, Cyprus, 6–7 October.
VALIDATION IN STATISTICS AND MACHINE LEARNING: Weierstrass Institute, Berlin, 6–7 October.

CAUSALITY IN THE BIOMEDICAL AND SOCIAL SCIENCES

Erasmus University Rotterdam, 6–8 October

PROOF: CALCULATION, INTUITION, AND A PRIORI KNOWLEDGE: Tilburg Center for Logic and Philosophy of Science, 6–8 October.
THE LIMITS OF KNOWLEDGE SOCIETY: Iasi, Romania, 6–9 October.
INTEGRATING COMPLEXITY: ENVIRONMENT AND HISTORY: University of Western Ontario in London, Ontario, Canada, 7–10 October.
LPAR: 17th International Conference on Logic for Programming, Artificial Intelligence and Reasoning, Yogyakarta, Indonesia, 10–15 October.
PHILOSOPHY OF MIND, REDUCTION, NEUROSCIENCE: University of Lausanne, Switzerland, 12–16 October.
SEFA: 6th Conference of the Spanish Society for Analytic Philosophy, University of La Laguna, Tenerife.14–16 October
PHILOSOPHY OF SCIENTIFIC EXPERIMENTATION: A CHALLENGE TO PHILOSOPHY OF SCIENCE: Center for Philosophy of Science, University of Pittsburgh, 15–16 October.

Workshop on Quantification: University of Vienna and WU Wien, 18–19 October.
The Nature of Belief: The Ontology of Doxastic Attitudes, University of Southern Denmark, Odense, 18–19 October.
FMCAD: International Conference on Formal Methods in Computer-Aided Design, Lugano, Switzerland, 20–23 October.
Complexity and Statistics: Tipping Points and Crashes: London, 22 October.
ADT: 1st International Conference on Algorithmic Decision Theory, Venice, Italy, 21–23 October.
Workshop on Bayesian Argumentation: Department of Philosophy & Cognitive Science, Lund University, Sweden, 22–23 October.
Field Science: 26th Boulder Conference on the History and Philosophy of Science, University of Colorado at Boulder, 22–24 October.
Thinking and Speaking a Better World: 3rd International Conference on Argumentation, Rhetoric, Debate and the Pedagogy of Empowerment, Faculty of Arts, University of Maribor, Slovenia, 22–24 October.
NonMon@30: Thirty Years of Nonmonotonic Reasoning, Lexington, KY, USA, 22–25 October.
MWPMW: 11th annual Midwest PhilMath Workshop, Philosophy Department, University of Notre Dame, 23–24 October.
IJCCI: 2nd International Joint Conference on Computational Intelligence, Valencia, Spain, 24–26 October.
BNAIC: 22nd Benelux Conference on Artificial Intelligence, Luxembourg, 25–26 October.
ICTAI: 22th International IEEE Conference on Tools with Artificial Intelligence, Arras, France, 27–29 October.

November

ICMSC: IEEE International Conference on Modeling, Simulation and Control, Cairo, Egypt, 2–4 November.
LogKCA: International Workshop on Logic and Philosophy of Knowledge, Communication and Action, Donostia, San Sebastián, Spain, 3–5 November.
MindNetwork: 2nd meeting of the Mind Network, a network for Philosophy of Mind & Cognitive Science, King's College, Cambridge, 6 November.
MICAI: 9th Mexican International Conference on Artificial Intelligence, Pachuca (near Mexico City), Mexico, 8–12 November.
Causation, Coherence, and Concepts. Themes from the Philosophy of Wolfgang Spohn: Konstanz, 11–13 November.
Epistemology in the Early Analytic Tradition: Carleton University, Ottawa, 12–13 November.
P-NPMW: 2nd Paris-Nancy PhilMath Workshop, Paris, 17–19 November.
AMBN: 1st International Workshop on Advanced Methodologies for Bayesian Networks, Tokyo, Japan, 18–19 November.
LENLS: Logic and Engineering of Natural Language Semantics, Tokyo, 18–19 November.

