

VLADIMIR ALEKSANDROVICH SMIRNOV, TEACHER AND RESEARCHER*

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During the last three decades V. A. Smirnov taught at the Chair of Logic of the Philosophical Department of Moscow State University. He presented lectures and led seminars for the final-years students who specialized in logic; he was supervisor of dozens of graduate and post-graduate students.

The purpose of V. A. Smirnov's special courses and seminars was to provide the complete basic education for experts in the field of logic. He continuously presented fundamental courses in proof theory and the methodology of the deductive sciences which included very important results and problems of symbolic logic such as Gentzen's cut-elimination theorem, Craig's theorem, Herbrand's theorem, Beth's theorem, definability of terms within theories, and a comparison of deductive theories by means of definitions and operations of embedding.

Besides that, V. A. Smirnov always believed it to be necessary to acquaint students with the newest results in modern logic and with the most currently significant and widely discussed problems of modern logic. The topics of such studies varied perpetually, and pupils who worked in different fields of logic were drawn to these studies. A multitude of lectures in modal logic, temporal logic, relevant logic, paraconsistent logic, dynamic logic and non-monotonic logic, in situational and other semantics, on representation of logical systems in terms of the theory of categories and computer-oriented applications of logic were presented in Smirnov's seminars in different years.

Going with the times, V. A. Smirnov constantly aspired to improve his education courses. This aspiration was very brightly displayed when he prepared a non-standard course in deductive logic oriented towards computers. In the beginning of 1990s, when wide-spread use of personal computers began in Russia, he initiated an elaboration of the on-line proof search program and used it in the education process. He formulated proof search algorithms

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and systems of procedures for several logical systems (classical and non-classical) represented in different forms, in the first place in the form of subordinative natural deduction. On the basis of these results A. V. Smirnov and A. E. Novodvorsky created the computer program DEDUCTIO. In 1992-1996 V. A. Smirnov used DEDUCTIO in presenting his courses of lectures on the problem of proof search in logical calculi. The manual *A Proof and the Proof Search. (The Course in Logic and Computer-Based Training)*, which is unique in Russia, was written under his supervision as well.

When teaching students V. A. Smirnov did not aspire merely to give them as complete and detailed information about basic results and present situation in logic as possible. His purpose was more important: to inoculate them with a liking for independent research work.

He solved this noble task in two ways. Firstly, he always opened for students the door of his own "laboratory of creation", presenting in lectures his newest results and discussing the problems on which he was working at that present time. There were students who were the first audience who could judge his very interesting logical results, such as embedding of syllogistics into one-placed predicate calculus, embedding of Lesniewski's elementary ontology into second-order predicate calculus, extraction of modal fragments of different systems of temporal logic, reconstruction N. A. Vasiliev's logical ideas, and many others.

On the other hand, V. A. Smirnov also stimulated students to present their own reports on the problems concerned with their graduation papers. His remarks and straightforward tips were things of great value for graduates. Even those students who were not formally under his supervision rightly considered him to be their teacher.

V. A. Smirnov educated a great number of highly skilled and talented logicians. Many dissertations were prepared under his supervision. He generously shared his scientific ideas with post-graduate students. He was sincerely pleased with his pupils' successes and tried to publicize their results in all possible ways, mentioning these in his lectures and arranging publication of books and papers. It happened often that V. A. Smirnov and some one among his post-graduate students investigated similar problems at the same time. In these cases Smirnov followed the strict rule: at first to give the pupil the possibility to "display himself" and to maintain a thesis for a degree. Only then would Smirnov allow himself to publish his own ideas concerned with the problem in question.

V. A. Smirnov's pedagogical activity was not restricted only in the educating of professional logicians. He aspired to make results of practical applications of modern logic to become widely known by specialists. The

manual for medical institutes, *Logic and Clinical Diagnostics*, was written under his supervision. His dream was to present a fundamental course in logic intended for students of philosophical departments. He had even prepared the manuscript of the manual *Logic for Philosophers* (co-authored with E.D. Smirnova) But being suddenly attacked by serious illness he had time only to begin the course at the Humanitarian College of the Institute of Philosophy of Russian Academy of Sciences. Now all of his pupils keep a thankful memory about their teacher and try to continue his affair as far as they can.