

World Logic Day 2021 – Zagreb, Croatia

January 14, 2021

The online round table “What is logic?” was co-organized by the *Croatian Logic Association* and the *Institute of Philosophy*, Zagreb, a public research institute of the Republic of Croatia.

The meeting began with the obituary and a minute’s silence in tribute to Paola Glavan (1967-2021), a Croatian logician and mathematician, who passed away on January 9. The obituary speech was given by Mladen Vuković (University of Zagreb).

The opening and welcome addresses were given by Luka Boršić, Director of the Institute of Philosophy, Zagreb, and Srećko Kovač, President of the Croatian Logic Association, who moderated the meeting. The participants of the round table presented their views on logic in short introductory expositions.

Tajana Ban Kirigin (University of Rijeka) emphasized that science is based on logic as a tool for deriving conclusions from assumptions and for the preservation of truth in an inference. Science should be resistant to logical tests of reasoning, including the case when other methods besides logic (for example, statistics) are employed.

Tin Perkov (University of Zagreb) draw attention to inductive methods (logic in a wider sense), which help where there is no full certainty in reasoning. He stressed the use of logic in everyday argumentation, and, on the other side, the role of logic in the conceptualization of truth within a systematic (for example, axiomatic) theory.

Nenad Smokrović (University of Rijeka) focused on the relationship of logic and epistemology, proposing the view that epistemic logic should serve not as a norm, but as a model to describe human reasoning. This involves the much discussed problem of the capability of logic to express imperfections of human reasoning while possessing all the “good” properties of a logical system.

According to Majda Trobok (University of Rijeka), the key aspect of logic is its ontological status. Starting from Frege’s and Timothy Williamson’s views, she argued that logic deals, at an abstract, structural level, with reality in general. It is only on this ground that logical forms can be declared to be valid forms of reasoning.

Mladen Vuković (University of Zagreb) pointed out the differences between the concepts of mathematical logic, logic of computer science, and modal logic. He proposed the view (based on Lindström’s theorems) on logic of mathematics

as first-order logic. He problematized the concept of proof on the pretext that a proof can be carried out or assisted by computational means.

A discussion developed relating to several questions and comments. Mate Penava (University of Mostar, Bosnia and Herzegovina) draw attention to the problem of the concept of truth. Zvonimir Šikić (University of Zagreb) brought into discussion a Quinean naturalistic view on logic as the least changeable core of science. Ivan Restović (Institute of Philosophy, Zagreb) put the question on the relationship of the universality of logic and pluralism.

Besides the birth of Alfred Tarski and the death of Kurt Gödel, the Croatian logical community remembers the close dates of the birth of Vladimir G. Kirin (January 12, 1928), the death of Dean Rosenzweig (January 9, 2009) and the death of Faust Vrančić (Faustus Verantius; January 20, 1617).

In the evening, the yearly meeting of the Assembly of the *Croatian Logic Association* was held online. The work and financial reports and plans were discussed and accepted.

S.K.