Philosophy of Information: Brussels, 18–19 November.
TAAI: Conference on Technologies and Applications of Artificial Intelligence, Hsinchu, Taiwan, 18–20 November. IBSMAS-2010: Interface Between Statistics, Mathematics and Allied Sciences, Almora, Uttarakhand, India, 20–22 November.
Epistemology & Extended Cognition Workshop: University of Edinburgh, 24 November.
Dutch-Flemish Graduate Conference on Philosophy of Science and/or Technology: Ghent, 25–26 November.
KICS: 5th International Conference on Knowledge, Information and Creativity Support Systems, Chiang Mai, Thailand, 25–27 November.
ISDA: International Conference on Intelligent Systems Design and Applications, Cairo, Egypt, 29 November - 1 December.
Workshop in Probability Theory and Mathematical Statistics: Victoria University of Wellington, NZ, 30 November - 1 December.

December

AI*IA: 11th Symposium on Artificial Intelligence of the Italian Association for Artificial Intelligence, Brescia, Italy, 1–3 December.
Semantics for Robots: Utopian and Dystopian Visions in the Age of the 'Language Machine': Chicago, Illinois, USA, 2–4 December.
MINDGRAD: Warwick Graduate Conference in the Philosophy of Mind, University of Warwick, UK, 4–5 December.
CACS: International Congress on Computer Applications and Computational Science, Singapore, 4–6 December.
NIPS: 24th Annual Conference on Neural Information Processing Systems, Vancouver, B.C., Canada, 6–11 December.
From Cognitive Science and Psychology to an Empirically-informed Philosophy of Logic: Amsterdam, 7–8 December.
MIWAI: 4th Mahasarakham International Workshop on Artificial Intelligence, Mahasarakham, Thailand, 9–10 December.
APMP: 1st International Meeting of the Association for the Philosophy of Mathematical Practice, Brussels, 9–11 December.
ICDM: International Conference on Data Mining, Sydney, Australia, 14–17 December.
SILFS: International Conference of the Italian Society for Logic and Philosophy of Sciences, University of Bergamo, Italy, 15–17 December.
Scepticism and Justification: COGITO Research Centre in Philosophy, Bologna, 17–18 December.
International Conference on Recent Advances in Cognitive Science: Varanasi, India, 18–20 December.

January

LogICCC Meets India: Delhi University, India, 7–8 January.

ICCMS: 3rd International Conference on Computer Modeling and Simulation, Mumbai, India, 7–9 January.
ICLA: 4th Indian Conference on logic and its Applications, New Delhi, India, 9–11 January.
Graduate Conference in Epistemology: Miami, FL, 13–15 January.
Philosophy of Science Colloquium: Durban, SA, 18 January.
The Notion of Form in 19th and Early 20th Century Logic and Mathematics: International graduate workshop, Vrije Universiteit Amsterdam, 20–21 January.
Graduate Conference on the Philosophy of Logic and Mathematics: Cambridge, 22–23 January.
SODA11: ACM-SIAM Symposium on Discrete Algorithms, San Francisco, California, USA, 23–25 January.
ICISD: International Conference on Intellingent Systems & Data Processing, Vallabh Vidyanagar, Gujarat, India, 24–25 January.
ICAART: 3rd International Conference on Agents and Artificial Intelligence, Rome, Italy, 28–30 January.
CCA: Computability and Complexity in Analysis, Cape Town, South Africa, 31 January - 4 February.

February

AIA: 11th International Conference on Artificial Intelligence and Applications, Innsbruck, Austria, 14–16 February.
PhDs in Logic: Graduate Conference and Winter School, Brussels, 17–18 February.
CICLing: 12th International Conference on Intelligent Text Processing and Computational Linguistics, Tokyo, Japan, 20–26 February.
ICLICC: International Conference on Logic, Information, Control and Computation, Gandhigram, Tamil Nadu, India, 25–26 February.
Novel Ppredictions: Heinrich-Heine Universitaet Duesseldorf, Germany, 25–26 February.
ICMLC: 3rd International Conference on Machine Learning and Computing, Singapore, 26–28 February.

