

**200 YEARS FROM THE ESTABLISHMENT OF THE SUPERIOR
SCHOOL OF LAND SURVEYING ENGINEERING
IN THE NATIONAL LANGUAGE FROM WALLACHIA
(1818-2018)
REMEMBER: GHEORGHE LAZĂR**

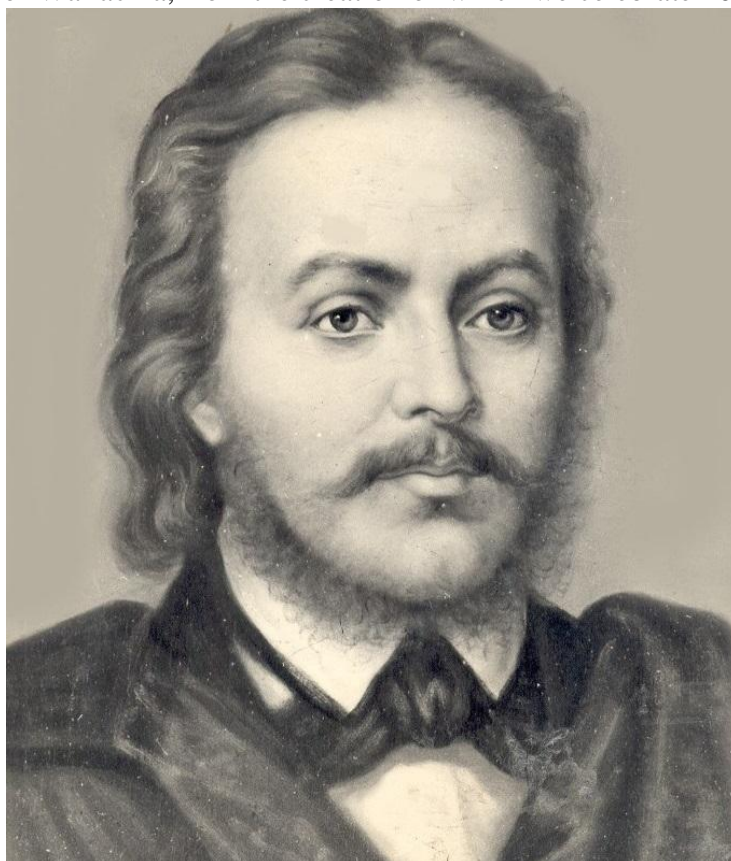
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Abstract: *The Superior School of Land Surveying Engineering, the first superior education program in Wallachia, was inaugurated two hundred years ago (1818-2018). This memorable event occurred owe to the arduous efforts of a great patriot, Gheorghe Lazăr, who carved a path for Romanians to pursue science and engineering in their maternal language.*

Honoring the ancestors is a sacred duty and an act of culture. In our history there are precursors whose dedication is a sacrifice in the sustainable building of education and culture. These national scientists and culture builders have endeavored to synchronize Romanian spirituality with the great European cultures. Such a precursor was the scholar, the patriot, and the man of school Gheorghe Lazar, the founder of the Superior school of land surveying in the national language of Wallachia, from the creation of which we celebrate 200 years.



Gheorghe Lazăr was born on 5 June 1779 in Transylvania, in the village of Avrig, at the foot of the Făgăraș Mountains, on the Olt Valley. His parents, Gheorghe and Maria, Romanian Orthodox, had the modest condition of the peasants, who had their little free property, as well as the saxons in the commune. Of the inhabitants it is said that a small part was made up of saxons, and a large part of the Wallachians, whose main occupation was carrying the goods of merchants from Hungary, Slovenia, Banat and Wallachia. The Lazăr family, whose real name was Lăzăroaie, had six children: Onea (Ioan), Sillia (Vasile), Luca, Zenovia, Ana and Gheorghe-Eustațiu, the youngest of them.

The first teachings he received in his native village, having as teacher the writer Ioan Barac. The smallest, Gheorghe, being smarter and more inclined to learn, was sent to school in Sibiu where he learnt Latin. Here, distinguishing himself among his colleagues, he attends the courses of the Academy in Cluj, in fact an annex of the Roman Catholic high school, having colleagues some other Romanians. The high school had courses of grammar, rhetoric, philosophy and an academic course, with two years of study.

Between 1799-1801, he graduated from grammar in Cluj, and in Sibiu the rhetoric course, after which he returned to Cluj for the courses of philosophy and law.

Between 1802-1804, Gheorghe Lazăr followed the first and second years of philosophy, representing his most productive years, where he is among the top students in learning, with very good grades in logic, history, geography, architecture, chemistry and mineralogy, disciplines which were studied at this stage of education. In terms of law courses in Cluj, he followed natural law, public, national and international.

