*In Memoriam***Vladimir Vladimirovich Beloussov**

Vladimir Beloussov died on Christmas Day 1990, after a short illness, at the age of 83 years. I have always pictured him as a bear: strong, kind, wise, presumably dangerous when attacked, and profoundly Russian.

He was, of course, primarily attached to the International Union of Geodesy and Geophysics (IUGG), which he presided over from 1960 to 1963. But he did not consider geophysics, especially planetary geophysics, as a science apart from geology; he always insisted on the unity of the earth sciences ("geonomy"). Indirectly, the International Union of Geological Sciences (IUGS) owes very much to his activity as a spokesman for interdisciplinary and international cooperation. His major involvement in international science started with his membership on the Committee for the International Geophysical Year in 1956. He was one of the initiators of the very successful Upper Mantle Project and served as President of its Committee. He also lent support to the succeeding joint IUGG-IUGS ventures, the Geodynamics Project and the Lithosphere Project. He had a great power of persuasion, which was aided by his booming voice and his grasp of dialectics.

In his country as well, he was a highly respected scientist. Since 1961, he had been President of the Soviet Geophysical Committee. He strongly and effectively advocated the drilling of the Kola deep borehole, one of his favorite projects.

Beloussov had a great influence on the development of the geological sciences in the USSR. His books, notably on geotectonics, have marked an entire generation of Soviet geologists. His main and valid point is the concept of dynamic interaction between the crust and mantle. This led him to give weight to the vertical tectonics within continents. On the other hand, he underrated the importance of horizontal displacements and tried to invoke gravity gliding as a major cause of superficial folding. To Russian geologists, their Great Caucasus has always been the paradigm of "Alpine Chains;" the Caucasus lacks pervasive nappe structure and has, on the other hand, a true "geosyncline"—or what other term applies to 11 km of Lower Jurassic shales? Beloussov's approach to geotectonic problems was historical rather than uniformitarian. His recent paper in *Tectonophysics* (1990, *Tectonosphere of the Earth: Upper mantle and the crust interaction*, v. 180, nos. 2-4, p. 139-183) provides a good summary of his philosophy.

Vladimir Beloussov was excited by the new discoveries in the oceans, but he remained skeptical as to the universal application of the theory of plate tectonics. He liked to point out certain contradictions, such as the widespread occurrence of intermediate crust in marginal seas and in the southwest

Pacific or the absence of a post-Cretaceous plate boundary between Siberia and Alaska.

To the True Believers, who think that all deformations of the Earth can be explained by one simple model, V.V. Beloussov was the very incarnation of the Bad Guy. I doubt whether such a Manichean attitude is justified. During a memorable field trip to the Canadian Rockies quite early in the season, our bus became stuck in a snowdrift. While we were working at it, our colleagues from Alberta took a snapshot, which they published in their local journal, calling attention to the fact that Dr. Beloussov was *lifting* and Dr. Trümpy was *pushing*. Both efforts may well be needed to make busses (and mountains) move.

I thank Ruslan I. Volkov for providing dates on V.V. Beloussov's distinguished career. □

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