

Translator’s Preface

It is a great pleasure to have the opportunity to acquaint English-speaking readers with the masterly study of the 1936 Lusin Affair by the Mathematics Section of the Institute for History of Science and Technology. As explained in the authors’ preface, the main outlines of this history were discovered piecemeal in the period from 1985 to 2000, but the full text of the July 1936 hearings did not become generally known until the Russian original of this comprehensive work appeared in the book whose translation is now before the reader.

As one who owes many kindnesses to the personnel of the Mathematics Section, I considered it particularly appropriate to contribute my small bit to their effort by making its results more widely accessible. In order to make the translation more comprehensible, I have provided a glossary of the people and institutions involved in the events described in this book (included at the end after Appendix 25).¹ Apart from the extra layer of information a foreigner must have in order to read a translation with comprehension, there is the old difficulty that “to translate is to betray.” Translators may disagree as to the best translation of a term or phrase, and in some cases there is no precise one-word translation. That is the frustration that faces any translator. As Mark Twain said, “The difference between the right word and the almost right word is the difference between lightning and a lightning bug.” As an example of the latter, the 13 July session contains a reference to “rough-hewn” work (see p. 186). This is an image familiar to Russians, who know the difference between *topornaya rabota* (hatchet-work), which is done by a *plotnik* (carpenter), and *kleinaya rabota* (glue-work), which is done by a *stolyar* (cabinet maker). In this preface, I would like to touch on just three of these difficult points.

- (1) *Vreditel’stvo* (Вредительство). The root of this Russian word is the noun вред (*ved*), which corresponds rather precisely to the English noun *harm*. Russian, however, uses this root to form four other words in ways that English cannot duplicate using the noun *harm*. There is the verb вредить (*redit’*) meaning *to harm* or *to cause harm to*. So far so, good, but the longer the word gets, the farther it leaves the English language behind. А вредитель (*reditel’*) is one who causes harm. We have no word *harmer* in English. True, the adjective вредительский and the adverb вредительски might be translated as *harmful* and *harmfully*, but when that is done, they lose some precision as translations, since they describe the effect of the action rather than the intent of the one who performs it. And when we come to the important abstract noun вредительство, we are forced to use the gerund *harming*, which, being a noun formed from

¹I am grateful to Sergei Demidov, who read the glossary and caught several serious errors. The responsibility for any that may remain is of course entirely mine.

a transitive verb, requires a direct object. Without the direct object, it sounds incomplete.

The Russian term has a standard translation—at least, I have frequently seen this one—among Sovietologists as *wrecking*. The verb *wreck*, however, like the verb *harm*, is transitive; it requires a direct object, and again, *wrecking*, used as a gerund without a direct object, sounds barbarous in English. When told that someone is guilty of wrecking, the reader can't help asking: wrecking *what*? This word also suggests a picture of someone laying about with a sledge hammer, whereas the Russian term can apply to something as mild as non-compliance or minor vandalism and also to something as serious as major sabotage or physical attacks on government officials. And when we return to the agent of the *wrecking*, we are forced to call him a *wrecker*, which to Americans at least is the name of the truck used in clearing away the *wreckage* after an automobile accident. I believe there are simply too many drawbacks to this term. Therefore, with all due respect to Sovietologists, who are certainly better versed in the history of the Soviet Union than I am, I venture to suggest that *disruption* makes for a smoother, if slightly inaccurate, translation. (This term denotes the result of an activity while the Russian word denotes the activity itself.) When I hear that someone is guilty of disruption, I immediately understand that the miscreant is guilty of *causing* disruption. The parts of speech formed from the root *disrupt* track those formed from вред very well: disrupt, disrupter, disruptive, disruptively, disruption. I caution the reader to keep in mind that *disruption* denotes an offense that had serious consequences in the USSR during the 1930s. Nearly all of the discussions of “harm” in the text that follows arise in the context of this offense.