Studying in Cluj, he wanted superior teachings, which he had to follow in Vienna. The family did not have the opportunity to support it, so he needed a scholarship. Upon request, the Orthodox Bishopric of Sibiu awarded him a scholarship from the contribution of the faithful peasants and citizens in 1806. Although the scholarship was granted for the study of theology, Gheorghe Lazăr focused mainly on scientific studies. In the recommendation, in the Report of the Transylvanian Chancellery, it was emphasized that the peasant son from Avrig was endowed with the "best talent and morality", in studies obtaining "the first class with distinction".

From 1806 to 1809, Gheorghe Lazăr completed his courses in Vienna, studying law and theology. But he sought the world of cultural, political, philosophical and scientific ideas of the time, studying philosophy, history, and especially physic-mathematical sciences, being convinced that by their appropriation he could be grateful to the romanian people.

In Vienna, between 1808-1811, he dealt with the study, translation and elaboration of some works in romanian. At that time, Vienna was occupied by French troops. Because of the enrolments made in the army, Gheorghe Lazăr was recruited among Austrian topographers. This position takes him away from his studies, but gives him the opportunity to make a fruitful practice in applying mathematical science to various field and office operations. With his intelligence and diligence, he attracted the attention and satisfaction of the leaders. After the end of the campaign, freeing himself from the civil engineering service and from the technical works he was commissioned to, he resumed his studies at the Faculty of Theology to complete his studies he needed for the ecclesiastical career. At the end of this course, Gheorghe Lazăr obtains the diploma of laureate in theology.

After three years in Vienna, Gheorghe Lazăr goes to Carlowitz to complete his Orthodox dogmatic and liturgical studies in order to be ordained. But, not ending his theological studies, he remained layman.

After 1811, Gheorghe Lazăr started his activity in Sibiu, being appointed professor at Sibiu Seminar, a post from which he was removed, being suspected of revolutionary patriotic ideas.

Because of the difficulties encountered, Gheorghe Lazăr leaves for Braşov in December 1811 without the bishop's permission.

Gheorghe Lazăr's ideas did not match those of the society from Sibiu. His activity was supervised by political agents, being considered "disobedient, restless, unreasonable". All this led to his dismissal being demanded on September 15, 1815, because he was considered no longer qualified as a professor at Cernăuţi. Under the conditions of the Habsburg rule, unable to realize what he thought, a school that would contribute to the revival of the national conscience of the Romanians, he directed his hopes over the Carpathians in Bucharest.

Accustomed to travel, he goes to Braşov, where he was also in 1811, as a translator of Romanian. This time, he enters as a teacher for the children of Grigore Ghica's sister, who in 1822 will ascend to the ruler's seat in Wallachia. With this family, in 1816, he crosses the border, dressed poorly and with few books and laundry. In a while, while staying at a host, he was known as the Lazăr-the engineer, even before 1818.

On the arrival of Gheorghe Lazăr in Bucharest, the Greek Academy from St. Sava was known from the previous century. Organized as an academy since 1707 by Constantin Brâncoveanu, it was given a new structure by the charter of Alexandru Ipsilanti in 1776, framed with well-known teachers, having also a local library. In 1816, along with arts, sciences, languages, history and geography, a new course of law was introduced. It was also decided the reorganization of the site from Schitu Măgureanu. In Bucharest, slavico-romanian schools were also well-known, from Sfântul Gheorghe-Vechi and Colţea, with schools also in other localities in the country, so also preoccupations for learning. Wallachia lacked a superior school in the national language.

Gheorghe Lazăr entered into relations with outstanding people of the capital, who were responsible for the organization of schools in the country. In the discussions with them, he outlined the plan to organize a school on a new foundation, a national school, an education based on a new structure, a new orientation.

On March 6, 1818, the administrators of the schools, Metropolitan Nectarie, Grigore Ghica, Constantin Bălăceanu, presented to the ruler Ioan Gheorghe Caragea an anaphor, requesting the establishment of this Romanian school, framed with "skilled teachers", to teach the young people in romanian, the most suitable being "Lazăr, the engineer who has recently come from Transylvania". The document, drawn up by the nobleman, was approved and reinforced by the royal resolution of March 24, 1818, this being the official date for the establishment of Gheorghe Lazăr's school of engineering-surveying, with teaching in the national language, in Wallachia.

It should be emphasized that in this period it was increasingly necessary to make measurements in the domains of the nobleman, to prepare the surveyings by specialists with engineering training, which Bucharest and the country needed so much. There was a need for a superior school to train such specialists. In Moldavia, in Iaşi, such a school was founded at the Royal Academy, on November 15, 1813, through the efforts of moldavian scholar Gheorghe Asachi, supported by Metropolitan Veniamin Costache.

