

An appreciation of Victor Isaakovich Ogievetsky

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I met Victor Ogievetsky at an historic moment in the evolution of quantum gravity, which was the first Moscow Quantum Gravity Seminar, organized by Professor Moisei Alexandrovich Markov in 1978. At that moment, Russia and the West were beginning to open up to each other, and the pioneering work of a number of our Soviet colleagues in the fields of quantum gravity, supersymmetry and supergravity was becoming properly, although belatedly, recognized. Victor and I immediately became good friends, and this friendship continued always. I am indebted to Victor for the many insights he gave me into the secrets of supersymmetric theories, and as well for giving me a chance to become acquainted with the intense intellectual world of physics in Russia.

Many memories of times shared come back to mind, from a variety of places in Russia and its neighbors, and also later from meetings in Europe and the UK, once that became possible. I was honoured to host Victor and Rita (his lovely wife, Margarita Mikhailovna) in my flat in London and was happy finally to be able to show them the city which has become my home. Upon Victor's invitation, I visited Dubna for the first time, in 1981. Aside from intense physics discussions with Victor, Emery Sokatchev, Evgeny Ivanov, Alexander Galperin, Sergei Krivonos, Stilyan Kalitzin and other members of the Dubna group, I remember with great pleasure walks in the woods and swimming in the Dubna river near the historic church at Ratmino. Returning from those walks with a selection of mushrooms whose edibility I was completely incompetent to assess, which were then promptly separated into the appropriate categories by Rita in their charming house at the end of Lesnaya Street, the evening would then continue on with a marvelous dinner, lubricated of course by a certain amount of vodka.

One side trip I remember from that first extended visit to Dubna was to Kimry, on the "Raketa" ferry that used to travel up and down the Volga. Kimry was as far as a foreigner could go in Soviet times, and the town was for me a view into the deeper world of Russia. I remember Victor telling me about how this old town, known since the time of Ivan Grozny as a leather-working center, had developed a surprisingly lively artistic culture, mainly owing to its geographical position more than 101 kilometers from Moscow, and thus allowed as a place of residence for artists and actors in exile during the 1930s. On the way home, Victor spotted a woman selling milk and other products of her farm and gleefully bought cottage cheese –

“tvorog,” and excitedly told Rita about this immediately upon our return, leading on to yet another marvelous dinner, this time featuring syrniki.

That visit to Kimry stimulated in me a curiosity relating to another introduction Victor made to me: great Russian literature. At first, this was just ornery curiosity: Kimry was an allowed town for foreigners to visit, but the allowed limit stopped right at the bridge across the Volga to the village of Savyolovo. So, of course, I wanted to know what was so interesting in Savyelovo. At the time – frankly – nothing much, except for the end station of a train line leaving Savyolovsky station in Moscow, from which one also departs for Dubna. But Savyolovo stuck in my mind because of Victor’s introducing me also to the writings of the great Russian poets of the 20th century, and in particular to Osip Mandel’stam. It was later on, upon reading Nadezhda Mandel’stam’s *Hope against Hope* that I realized that Savyelovo was in fact a place where she and Osip had lived in exile in 1937, shortly before his final arrest. Other writers whom Victor introduced me to were Yury Trifonov and Vasily Grossman. It was from such interactions that Victor taught me about the deep connections in Russia between many aspects of culture – Dubna is a scientists’ city but it was also the location for important developments in the arts, such as one of the first public concerts of the famous poet and singer Vladimir Vysotsky.

Other crossings of Victor’s and my own worldlines took place outside Moscow and Dubna. There was a conference in Erevan, where I remember watching a lightning storm together with Victor and Rita during a warm evening on a balcony outside their hotel room. And there were a couple of meetings in Alushta, at the JINR laboratory’s sanatorium. On the first of those visits to Alushta, I remember arriving from Simferopol airport in a taxi. As it happened, Victor and Sasha Galperin were outside and greeted me enthusiastically just as I arrived. Then Victor mischievously informed me that it had been arranged for me to have a “special” room. In fact, Sasha had originally been settled in that room, but when it became known that I was arriving, he was unceremoniously bumped into another room in the complex. However, Victor and Sasha assured me that, to all visible appearances, Sasha’s new room looked identical to the one he had just been moved from. So, Victor concluded, it might be best if our discussions, about supersymmetry or about anything else, were to take place during walks along the Black Sea front.

Aside from the pleasures and mysteries of Russia with Victor as my guide, what remains of greatest importance for me is of course the long scientific interaction that I had with the work of Victor and his Dubna colleagues. This began even before we met in person, from struggles together with Peter West to understand the papers of Victor and Emery Sokatchev about the structure of the supercurrent multiplet in minimal $D = 4$ supergravity [1]. The outcome of

that struggle led Peter and me to construct an “off-shell” representation of the supergravity multiplet which did not involve the equations of motion in the anticommutator algebra. This then led on, through the work of a number of authors, to a general understanding of the couplings between supergravity and supermatter. Another important intersection of our interests came in connection with the construction I had made, together with Paul Howe and Paul Townsend, of an off-shell representation for $N = 2$ extended supersymmetry. This then came to full fruition with the beautiful work of Victor, Zhenia Ivanov, Sasha Galperin, Stilyan Kalitzin and Emery Sokatchev on the harmonic superspace formulation of $N = 2$ supersymmetry [2]. Aside from the direct interactions that we had, however, of equal importance to me were the many things that I indirectly learned from Victor through his writings. I think in particular about the beautifully clear lectures that he gave in the 10th Winter School in Karpacz on Nonlinear Realizations of Internal and Space-Time Symmetries [3] or his work with Borisov on gravity as a theory of intersecting affine and conformal symmetries [4].

Victor’s passing was a great scientific loss to all of us who have explored this subject, and to me, personally, it was the loss of a great friend. As a friend, I miss him very much. As a physicist, I miss his guidance. In both ways, I am grateful to have known him.

References

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