- (2) *The suffix -shchina* (-щина). There is no construction in English that quite expresses the idea that is suggested to a Russian by this suffix. It is always attached to someone's last name and denotes a serious disturbance of the peace associated with the person named, just as Americans, for the past four decades, have applied the suffix *-gate* to turn the name of just about anything into the name of a political scandal associated with it. The Pugachëv revolt during the time of Catherine the Great is called the *Pugachëvshchina*. Mussorgsky's 1886 opera *Khovanshchina*, describing the Strel'tsy Rebellion of 1682 led by Prince Ivan Khovanskii, which nearly cost the young Peter I his life, is best known in the West by its Russian title. The only attempt I have seen to translate the title—*The Princes Khovansky*—fails to capture the meaning of the Russian. Some of the purges during the 1930s and 1940s came to bear this signifier in Russian, for example, the Ezhovshchina terror of 1936–1938 led by Nikolai Ezhov (who himself fell victim to the terror). One might think that the word *terror* would convey the idea of this suffix. That word would be ludicrously exaggerated in the case of the present work, where the reader will learn of an alleged *Egorovshchina* and a *Luzinshchina* in academic circles. The idea might be best conveyed to Americans by recalling the McCarthy hysteria of the early 1950s. Still, *hysteria* doesn't quite convey the same idea, and the only comparable words that have remained in English from

that period are the words *McCarthyite* and *McCarthyism*, both of which refer more to attitudes than to actions. With some dissatisfaction, I have come to accept *Luzinism* as the closest approximation. Here again, the Russian suffix denotes an activity and the English translation a policy or attitude, but, as far as I can see, one can't do any better than that. At one point, I simply transliterated the Russian word Егоровщина. When the word *Luzinism* appears, the reader should imagine a group of malefactors of dubious political reliability gathered around Luzin. It is impossible to put any particular person in this imagined group, however, since in fact there was no attempt by Luzin to disturb the peace and good order of the new Soviet system.

- (3) *Kafedra* (Кафедра). This term is a Russian borrowing from the ancient Greek word *kathédra* (καθέδρα), which means both a seat and the sitting position. It is familiar to Western readers in the word *cathedral* and in the Latin phrase *ex cathedra* that signifies a doctrinal statement made by the Pope from the Chair of St. Peter. In Russian, it denotes an administrative subdivision of a University subordinate to a *fakul'tet*. Both of these overlap with several subdivisions found in American universities known variously as programs, departments, schools, (endowed) chairs, and divisions, but does not correspond exactly to any one of them. Consistency in the translation of this term is nearly impossible to achieve, and I beg the indulgence of any readers who find my terminology for Russian administrative divisions inaccurate. I have generally chosen to omit these terms entirely, especially as the exact niche in the Soviet university system is not usually relevant to the issue being discussed. In the notes to the session of 9 July, I have translated *kafedra* (in the Academy of Sciences) as *section*. The problem of translating social institutions from one language to another is fraught with difficulty in any case, and short of including organizational charts for a typical Soviet university and a typical Western university, one really can't convey to the Western reader the same picture that the Russian reader gets from the original text.

The same is true for government institutions. For example, the Soviet Union had an institution known informally as *NarKomInDel*, an abbreviation for *National Commissariat on Foreign Affairs*. (I find the common translation of народный as *people's* to be overworked and prefer to substitute *national*.) That full name is too long to be repeated constantly throughout a text; something shorter is needed. Should the translation be *State Department* or *Foreign Office*? Such a rendering would not only translate it, but, it seems to me, also transfer it to the United States or Great Britain. I have chosen to leave it as *NarKomInDel*, with an explanation of what it means. I apologize for the annoyance I know many readers will feel when they encounter this term repeatedly. Although *NarKom* might well be replaced by *ministry*, the context of this book is the Soviet Union; and Soviet nomenclature is not entirely unknown in the West, common examples being *Commissar*, *Politburo*, *Presidium*, and *KGB*.

