paradoxes and solutions to them, I would propose exactly the same cause (violation of (2)) and exactly the same solution: (2) reveals the objects involved aren't the intensional objects they seem to be.

Rabern, Rabern, and Macauley ('Dangerous Reference Graphs and Semantic Paradoxes', corollary 13, forthcoming in the *Journal of Philosophical Logic*) have shown that all sentential paradoxes with *finite* reference chains require referential circularity. I won't pretend my proposal here will turn out able to solve all sentential paradoxes. But it might well be able to deal with circularity paradoxes of the two kinds Eldridge-Smith has put forward.

> LAUREANO LUNA IES Doctor Francisco Marin

# News

### Amsterdam Workshop on Truth, 13–15 March

The Amsterdam Workshop on Truth served as a meeting point for researchers working on more or less formal approaches to the philosophy of truth.

The first speaker was Volker Halbach, who distanced himself from his earlier work with Leon Horsten on the axiomatisation of Kripke's theory of truth in partial logic PKF on the grounds that mathematical induction is considerably weakened. Martin Fischer's talk showed whether or not certain paradoxes arising from the interaction of modalities are reducible to paradoxes of a single modality. Johannes Stern provided a proof-theoretic alternative to Halbach and Welch's work on understanding modal predicates as the complex predicate of truth modified by a necessity operator ("necessarily true") to circumvent the objection one may have to adopt Halbach and Welch's possible world semantics. Theodora Achourioti argued that in appropriate contexts truth exhibits intensional properties that resemble those of an S4 modal operator. Jönne Speck introduced tense operators to express Kripke's notion of groundedness within the object language of an augmented theory of truth.

Nina Gierasimczuk provided a means of assessing belief revision methods in terms of identifiability at the limit of the revision processes. Sonja Smets presented a problem in applications of Dynamic Epistemic Logic to collective learning scenarios due to the phenomenon of "information cascades", and suggested a way forward.

Graham Leigh presented a variety of mathematical techniques available to the proof-theoretic deflationary truth theorist, including infinitary cut elimination and model constructions. Carlo Nicolai presented an axiomatic compositional theory of truth with the syntax formalised in a theory of hereditarily finite sets.

Paul Egré presented the strict-to-tolerant consequence theory of truth he developed with Robert Van Rooij, Pablo Cobreros, and David Ripley, with a distinction made between strict and tolerant assertion. To continue this idea, Stefan Wintein presented a uniformed signed tableau calculus with strict and tolerant assertion and denial.

Giulia Terzian offered and assessed some proposals for making more precise the notion of "simplicity" of truth in the deflationist literature. In the form of a dialogue, Jeffrey Ketland defended the notion that semantic facts are not naturalistically reducible. Two talks were historically informed. Iris Loeb challenged the view that a postscript that Tarski added in a later version of "Der Wahrheitsbegriff in den formalisierten Sprachen" indicated that he moved from a semantic universalist to an antiuniversalist. Georg Schiemer presented methods in work by Carnap and Tarski that allowed them to recast a model-theoretic approach to metamathematics within type theory.

Albert Visser presented a simple construction of full satisfaction classes with properties such as  $\sigma_n$  correctness, schematic correctness and extensionality. Philip Welch summarised features common to a wide variety of revision theoretic mechanisms and presented "ineffable liars" that diagonalise past the determinateness operators definable in Hartry Field's theory of truth. Finally, Leon Horsten argued that there are natural theories of truth for the purposes of metamathematics that satisfy both the demand of being semantically conservative and extending the expressive power of the object language in an adequate way.

Abstracts and slides of the talks can be found here.

CIAN CHARTIER ILLC, Amsterdam

#### Logic, Knowledge and Language, 14–15 March

On the 14th and 15th of March 2013 the international conference Logic, Knowledge and Language was held in Brussels as a tribute to Paul Gochet's memory. Fourteen speakers who had interacted with Gochet on topics related to the fields of formal logic, philosophy of language, epistemology and ontology had been invited. Even though some of them were eventually prevented from joining the conference because of health problems or climatic conditions, all sessions were very rich and intense.

Based on joint work with Klaus Frovin Jørgensen, Patrick Blackburn's paper re-examined Prior's work on the semantics of temporal indexicals through the lens of modern hybrid logic. By indexing propositional symbols with names of moments of time at which the propositions are true ( $@_ip$ : p is true at i), we can give an account of simultaneousness of (past and future) events, as well as express complex propositions relying on Reichenbach's distinctions between points of speech, of reference and of event. In such a system, an important role can played by the "now"-operator acting as an index (or "rigidifier") for propositions.

Based on joint work with Henrik Boensvang and Rasmus Rendsvig, Vincent Hendricks' talk showed how multi-agent modal logic (involving epistemic logic, game theory and judgment aggregation) could be applied to formalize phenomena involving "social proof" such as *informational cascades* observing many individuals make the same choice provides evidence that outweighs one's own judgment based on private signal—and the *bystander effect*—individuals do not offer any means of help to the victim in an emergency situation when other individuals are present.

After commenting on the work that has been done in the fields of logic *for* knowledge as well as of logic *of* knowledge, Jacques Dubucs showed how logic can also be seen as *providing insights* to knowledge. In particular, analysis requires one to enrich available information by considering information that is not provided in what was given as well as by considering objects of another kind than the ones actually under investigation.