March

Theory-Ladenness of Experience: Heinrich-Heine Universitaet Duesseldorf, Germany, 10–11 March.
STACS: 28th International Symposium on Theoretical Aspects of Computer Science, Dortmund, Germany, 10–12 March.
NAFIPS: 30th North American Fuzzy Information Processing Society Annual Conference, El Paso, Texas, USA, 18–20 March.
AI and Health Communication: Stanford University, California, 21–23 March.
Truth be Told: Workshop on Philosophical and Formal Theories of Truth: Department of Philosophy, Institute for Logic, Language and Computation, Universiteit van Amsterdam, 23–25 March.

Social Computing, Behavioral-Cultural Modeling, & Prediction: College Park, Maryland, United States, 29–31 March.

April

SpringSim: Spring Simulation Multi-conference, Boston, MA, USA, 4–9 April.
The Authority of Science: University of Sydney, Australia, 8–10 April.
AIML: ICGST International Conference on Artificial Intelligence and Machine Learning, Dubai United Arab Emirates, 11–14 April.
ICANNGA: International Conference on Adaptive and Natural Computing Algorithms, Ljubljana, Slovenia, 14–16 April.
AICS: 22nd Midwest Artificial Intelligence and Cognitive Science Conference, Cincinnati, Ohio, USA, 16–17 April.
NFM: 3rd NASA Formal Methods Symposium, Pasadena, California, USA, 18–20 April.

May

AAMAS: 10th International Conference on Autonomous Agents and Multiagent Systems, Taipei, Taiwan, 2–6 May.
ICCS: 4th International Conference of Cognitive Science, Tehran, Iran, 10–12 May.
Metaphysics & the Philosophy of Science: University of Toronto, 13–15 May.
LPNMR: 11th International Conference on Logic Programming and Nonmonotonic Reasoning, Vancouver, BC, Canada, 16–19 May.
Argumentation: Cognition & Community: Ontario Society for the Study of Argumentation (OSSA), University of Windsor, 18–21 May.
PAKDD: 15th Pacific-Asia Conference on Knowledge Discovery and Data Mining, Shenzhen, China, 24–27 May.
Normativity of Meaning: Sellersian Perspectives: Department of Logic, Institute of Philosophy, Prague, Czech Republic, 25–27 May.

§6
Courses and Programmes

Courses

BLT: Bochum-Lausanne-Tilburg Graduate School: Philosophy of Language, Mind and Science on Calculation, Intuition, and A Priori Knowledge, Tilburg University, The Netherlands, 5–8 October; Philosophy of Mind, Reduction, Neuroscience, University of Lausanne, Switzerland, 12–16 October.
SELLC: Sino-European Winter School in Logic, Language and Computation, Guangzhou, China, 3–18 December.
Logic Summer School: Canberra, Australia, 6–17 December.

Programmes

Doctoral Programme in Philosophy: Language, Mind and Practice, Department of Philosophy, University of Zurich, Switzerland.
HPSM: MA in the History and Philosophy of Science and Medicine, Durham University.
Master Programme: Philosophy of Science, Technology and Society, Enschede, the Netherlands.
MA in Cognitive Science: School of Politics, International Studies and Philosophy, Queen's University Belfast.
MA in Logic and the Philosophy of Mathematics: Department of Philosophy, University of Bristol.
MA in Metaphysics, Language, and Mind: Department of Philosophy, University of Liverpool.
MA in Mind, Brain and Learning: Westminster Institute of Education, Oxford Brookes University.
MA in Philosophy: by research, Tilburg University.
MA in Philosophy of Biological and Cognitive Sciences: Department of Philosophy, University of Bristol.
MA in Rhetoric: School of Journalism, Media and Communication, University of Central Lancashire.
MA programmes: in Philosophy of Language and Linguistics, and Philosophy of Mind and Psychology, University of Birmingham.
MRes in Methods and Practices of Philosophical Research: Northern Institute of Philosophy, University of Aberdeen.
MSc in Applied Statistics and Datamining: School of Mathematics and Statistics, University of St Andrews.
MSc in Artificial Intelligence: Faculty of Engineering, University of Leeds.

