Wittgenstein+PhilMath, IHPST Paris, 27-28 June 2024

Abstracts:

Pierre Fasula (Paris): The Mathematician as a Normative Animal

How should one present the connection between mathematics and form of life in Wittgenstein's philosophy? In his Remarks on Frazer's Golden Bough, Wittgenstein states: "One could almost say that man is a ceremonial animal. That is perhaps partly false, partly nonsense, but there is something correct about it." This expression does justice both to the diversity of human ceremonies, rituals, and institutions, and to their anchoring into our form of life. In our presentation, first of all, we want to adapt this phrase to the issue of normativity: humans are normative animals. Normative activities are not only diverse but also a feature of our form life. As regards to its origin, it means that, against the idea that normativity emerges from practices or results from the activity of consciousness, one should in it a feature of the specific form of life which is ours. It is then possible to present basic mathematical practices having to do with calculating or following a rule, as rooted into animality but transformed by the normative feature of our form of life. Other species behave indeed as if one could attribute to them a rudimentary mathematical sensitivity (sensitivity to small numbers, a certain sense of repeating operations). On the other hand, without denying this, what seems to characterise human mathematical practices is precisely the fact that they are practices, and normative ones.

Anne-Marie Søndergaard Christensen (Univ. of Southern Denmark): Perspicuous Overviews of the Moral? Wittgenstein and Descriptive Moral Theories

In this talk, I present an interpretation of the notion of grammar found in the later work of Ludwig Wittgenstein and on the basis of this I develop a view of the role of moral theories. According to this view, moral theories provide overviews of various normative structures of concerns – moral grammars – that may serve two different purposes, providing either general descriptions of the logic of our moral language or descriptions that elucidate a specific moral problem. If we accept this view, moral philosophers must accept the co-existence of a plurality of moral theories that describe a plurality of moral grammars, and they must give up the idea that moral theories are mutually exclusive. Moreover, this Wittgensteinian view of moral theories implies that theories cannot be the sole tool of moral philosophy, they need to be supplemented with grammatical investigations of the particularities involved in moral problems.

Kevin Cahill (Bergen): Wittgensteinian Political Quietism

Although Wittgenstein said nothing philosophical about politics, Wittgenstein scholars might nevertheless be tempted to try to find philosophical support in his work for certain political views or theories. Whatever Wittgenstein's views on politics may have been, he saw it as importantly distinct from his work in philosophy. To paraphrase Rawls: Politics for Wittgenstein was political, not metaphysical.

Sorin Bangu (Bergen): Wittgenstein on Assimilationism, Scientism and Mathematics

This talk deals with Wittgenstein's take on what I shall label 'assimilationism': the pernicious habit of thinking he holds responsible for creating philosophical problems - everywhere, but in particular in the philosophy of mathematics. Moreover, I shall argue that his worries about assimilation(ism) lead to his anti-scientism, which, I maintain here, is more of a by-product of his (therapeutical) philosophical agenda than a direct concern.

Alex Paseau (Oxford): What Past Mathematicians Talked About When They Talked About Mathematics

Contemporary philosophers put forward accounts of what mathematics is about. They might advance some form of platonism, or structuralism, or conventionalism, etc. Philosophy of mathematics, however, at least in the analytic tradition, is largely uninterested in the history of mathematics. This is a regrettable omission. An adequate philosophy of mathematics should make sense not just of today's mathematics, but also older mathematics. A philosophy made for 21st-century mathematics should not imply that older mathematicians were on the whole radically misguided, that they proved no results, or, worse, that they failed to talk about anything, simply because their mathematics was not ours. My aim in this talk is to judge metaphysics of mathematics by this criterion. Or rather, to start down this path, by examining how a couple of metaphysics of mathematics handle older mathematics and by reflecting on the methodology philosophers should adopt when approaching the history of mathematics. The talk is joint work with Fabian Pregel.

Rob Knowles (Swansea): The Problem of Mathematical Explanation

We sometimes appeal to pure mathematical facts to explain physical phenomena, but it is unclear how mathematical facts could exert explanatory influence over the physical world. I develop a concrete formulation of this problem informed by the popular and well-motivated view that explanations reveal relations of dependence. Prominent analyses of mathematical explanation invoke either mathematical explanantia or mathematical relations of explanatory relevance. I show that these analyses fail to solve the problem. I then develop a novel analysis that demonstrates a more promising way forward. On my analysis, mathematical explanations are distinguished by the non-representational manner in which they facilitate our grasp of physical explanantia and relations of dependence. My analysis dissolves the problem and enjoys many other benefits besides.

Francesca Poggiolesi (Paris): Mathematical Explanations - An Analysis Via Formal Proofs and Conceptual Complexity

This talk explores internal (or intra-)mathematical explanations, namely those proofs of mathematical theorems that seem to explain the theorem they prove. The goal of the talk is to provide a rigorous analysis of these explanations. This will be done in two steps. First, we will show how to move from informal proofs of mathematical theorems to a formal presentation that involves proof trees, together with a decomposition of their elements; secondly we will show that those mathematical proofs that are regarded as having explanatory power all display an increase of conceptual complexity from the (undischarged) assumptions to the root of the proof-tree they are formalized with.