Roger Cooke
August 2014

Preface to the English Translation

The present translation of *The Case of Academician Nikolai Nikolaevich Luzin* (henceforth referred to as *The Case...*) is being published more than 15 years after the publication of the Russian original. The main part of it consists of the transcripts of sessions of the commission of the USSR Academy of Sciences in the matter of Academician N.N. Luzin, which were held in July of 1936. The bottom carbon copy of the minutes, barely legible (but still legible!), was discovered completely by accident during the study of some old papers in the Presidium of the USSR Academy of Sciences. It had been believed that this transcript had been destroyed by someone with a personal interest in causing the disappearance of any information about the inquisition held over the founder (together with D. F. Egorov) of one of the most distinguished mathematical schools of the twentieth century, the Moscow School of the Theory of Functions. (One cannot resist quoting here the memorable words of Bulgakov in *The Master and Margarita*: “Manuscripts don’t burn!”) This inquisition was organized with the active participation of his students, who were among the greatest mathematicians of the century.

Fortunately, this discovery was made in the late 1980s, during the so-called Perestroika era, when the Soviet Union was entering on its final days and it had become possible to speak openly about the dark pages of Soviet history. During those same years, certain archives that had previously been closed to researchers began to open up. In these archives, especially in the Archive of the President of the Russian Federation, some success was achieved in locating documents that shed light on the circumstances of the case. A group of researchers from the Vavilov Institute of History of Natural Science and Technology of the Russian Academy of Sciences, under the leadership of one of the greatest historians of science of the twentieth century, Adol’f Pavlovich Yushkevich (1906–1993), began working on these materials. Unfortunately, Adol’f Pavlovich died when the work was barely begun, and the manuscript was prepared for 1998 publication by a group of specialists under the leadership of S. S. Demidov, consisting of A. I. Volodarskii, N. S. Ermolaeva, and T. A. Tokarëva. This group worked collectively, and it is now impossible to assign any part of the work exclusively to one or another of them. All of the texts were discussed jointly, and it is not possible to say to whom a given interpretation or a given portion of the commentaries is due. It is possible, however, to say that the majority of the work in reconstructing the text of the typewritten minutes and writing the commentary to it was done by Ermolaeva and the work of selecting and commenting the appendices by Volodarskii and Tokarëva. Materials from the Archive of the President of the Russian Federation and the necessary commentaries to them were furnished by the well-known Russian historian V. D. Esakov. It goes without saying that this work could not have been completed successfully without

the active assistance of the staff of the Archive of the Russian Academy of Sciences and its director B. V. Lëvshin.

The book was received with extraordinary interest in scholarly circles (especially mathematical circles) in Russia, and evoked numerous responses abroad. How could it have been otherwise, given that it told of events that had resonated throughout the world and left behind a painful wound in the Soviet mathematical community? The history of this case cannot be accurately judged without taking account of its consequences for the structure of the Soviet community, the polarization of forces that arose in that community in connection with it, and finally, the prevailing atmosphere in the community.

Although the subject here appears to involve events that occurred within the Soviet scientific community—the conflict of interests of different groups of scholars in the community in the extremely ideologized atmosphere of a totalitarian government—this history, being the history of a generational conflict arising in the course of development of scientific schools, has not only nationwide interest, but also general interest for the history of science. (Of course, the history of any of the leading schools is indisputably important for the history of science.) A similar generational conflict arose in the late 1930s and early 1940s in France, the conflict of the legendary “Nicolas Bourbaki” with the “holdover” group of representatives of the legendary school of the theory of functions of a real variable who were still running things: Emile Borel, Henri Lebesgue, Arnaud Denjoy, and others.² Another example of such a conflict is the opposition of the mathematicians of Warsaw and L’viv to those of Krakow during the 1920s. On the one hand there was a new school headed by Waław Sierpiński and Stefan Banach, working along new lines in the theory of functions, set theory, and functional analysis, while on the other hand the school of Stanisław Zaremba was developing the classical areas of analysis.³ And it is no wonder that, from the moment they arose, these conflicts became the subject of partisan debate among the mathematicians of the USSR, France, and Poland. In the materials of *The Case...*, we become acquainted with the reaction to the circumstances of the Luzin case by both the French mathematicians (from A. Denjoy to A. Weil) and the Polish mathematician Sierpiński.

Thus the Luzin case should be regarded as one of the important events in the formation of both the Soviet and the worldwide mathematical community. The French and Polish mathematicians attempting to help a colleague in difficulty with the means they had available to them looked at it in exactly that way.