Skilled in land measurements, topographical plans, surveyings, Gheorghe Lazăr has been asked for such works since his arrival in the capital. The noblemans, the parents of the children, asked the teacher to do practical work on the field. Coming to Bucharest, Gheorghe Lazăr did not limit his activity to teaching only the lessons, but he talked with prominent people, presented them with his plans, and he was pushing to implement them. He had to convince the administrators of the schools of the necessity of setting up a romanian superior education school, of the possibility of teaching superior sciences in romanian. Practically, the beginnings of this school of Gheorghe Lazăr, its foundations, were made since 1816.

It should be noted that before the arrival of Gheorghe Lazăr in Bucharest, there was a romanian language education in the romanian countries. The correspondence between the voivodes and the noblemans of Wallachia with the Patriarchate of Constantinople, the commercial privileges granted to the noblemans through charters, etc., required the existence of document writers, teachers, experts in Romanian language. There was a Greek education system in the capital, followed by the noblemans children and the officials of the clerical churches. In parallel, there were schools like Colțea and Sfântul Gheorghe-Vechi, attended by many students of all sorts, including Transylvanian youth, the education being cost free.

The school of Gheorghe Lazăr meant something else, representing a new and important stage in the development of education, being the first high school of surveying engineers, where all the teachings were taught in romanian. The struggle for the formation and development of a national culture is becoming stronger, the cultural ties between the three Romanian countries are growing, together with the economic relations and the trade of goods.

In the 1818 public notice, Gheorghe Lazăr underlines his striving for the establishment of a superior education form. "With shame comes a nation that is so old, so famous, glorified and gifted with all the roots of the earth ... with a word of royal origins, but with no school that is more laborious, a science academy in its mother language". At the same superior education form he referred also in the "Call for the Submission of a Mathematics Course" from 1822.

The school of Gheorghe Lazăr presents the curriculum of a complete education, with all stages, including the superior one. Speaking of his school, of the "moment of Lazăr", it must be underlined that starting with him, there will be a superior education in romanian, with him being the founder of this form of school in Wallachia.

School administrators, concerned about the establishment of a superior school in romanian, sent some young people to study abroad to learn "philosophical crafts", so that later to be enrolled as school teachers in Bucharest.

The structure of education in Gheorghe Lazăr's school was as follows:

- the grammar course lasted three years and taught reading, writing, arithmetic, geometry and religion in three classes;
- rhetoric, also called humanitarian, with a duration of two years (poetics and rhetoric);
- the two-year philosophical course of logic, algebra, physics, architecture, history, chemistry and mineralogy;
- two-year academic course, with law, philosophy, medicine, architecture, etc.

Depending on the possibilities, on the teachers he could use, on the necessity of that time, Gheorghe Lazăr elaborates a complete plan, for all stages, from elementary classes, to superior education.

It should be noted that the plan elaborated by Gheorghe Lazăr differs from that of Gheorghe Asachi, applied at the Royal Academy in Iași on November 15, 1813. He opens in the capital of Moldavia, Iași, a romanian land surveying engineering course in the Greek school, while Gheorghe Lazăr organizes separately a romanian school with all levels of education. By doing so, he had imposed upon the romanian people and the possibilities then, such a plan, verified in the schools of the Austro-Hungarian Empire, at the beginning of the nineteenth century. It should be taken into consideration that the curriculum had a secular orientation.

An important place is occupied by the study of mathematics in the superior education stages: arithmetic "with all its parts", theoretical geometry, trigonometry, algebra, architecture, geodesy or field engineering, etc., all other objects outside of geography are related to the study theoretical and practical aspects of mathematics.

Gheorghe Lazăr has drawn up the first manuals necessary for the Romanian superior education, highly appreciated in the years to come. For the last stage of education, Gheorghe Lazăr also provided the study of philosophy and law, disciplines that prove to be necessary for the modern state.

Among the students who enrolled in the school opened by Gheorghe Lazăr, there were many people coming from the Greek school. It should be noted that the Greek Academy continued to operate after 1818, until 1821. According to Ion Ghica, when Gheorghe Lazăr arrived in Bucharest, the students from Udricani, Colțea, St. Gheorghe-Vechi and from all the churches emptied those schools and left for St. Sava, with Petrache Poenaru, Eufrosin Poteca, Simion Marcovici and many other young people from the Greek school.

At Gheorghe Lazăr's school there were over twenty school children who regularly attended. Among them were: Ioan Heliade Rădulescu, Petrache Poenaru, Ion Pandeale, Christian Tell, future general, Costache Moroiu, Anton Pann, Scarlat Rosetti and others. To these were added six moldavian young scholars who have been sent by moldavian Metropolitan Veniamin Costache to "the famous Parnassus of muses of the cultivated Gheorghe Lazăr" after the abolition of the Iasi School of surveying. The original documents from the end of the 18th century prove the presence of the Transylvanian youths at the Colțea school in Bucharest. There has been a tradition in this regard. Some of them have also been taught at St. Sava School, as well as in other Bucharest schools, such as St. Gheorghe-Vechi, Antim etc.