Susan Haack claimed that epistemology requires a theory of beliefs. Even though she concedes to W.V.O. Quine that

there are no sharply specifiable identity conditions for beliefs, to S. Stich that a functionalist account of beliefs is inadequate and to P. and P. Churchland that beliefs cannot be smoothly reduced to neurophysiological states, she still claims that we cannot do without knowing subjects and their beliefs, an (modestly naturalistic) account of which should involve three interlocking dimensions: behavioral, neurophysiological and sociohistorical.

In order to give an account of Henri Poincaré's claim that there is a need for intuition (>< purely formal logic) in mathematical proofs, Gerhard Heinzmann discussed several recent proposals for the formal characterization of informal provability (especially Rahman's dialogical type theoretical reconstruction of the Erlangen notion of a Constructive Language and Hintikka's Independence-Friendly Logic) before developing his own reverse project of an informal characterization of formal provability.

Willard Van Orman Quine's and Paul Gochet's nominalisms were the focus of discussion of three talks.

Hourya Sinaceur gave an account of Gochet's methodological nominalism in the view of Ernst Cassirer's distinction between substantial and functional identity; the question is not so much to tell what a proposition is than to ask which functions it fulfils and whether these functions could not be fulfilled by sentences.

Jean-Maurice Monnoyer showed how Gochet highlighted some of the main tensions and difficulties in Quine's nominalist positions. By commenting Quine's "Logistical approach to the problem of ontology" and his "Confessions of a confirmed extensionalist", Monnoyer discussed the feasibility of the nominalist project in the light of some of Gochet's own comments.

Dagfinn Føllesdal provided an idea of the way Quine had planned to rewrite *Word and Object* around 1998, i.e., two years before his death. The problems which Quine wanted to solve were amongst the ones Gochet (and others) had stressed. First, Quine wanted to involve some theory of perception in his book in order to give an account of stimulation (which is central as regards observation sentences) as empirically accessible. Secondly, Quine wanted to work out a new theory of modalities in order to show that we need a non-unified semantics: singular terms do not have the same semantics as general terms; no descriptive theory of names is possible.

> Bruno Leclerco Philosophy, Université de Liège

### Philosophy of Information, 27–28 March

The fifth workshop on the Philosophy of Information took place at the University of Hertfordshire 27th to 28th March 2013, organised by the UNESCO Chair in Information and Computer Ethics in collaboration with the AHRC project 'Understanding Information Quality Standards and their Challenges' (2011– 2013). The topic was the intersection between qualitative and quantitative views of information. Nineteen papers were presented whose themes were diverse yet united by the application of informational methods.

The keynote speaker, Dr Leonelli (Exeter) discussed *Data integration and the management of information in contemporary biology*. In particular, she reflected on what it means and takes to integrate data to acquire new knowledge about biological entities and processes, focusing specifically on the facilitating role of data-sharing tools. Continuing the biology theme, Russo (Brussels and Kent) and Illari (Hertfordshire and UCL) argued that biomarkers research can be used as a test case for an informational account of causality, illustrating how even in complex cases, the idea of tracing a causal link could still be vital to the scientific practice.

In an interesting perspective on consciousness, Gamez (Sussex) considered the question "*Are Information or Data Patterns Correlated with Consciousness?*" He discussed how experimental work on the correlates of consciousness is attempting to identify the relationship between phenomenal and physical states. While information integration is currently the only explicitly informational theory of consciousness, other algorithms could be used to identify information patterns in the brain that could be correlated with consciousness.

Algorithms were also discussed by Gobbo (L'Aquila) and Benini (Leeds) in their co-authored paper on computational complexity bringing together an aspect of information in Computer Science that is quantitative and qualitative at the same time: measuring, an act that is often described as 'describing a phenomenon by a number'. Other papers that were concerned with modeling were given by Coghill (Aberdeen) and Antón (Sevilla), while Hamami (Vrije) approached the topic from a mathematical perspective

Two papers considered information security and individual rights. Pym (Aberdeen) argued that information security is concerned with the protection of the attributes of items of information that are of value to the owners, users, and stewards of that information. Taddeo's (Warwick) paper addressed two challenging and ethical questions; namely, whether the transformations engendered by the information revolution create the need for individuals to claim new rights for themselves as agents living the onlife, and what such rights should be. Primiero (Ghent) looked at distrust and mistrust relations for privatively and modally qualified information channels.

Many of the papers referenced the work on the philosophy of information carried out by Floridi (Hertfordshire and Oxford). His paper, *Maker's Knowledge and the synthetic uninformative*, sought to understand what kind of knowledge this is as when Alice (knows or rather) is informed (holds the information) that Bob's coffee is sweetened because she just put two spoons of sugar in it.

The Workshop demonstrated that the philosophy of information is a multi-faceted and topical field of research, not only in itself, but also as a conceptual framework for other established philosophical domains, allowing elaboration from an informational perspective.

Interested readers can see all the abstracts on the website of Society for the Philosophy of Information and indeed, may be inspired to join. Please visit here for further information.

> PENNY DRISCOLL PA to Prof. Luciano Floridi, University of Hertfordshire

# Thinking and Rationality, 29 March-7 April

The workshop on "Thinking and Rationality" was organized as an event within the 4th World Congress and School in Universal Logic (UNILOG 2013), held in Rio de Janeiro between March 29–April 7, 2013. The main intention was to discuss, not only logical systems and logic theories, but why and how logic and thinking can coexist and help to model, express and understand