

About my first meeting with S. I. Zuchovitsky

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In these short recollections¹ I want to return to the Fall of 1943, the time when the Germans were driven out from Kiev, and a small handful of people chose to devote themselves to mathematics. I want to talk about the mathematicians who made it possible for the young people who were interested in mathematics to get involved in mathematics. Those young people who by the chance of fate found themselves in Kiev at this terrible time.

I absolutely do not pretend to present a full picture – I will write about the mathematicians thanks to whom I became a mathematician. Other mathematicians had other teachers, and their recollections would be different.

First, I would like to talk about Semen Izrailevich Zuchovitsky. Recently in Israel there was established a graduate student scholarship in the name of S. I. Zuchovitsky. It will commemorate S. I. – a renowned mathematician, but, in my opinion, first of all, an outstanding teacher. A teacher, who by his brilliant lectures and even by his way of life have attracted many young people into mathematics.

I was among those people. I think that S. I. have played a defining role in my life. All this had happened in Kiev, during Winter-Spring of 1943–1944.

It was the time when the Germans were just ousted from Kiev and the Soviet Army got in. The people who stayed during the occupation were no less scared of the Soviets than of the Germans. Insistent rumors about forcing all Ukrainians out to Siberia, as Tatars from Crimea, preceded the entry of the Soviet Army. Later there were rumors that no expulsion will undergo because of the lack of trains, – too many people had to be transported. And that almost certainly the corresponding order already had Stalin's signature.

The destroyed city, dispirited people, the hunger, and the fear for tomorrow. Talks about possible repressions. In this atmosphere a few professors who stayed in Kiev are trying to revive the Kiev University. Admission is announced, there are no entrance exams. One of the departments is the department of Physics and Mathematics (physicists and mathematicians were put together – there was not enough professors and not enough prospective students). 30–40 students were admitted, girls, boys injured in the War, and boys not drafted because of an impairment (I was one of them). The large main building of the University, previously painted in red, is burnt down, the departments of natural sciences are located in the buildings of the chemistry department, left undamaged.

We started to attend classes. The war goes on. Exhausted professors are giving lectures in physics, mathematics, and in something else. I was a little bit prepared – before the War I finished 8 of 10 high school grades, but read some on my own. I liked mathematics, but preferred physics (the childish interest in radio).

And so from the first days of the studies we started to attend the calculus class taught by S. I. – still almost a young man, the handsome southern face and the eyes attentively looking at students. A little bit burring voice – something subtly foreign in these lectures. Though we knew that he was a Jew, who miraculously have survived the occupation due to the bravery of some professor who was hiding him (later we learned that this professor was the renowned mathematician Yu. D. Sokolov). Probably the look of S. I. played some role. But the main thing was what he taught and how he did it. I stress that the city is destroyed, the hunger and the fear is around, – mainly, the fear. But S. I. is talking about the Dedekind's theory of real numbers. As if nothing terrible around

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us is happening but only these beautiful mathematical constructions exist and they are absolutely permanent and eternal. And you start to believe that the problems will go away, but the mathematics will remain. This was giving strength to those boys and girls who were trying to study in all this chaos.

S. I.'s lectures determined my interests, – I have abandoned physics and decided to become a mathematician. And then, as a boy, I have understood that there is science not influenced by the cruelty of the government and the regime. And by devoting yourself to science you will become free. In spite of anything.

I was not the only one who, under the influence of S. I., decided to become a mathematician. Sadly, not everybody was lucky – some were killed by NKVD, some could not make it because of the record “was in the occupied territory”.

S. I. himself had difficulties in the USSR. Soon the general persecutions of Jews and “cosmopolitans” have started. He had to move from the University to the Pedagogical Institute, and later had to work outside of Kiev, in Lutsk, and later in Moscow. But he always charmed his students with mathematics and tried, as much as he could, to help young mathematicians to endure the pressure of the USSR totalitarian system that was trying, in a better case, to level everything living.

Later, when I got to know S. I. better, I have learned that he was a deeply religious person, that his dream was to live and to die in the land of his ancestors. And I am glad that he fulfilled his dream and spent the last years of his life in Israel, and that he is there forever.