
REPORT

Pavel Materna (1930 – 2024)

On October 25, prof. Pavel Materna, aged 94, passed away peacefully in Prague. This notice, though awaited, afflicted us a lot. Pavel was a Czech logician, philosopher and musician. He was a follower of Pavel Tichý, the founder of Transparent Intensional Logic (TIL). Pavel Materna contributed a lot to the development of TIL, the system within which he developed an original theory of concepts. In this theory, concepts are defined as abstract procedures that can be viewed as ‘instructions’ encoded by natural-language expressions on obtaining an object (if any) denoted by a given expression. These results yielded numerous papers and three books. They are “Svět pojmů a logika” (in Czech), Praha, Filosofia 1995, “Concepts and Objects”, Helsinki, Acta Philosophica Fennica vol. 63, 1998, and “Conceptual Systems”, Berlin, Logos Verlag 2004.

Applying TIL to natural-language processing was Pavel’s primary professional interest. He was known internationally for his influential research in this area, where he achieved significant results and published numerous papers and books. This work culminated in the book published with co-authors Marie Duží and Bjørn Jespersen, “*Procedural Semantics for Hyperintensional Logic*” with the subtitle “*Foundations and Applications of Transparent Intensional Logic*”, Springer 2010. The book provides a much-needed comprehensible, elaborate and systematic exposition of the foundations of Transparent Intensional Logic, demonstrates how TIL lends itself to a broad range of applications and presents new results concerning knowledge representation, attitude logic, incomplete meanings (anaphoric references), and philosophy of mathematics. In July 2011, the Council of the Academy of Sciences of the Czech Republic presented Procedural Semantics for Hyperintensional Logic with its prestigious award for outstanding results of major scientific importance.

Personally, Pavel was a good friend, joyful in discussions and a great musician and pianist. We had a lot of fun listening to his piano playing on conference evenings. He had an unbelievable musical memory and could play any motive



from Wagner's operas, as well as works of other great composers like Leoš Janáček ("On an Overgrown Path") and Bohuslav Martinů ("Puppets"). In addition, anybody could ask for any anthem, even Chinese or Japanese, and Pavel played it for the great joy of the listeners.

Besides logic, the author of this short obituary shared another common hobby with Pavel: classical music. We played four-hand piano compositions and performed them at the conference SOFSEM, which used to be an extraordinary phenomenon in then Czechoslovakia. The conference lasted a fortnight and was a winter school of informatics and other close areas, such as philosophy and logic. In those dark times of "normalization" after the Soviet invasion of Czechoslovakia in 1968, SOFSEM was an island of freedom with an extremely nice and friendly atmosphere.

Pavel loved life and women. He was married four times, and he had six children with three of his wives. He spent the longest time, more than fifty years, with his last wife Helena and their children Klára and Štěpán. Helena is a medical doctor who devoted her care to Pavel till his last days. Pavel Materna died fifty years after the death of his close friend Pavel Tichý.

He will be greatly missed by all who love him.

Marie Duží