MA in Reasoning

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

MSc in Cognitive & Decision Sciences: Psychology, University College London.
MSc in Cognitive Science: University of Osnabrück, Germany.
MSc in Cognitive Psychology/Neuropsychology: School of Psychology, University of Kent.
MSc in Mathematical Logic and the Theory of Computation: Mathematics, University of Manchester.
MSc in Philosophy of Science, Technology and Society: University of Twente, The Netherlands.
Master of Science: Logic, Amsterdam.
Research Master in Cognitive Science and Humanities: Language, Communication and Organization: Institute for Logic, Cognition, Language, and Information, University of

the Basque Country (DonostiaSan Sebastian).

§7
Jobs and Studentships

Jobs

Senior position: Open AOS, with a preference for philosophy of mind/cognitive science/neuroscience/language, Department of Philosophy, University of California, San Diego, until filled.
Post-doc Stipend: in theoretical philosophy, Philosophy Department, Ruhr-Universität Bochum, deadline 10 October.
Research Fellowship: in Foundations of Logical Consequence, Arché Research Centre, St Andrews, deadline 11 October.
Chair of Computational Logic: Faculty of Computer Science, Institute of Artificial Intelligence, Dresden University of Technology, deadline 15 October.
3 Post-Doctoral Research Assistant posts: on LogMap (1) and ExODA (2), Computing Laboratory, University of Oxford, deadline 22 October.
Visiting Fellowships: at the Sydney Centre for the Foundations of Science (SCFS), University of Sydney, deadline 30 October.
Assistant Professor: AOC: Epistemology and Metaphysics, Department of Philosophy, Samford University, Alabama, deadline 1 November.
Tenure-track position: AOS: philosophy of science, Department of Philosophy, Concordia University, Montreal, Quebec, deadline 1 November.
Tenure-track assistant professor position: AOS: Metaphysics, Epistemology, or Philosophy of Mind, Department of Philosophy, Stanford University, deadline 1 November.
Three tenure-track positions: in philosophy, Department of Philosophy, University of Tennessee, Knoxville, deadline 1 November.
Tenure-track position: AOS: Philosophy of science, philosophy of language, epistemology, or metaphysics, Department of Philosophy: DePauw University, deadline 8 November.
Wagner Risk Fellowship: Center for Philosophy of Science, University of Pittsburgh, deadline 15 November.
Assistant Professor: AOS: Metaphysics or Philosophy of Language, Department of Philosophy, University of Wisconsin, Madison, deadline 20 November.
Assistant Professor: AOS: Philosophy of Science or History of Philosophy, Lawrence University, Appleton, WI, deadline 1 December.
Visiting Assistant Professor: AOS: Epistemology, Metaphysics, Mind, Language, or Philosophy Science, Department of Philosophy, Lafayette College, Easton, PA, deadline 1 December.

Studentships

D.Phil studentship: in Knowledge Representation and Reasoning, Computing Laboratory, Oxford University, available immediately.
10 PhD student positions: within the doctoral program "Mathematical Logic in Computer Science", Vienna University of Technology (TU Wien), until filled.
PhD Studentship: "Hyper-heuristics for Grouping Problems", School of Computer Science, University of Nottingham, until filled.
PhD Positions: Faculty of Computer Science, KRDB Research Centre for Knowledge and Data, Bolzano, Italy, deadline 18 October.
Doctoral Studentships: Computing Laboratory, University of Oxford, first deadline 19 November.