The past decades have seen intensive research activity on logical and philosophical aspects of truth and the paradoxes. On the logical side, a great number of interesting proof theoretic and semantic approaches to truth and paradox have been proposed. On the philosophical side, the discussion has mostly centered around the deflationist conception of truth.

In all of these areas, new directions of research seem to be called for. On the proof-theoretic side, the subject has become very technical. The era of formulating new natural axiomatic truth systems and investigating their proof theoretic strength seems to be closing. One has the feeling that most of the natural systems of truth have been found and studied. On the semantic side, it is no longer clear what the desiderata are for a theory of truth. Securing a transparent notion of truth often comes at the cost of consequences that are counter-intuitive for reasons not always related to truth. And on the philosophical side, one has the feeling that most of the interesting versions of deflationism have been articulated and debated, and that the philosophical discussion has lost some of its momentum.

In sum, it seems that a re-orientation of the field is needed. And in many ways this is already happening. In particular, researchers are starting to relate the concept of truth to other notions that are of logical and philosophical interest, such as conditionals (Field), reflection principles (Ketland) and probability (Leitgeb). Most notably, there is increasing interest on questions surrounding the relation of truth to intensional notions such as necessity or tense (Halbach). It has now become clear that relating such notions to the concept of truth yields deeper insight into them. At the same time, doing so rests on insights that have been obtained in the study of axiomatic and semantic theories of truth and in the discussion of truth theoretic deflationism.

In light of all this, it seems timely and important to devote a special session of the 2015 edition of CLMPS to discussing the current state of affairs in the study of truth. In particular, we want to investigate the ways in which the relation of truth to other notions can be explored, what we already know and what is reasonable to expect. We do this by choosing four themes, explored in four different talks, which we use as our starting points for further discussion. The first talk relates truth to necessity and shows that new paradoxes exert once again limiting force. The second talk reopens the problem of the definability of truth in a novel model theoretic setting where there is more than
paradox to worry about. The third shows that full disquotation, which constitutes the motivation for most non-classical truth theories, is not necessary for a truth predicate that fulfils its desirable generalising function. And the final talk discusses the logical relation between Tarski biconditionals and reflection principles, and the implications of this for the philosophical doctrine of deflationism.

We will conclude with a round table discussion with the aim of drawing connections between the above themes and other topics currently undertaken in the study of truth. This will be done with an eye on articulating questions that are open for future research.

Format: four talks each scheduled for 25’, followed by 20’ round table discussion led by the principal organiser.

Duration of the symposium: 2 hours.

Schedule:
Talk 1: Necessities and Necessary Truths Revisited (25’)
Talk 2: Definability of Truth and Intensional Context (25’)
Talk 3: Disquotation and Deflationism (25’)
Talk 4: Reflection, Truth, Entitlement (25’)
Round table discussion (20’)

1 Necessities and Necessary Truths Revisited

Pursuing a suggestion by Kripke (1975) and others, Halbach and Welch (2009) considered a reduction of modal predicates to modal operators and a truth predicate: A verb phrase such as *is necessary* is replaced with the expression *is necessarily true* that contains only an adverbial phrase for the modality and a truth predicate. I argue that this reduction is hardly acceptable, because it imposes strong constraints in various areas of philosophy and forces strong revisions to certain standard frameworks in philosophical logic, metaphysics and epistemology. I conclude that the operator conception of modal notions such as necessity, apriority, analyticity and provability are not serious options and that they should be treated as predicates. The simultaneous treatment of modal notions and truth as predicates yields expressively rich languages; but it also carries with it the risk of paradox, as Halbach (2006), Horsten and Leitgeb (2001) have observed. Not all of these paradoxes cannot be reduced to the known paradoxes of one predicate as Stern and Fischer (2014) have shown. They threaten many areas of philosophical discourse and may impose severe constraints on theories in epistemology, modal metaphysics and other areas.

2 Definability of Truth and Intensional Context

Semantic truth theories propose different ways of doing away with the paradoxical aspects of truth. What is considered an acceptable solution to the paradox depends on what properties truth is expected to have; for example, whether the truth predicate can be iterated, whether it is fully transparent, whether it licenses or not certain reasoning patterns. Less attention has been devoted on the way a truth predicate interacts with
the context in which it is to be defined. We propose to study structures that incorporate variability in the domains and the interpretation of the predicates. Such structures are epistemologically interesting in that they reflect the familiar situation of revising our beliefs and repairing our expectations as we further our knowledge of the world. In this novel setting, definability of a truth predicate for a given sentence is not solely dependent on whether the sentence is paradoxical or not. We argue that a natural way to go is to employ a co-recursive definition, so that the meaning of a truth predicate informs itself by later stages in the acquisition of knowledge. It is no surprise, yet formally interesting, that in such contexts, a truth predicate represents an intensional notion and acquires properties of a modal operator.

3 Disquotation and Deflationism

According to deflationism, the truth predicate would be entirely dispensable save for the fact that it enables us to express certain generalisations. Several authors claim that the truth predicate can serve this function only if it is fully disquotational—i.e. it satisfies the general equivalence between a sentence and its truth predication, which is impossible in classical logic. Accordingly, many non-classical theories of truth have been proposed. In this talk, we propose a concise formulation of what it means for a theory of truth to enable us to express generalisations and examine existing truth theories under this light. It turns out that disquotation is neither necessary nor sufficient to express generalisations: there are many classical truth theories that support the generalising function while a couple of non-classical theories of disquotational truth do not.

4 Reflection, Trust, Entitlement

Even though disquotationalism is not correct as it is usually formulated, a deep insight lies behind it. Specifically, it can be argued that, modulo implicit commitment to reflection principles, all there is to the notion of truth is given by a simple, natural collection of truth-biconditionals.

John Burgess published a paper with the title “The truth is never simple” Burgess (1986). What he meant is that the extension of the truth predicate, in a typed and even more so in a type-free approach, is complicated. This cannot be disputed. But we argue that the intension of the truth predicate is simple, in the sense that the content of the concept of truth is given by a simple and natural collection of truth-biconditionals. In other words, we claim that some form of disquotationalism must be in some sense correct. From a logical point of view, this takes us to the area of proof-theoretic approaches to truth, and away from the area of model-theoretic approaches to truth, which was the focus of Burgess (1986).

Arguments by Shapiro and Ketland that are based on observations by Tarski, have shown that certain standard formulations of disquotationalism are untenable. The fact that truth is compositional cannot be fully accounted for by disquotational axioms alone. Moreover, disquotational principles alone do not seem to do justice to the role that truth
plays in metamathematical reasoning. In particular, compositional truth principles can be used to show that reflection principles hold and thus to justify reflection principles, whereas disquotational principles are too weak to do this.

Our position in this article is that disquotational principles nonetheless capture the core content of the concept of truth. When reflection principles are applied to (proof-theoretically weak) disquotational principles against the background of a weak syntax theory, strong compositional theories result. And when we are committed to a weak disquotational theory of truth, then we are implicitly committed to reflection principles for it. Therefore the compositionality of truth is implicitly contained in disquotational principles.

References