As we have already said, 15 years have passed since the publication of the Russian edition. Quite recently, a folder of materials on Luzin turned up, one that had been preserved by someone (presumably D. E. Men’shov). Along with some exceptionally interesting fragments of notes from Luzin’s diary during the early years of his career, it contains some materials on the case: drafts of his letter to the Central Committee, newspaper clippings, and other things. A preliminary cursory examination leaves the impression that these materials contain nothing basically

²This “holdover” situation arose because a whole generation of young French mathematicians had perished on the battlefields of the First World War: Under the laws of the French Republic then in effect, young French scholars were not exempt from being drafted into the army.

³In a letter to Denjoy dated 30 September 1926—see “Letters of N.N. Luzin to A. Denjoy (a publication of P. Dugac, translated from French by F. A. Medvedev).” *Istoriko-matematicheskie Issledovaniya*, 1978, No. 23, 314–348 (Russian)—Luzin gives a remarkable description of this conflict as reported by Sierpiński.

new for understanding the essence of the case. A final judgment, however, must await careful study of these materials. Drafts have been discovered and published⁴ of the well-known biography of Luzin written by Golubev and Bari for the edition of Luzin's classic dissertation *Integration and the Trigonometric Series* (Moscow, 1951), containing fragments that are not in the published text. The content of these fragments confirms the reconstruction of the main events of the case proposed in *The Case. . .*

New information has come to light regarding the case of V. A. Kudryavtsev (1886–1953) mentioned in the materials. Luzin had been blamed for advancing Kudryavtsev's candidacy for the degree of Doctor of Mathematical Sciences *honoris causæ*, even though as a mathematician he was weak, in the opinion of the plaintiffs (Aleksandrov and Lyusternik). As it now appears,⁵ their choice of a target was very accurate on ideological grounds. Kudryavtsev was the stepson of the eminent Russian historian and social activist, Moscow University Professor A. A. Kizivetter (1866–1933), who had emigrated to Czechoslovakia in 1921 together with Kudryavtsev's mother and become a professor at Prague University. Naturally, Luzin's support of such a person looked very compromising from the point of view of the authorities.⁶

The present edition contains a few minor changes: certain dates have been made more precise, information has been provided on certain people mentioned in *The Case. . .* that was not in the original, and the literature referred to in the material of the case has been updated. None of these small changes is noted in the text.

Over the time that has elapsed since *The Case. . .* was published, two of its authors have passed on to another world. Boris Venediktovich Lëvshin (1926–2012) is no longer with us; he was a well-known historian and archivist and director of the Archive of the Academy of Sciences during the preparation of the Russian edition. Without his active collaboration this book could not have existed. It is now two years since the passing of Aleksandr Il'ich Volodarskii (1938–2012), a well-known historian of mathematics specializing in the history of the mathematical culture of ancient and medieval India and more recently in the history of mathematics in Russia and the USSR.

More recently, the well-known historian Vladimir Dmitrievich Esakov (1932–2015), who discovered the priceless breakthrough for understanding the essence of the “case” archival documents, passed away.

⁴See Tyulina, A. K. “On a manuscript by an unknown author (toward a biography of N. N. Luzin)” *Istoriko-matematicheskie Issledovania*, 2nd series, No. 11 (46), 2006, 267–306 (Russian).

⁵Petrova, S. S. “An episode from the history of mathematics at Moscow University in the first half of the twentieth century: Vsevolod Aleksandrovich Kudryavtsev.” *Voprosy Istorii Estestvoznaniya i Tekhniki*, No. 1, 2014, 142–147 (Russian).

⁶And in this respect the authorities turned out to be perspicacious. Kudryavtsev and his wife set up an underground secondary school in their home, one attended by the children of their friends, who were afraid of the pernicious effect the ideology of a Soviet school might have on their children. Among the subjects taught from the pre-revolutionary curriculum at the school was Divine Law. One of the students at this school was the future Nobel laureate Andrei Sakharov, who was a friend of the Kudryavtsevs' son. It is worth noting in this connection that in 1949 Kudryavtsev published a *Course of Higher Mathematics* co-authored by B. P. Demidovich. This book became one of the best-known courses of mathematics for non-mathematics majors. It has now undergone 11 editions, the most recent in 2007.

