

MEMORIES ON EDEM LAGVILAVA

We graduated together with Edem from a famous mathematical high school in Georgia, School No. 42 (currently named after Ilya Vekua). Edem stood out for his remarkable talent in mathematics from the very beginning. Every year, he was the winner of Mathematical Olympiads. As the winner of the local Olympiads, he participated in the union-wide Olympiads and become the winner, as well. It is noteworthy that he was able to do this without any prior preparations. It was the time when Academician Andrey Kolmogorov spoke highly of Edem's distinguished talent in mathematics.

We graduated at a very interesting moment. There were the first school leavers from the Ilya Vekua and Komarovi mathematical high schools. At that time, the 11-year system of education was transformed into the 10-year system, hence there were twice as many high school leavers that year, so, the Department of Mathematics of Tbilisi State University was filled with applicants finishing their schools with honors. Due to these circumstances, the then rector of Tbilisi State University, Ilya Vekua, took an interesting and very important decision. He appointed the best professors to teach us; practical seminars and optional courses were conducted by our young mathematicians invited from the A. Razmadze Mathematical Institute, who became famous later: Gigla Janashia, Nodar Berikashvili, Khvedri Inassaridze, Guram Berishvili, Bibi Kartsvadze, Otar Tsereteli, Vakhtang Kokilashvili, etc. It was at the seminars that the idea emerged to transfer the best students to the Department of Mathematics of Moscow Lomonosov State University and Edem was among the candidates. Due to the great efforts of Ilya Vekua, this idea was successfully realized, and Edem, together with several other students, continued his studies at this globally prominent center of mathematical science. Of course, he became a distinguished student there, too. Having returned to his homeland, he continued his research in the currently well-known field of mathematics together with his first scientific advisor Gigla Janashia, and soon they were able to achieve world-wide success and recognition.

Tornike Kadeishvili

Head of Scientific Board of Andrea Razmadze Mathematical Institute

Edem and I studied at the Department of Mathematics of Moscow State University at the same period. Vladimir Arnold was in charge of the classes in differential equations. He was young at the time, but already at the peak of his fame. His classes were prominent for a full attendance. At the end of the third year, we had an exam in partial differential equations. The members of the Differential Equations Department, including Vladimir Arnold, were administering the exams.

Due to certain circumstances, Edem was not fully prepared for the exam. Arnold noticed that he was unable to respond to specific examination questions and decided to test his mental capabilities. He offered him to solve a specific equation that Edem solved quickly. Then Arnold asked him to solve another task, this time quite a complicated one. After an hour or so, Edem was able to solve it, as well. Without saying a word, Arnold took his record book, gave him the highest mark, and added with a smile: "Young man, when you have some free time, please, look through the topics you were supposed to be tested in today." In my opinion, this was a natural and authentic encounter of two great mathematicians.

Vano Demetrashvili

Edem's Friend

I met Edem in 1979, when I was in my eighth grade at the mathematical high school named after Komarovi, where Edem and Guram Berishvili were in charge of an extracurricular mathematic class. One of the most remarkable features of Edem was to constantly work with school students and as I understand now, he did this work absolutely selflessly. In general, this was a common practice among

the mathematicians at that time, to increase the popularity of mathematics among school students and to raise the quality of their knowledge.

Although other teachers (for rare exceptions) used this type of extracurricular classes for the single purpose of preparing students for mathematical Olympiads. Guram and Edem regarded the classes as additional aspects and their major purpose was to introduce us to the different branches of advanced mathematics. Later (during our studies at the university), this greatly facilitated the selection of courses. The one amazing thing I best remember of the times was Edem's manner of working with us. Edem sometimes pronounced just a couple of sentences during two hours of classes, but he could simply communicate through vivid facial gestures and the expression in his blue eyes. We used to joke that Lagvilava opened his mouth only to take a smoke. We solved mathematical problems together. As a rule, when they wanted to show us the way, Guram started with the following phrase: "Edem would like to say that ... would not you, Edem?" In the meantime, Edem would not say anything at all. After hearing this, we all turned to Edem and it became perfectly clear what we needed to do. It was very impressive to observe the process of his thoughts and concentration and see how quite a complicated problem was solved before our eyes. Thus, in addition to learning the methods for solving problems, we learned how to think, which is probably more essential for students.

Levan Alania

Professor of Moscow State University

Edem and I lived in the dormitory of the Komarovi Mathematical School, although we attended different schools. I could see that his talents were extraordinary. It was such a pleasure to listen to him, when he described his original way of solving a complicated problem. Despite his distinguished talent, he was an extremely humble and modest person. This was probably the reason for my utmost reverence for him, which I have never felt for anybody before or after the times, although I have encountered many renowned mathematicians during my life.

Alex Pachkoria

A. Razmadze Mathematical Institute of
I. Javakhishvili Tbilisi State University

I had just returned from Japan in 2007. I was offered to teach mathematics in English to a group of students of senior classes at the British Academy in Tbilisi. I gladly accepted the offer. At the beginning, everything was going all right. I think there were rumors that the teacher was invited from Japan, so the children were quite polite. However, discipline became laxer as time went on. I had the feeling that my "lenient character" also contributed to this deterioration.

Edem had been teaching at school for 10 years and he was much more "lenient" than me, but everything was going perfectly well with him. I decided to look into the matters. I knew he would not have stayed at school, had discipline not been exemplary in the classrooms. I called granddaughter of my former scientific advisor Otar Tsereteli, who was a student at School No 42 at that time. I asked her: "Mariam, how can Edem manage to maintain exemplary discipline at the classes?" "He speaks so softly that we have to sit still to be able to hear what he says," Mariam gave a sincere answer unexpected to me.

Lasha Ephremidze

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New York University in Abu Dhabi

I met him when I visited Georgia some years ago. My father had been born in Batumi and my acquaintance with Lasha Ephremidze facilitated me making that trip and also meeting Edem's daughter Salome. I was introduced to his work through my collaboration with Lasha. My visit to Georgia was memorable. In addition to the moving experience of retracing my father's steps, I was met with amazing hospitality by everyone. Edem invited me and my wife to their house, where we spent one night and enjoyed long discussions and shared delicious meals. I will never forget the gentlemanly way with which he welcomed us. Although I did not have a chance to work with him professionally, but I felt a kinship with him that arose from his engaging personality. Lucky are those who were his friends and who knew him better. I take this opportunity to add my little note of respect for him on the occasion of dedicating this special issue to him. He will always be remembered by me and my wife.

Anthony Ephremides

University of Maryland

Distinguished University Professor Emeritus

Cynthia Kim Eminent Professor of Information Technology

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