The translator of this book, the well-known American historian of mathematics Roger Cooke, has carried out a large and extraordinarily complicated task. The translation of the minutes was particularly complicated, since the translator had to deal not with an edited book but with the notes made by stenographers from the speeches of those who spoke at the meetings. It is not merely that the spoken language is far from being grammatically correct; by no means always was it heard and understood correctly by the stenographer, leading to a special complication in translation. It must be said that Dr. Cooke has dealt admirably with this problem; he has succeeded not only in finding the necessary words and turns of phrase to convey adequately the speaker's intent, but also in conveying to the reader the atmosphere of the time and place in which the dramatic events of the case took place. He was able to do this through his outstanding knowledge of the language and the intricacies of Russian social life in the nineteenth and twentieth centuries. For many years, he has been making the western reader acquainted with the history of Russian mathematics. It suffices to mention the scientific biography of S. V. Kovalevskaya⁷ written by him, which has enjoyed deservedly widespread notice. Bearing in mind that the typical western reader has little acquaintance with the intricacies of Soviet life during the 1930s, he has added a special glossary to this book to enable the reader to grasp the context and thereby adequately appreciate the materials of *The Case*...

For understanding the intricacies of the case and the possible outcomes it might have had, the publications by the well-known Ukrainian scholars V. M. Urbanskii and M. I. Kratko of materials on the case of the prominent Ukrainian mathematician M. F. Kravchuk (1892–1942) are very important. These publications appeared in 2002⁸ and 2011.⁹ A talented mathematician, the author of first-rate results in algebra, mathematical analysis, probability theory, and mathematical statistics, this outstanding teacher and effective administrator in science and education, a full member of the Ukrainian SSR Academy of Sciences, fell victim to an intrigue that was essentially of internal origin. The main accusation against him was of course ideological: bourgeois nationalism. The entire course of the case begun in the Institute of Mathematics of the Academy of Sciences of the Ukrainian SSR was accusatory in nature and had a condemnatory conclusion. It was followed by his arrest by the NKVD, the “judicial” investigation customary in such cases within the walls of the NKVD, and sentencing: 20 years in prison. Kravchuk disappeared into the boundless expanses of the GULag. Even the date of his death (9 March 1942) shown on the official report, based on the testimony of the same organs of power, does not inspire confidence. To return to *The Case*... and compare it with the case of Kravchuk, the thought immediately suggests itself that if “higher authorities” had not intervened to halt the process, the outcome might have been the same: a condemnatory conclusion of the commission, expulsion from the Academy, arrest, and subsequent disappearance into the depths of the GULag. It will not do to take reassurance from the fact that in our case the events occurred in 1936 (and not the horrific 1938, as in the case of Kravchuk!), or that a much more

⁷Cooke, R. *The Mathematics of Sonya Kovalevskaya*. New York, Berlin, Heidelberg, Tokyo. Springer-Verlag, 1984.

⁸Urbanskii, V. M. *Mikhail Filippovich Kravchuk, 1892–1942?* Moscow: Nauka, 2007 (Russian).

⁹*The Golgotha of Academician Kravchuk. A collection of documents*. Edited by M. I. Kratko. Luts'k: Volins'kii Institute of Post-Secondary Pedagogical Education, 2011 (Ukrainian).

eminent mathematician was involved. Scientific eminence did not furnish protective credentials to the famous biologist Academician N.I. Vavilov (1887–1943). One could say then that Luzin was very lucky. And not only Luzin, but all of Moscow mathematics: the arrest of the head of a school could easily have produced a chain reaction of ideological investigations and arrests. The “Golden Years of Moscow Mathematics” might have ended as soon as they began.¹⁰ Fortunately, that did not occur.

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¹⁰Zdravkovska, S., Duren, P.I. (Eds.) *Golden Years of Moscow Mathematics*. American Mathematical Society, London Mathematical Society: History of Mathematics, Vol. 6. Providence, RI, 1991.