Besides mother tongue, Gheorghe Lazăr knew several languages: Latin, French, German and Hungarian.

Gheorghe Lazăr's school taught young people from the three Romanian countries. The lectures of the Transylvanian and Wallachian teachers, the discussions between them about the common origin, the historical events, the language, customs, etc., will contribute to the development of the national consciousness.

The school of Gheorghe Lazăr addressed young people from all social levels. Among his students were sons of nobleman, but most of them were the ones from the other slums schools, most of whom were sons of furriers and tailors, coming from low-income families.

The administrators of the schools, in the desire to have trained teachers for the St. Sava School, decided to send abroad the first scholars who had distinguished themselves in their studies: Eufrosin Poteca, Ion Pandeale, Costache Moroiu, Simion Marcovici and Petrache Poenaru. They studied abroad between 1819-1820.

The establishment of the school St. Gheorghe-Vechi was discussed in 1817, having three teachers. One of them taught students notions of superior mathematics. Gheorghe

Lazăr asked, as a help, pope Paul to be a teacher for the beginner classes. He is considered the first teacher assistant. Then, from 1818, Eufrosin Poteca, Petrache Poenaru, Ladislau Erdeli, Ioan Heliade Rădulescu and Grigore Râmniceanu came.

Through his conception, through the ideas behind the organization of his school, Gheorghe Lazăr was close to the revolutionary movement led by Tudor Vladimirescu. General Christian Tell, a former student of Lazăr, wrote to George Barițiu, stressing that "He (Lazăr) and Tudor knew each other very well, and he was often called up to the Cotroceni monastery." Further, Tell wrote that Gheorghe Lazăr taught Tudor's people "how to make the carriages and how to cannonade." Ioan Heliade Rădulescu also mentioned that he accompanied Gheorghe Lazăr to Cotroceni, slept for several nights here and that the fortification of the Cotroceni camp attracted the persecution that came over him.

The Greek Academy closed its gates in March 1821, with the outbreak of Tudor Vladimirescu's revolutionary movement. It must be stressed that the two academies, romanian and greek, operated in parallel from 1818 until 1821. The historian V. A. Urechia stated that, at the outbreak of Tudor's revolutionary movement, all the teachers and students left Lazăr's school and lined up, becoming active supporters of the movement.

Gheorghe Lazăr also faced difficulties regarding the school location because the rooms in St. Sava were occupied by tenants, greeks, serbs, albanians. The school administrators had no funds to print the textbooks.

Appreciating the educational value of the reading books, Gheorghe Lazăr pleaded for the importance of the school library. Thus, the library of St. Sava was shortly the largest in the country. He also paid great importance to school textbooks in the mother tongue, without which no thorough education can be done. Even during his studies in Vienna, he elaborated books. The activity continues in Bucharest, developing mathematics and philosophy courses. Preserved: Mathematical Arithmetic, Right Trigonometry, Geometry. He introduced Kant's philosophy course, as well as logic and metaphysics, by the same author.

Mathematical arithmetics includes the inscription: "Made up firstly in romanian by Gheorghe Lazăr, for the benefit of its school pupils from St. Sava school, Bucharest, 1821, February 26, Lazăr." Academician Dimitrie Pompeiu stressed that "it is a scientific book", including "both rational and practical math problems", that "it distinguishes itself by great clarity" and can contribute especially to the establishment of mathematical terminology. The other work, The Right Trigonometry, written in 1821, was transcribed by Traian Lalescu, who also published it.

In his conclusions, Traian Lalescu, editor of Trigonometry by Gheorghe Lazăr, stated that, independently of the period in which it was written, the work is good, having "a historical place of honor" in our scientific literature, and the language "unshaken", „with naive but interesting adaptations”, is a pleasant reading today, at the level of the pathetic chronics of the eighteenth century.

Gheorghe Lazăr belongs to the scientific education, as Traian Lalescu concludes, being the first romanian engineer in Muntenia, "the first great teacher of romanian ideal", as Nicolae Iorga called him, and the first author of textbooks for the mathematics discipline.

In organizing the school, the Transylvanian scholar was guided by an important principle: the connection with practice. Through his lessons, Gheorghe Lazăr responded to the demands that were being made at that time, to prepare engineers for surveyings. The principles applied by Gheorghe Lazăr were fruitful. With his students, in 1821, he had drawn

up the plan of the Fântânele domain in Ilfov County. At St. Sava school, Gheorghe Lazăr formed romanian engineers, among them being Grigore Pleșoianu, Vasile Urzescu, etc. It was a good start for superior technical education in the national language. Unfortunately, it did not have continuity. The school of Gheorghe Lazăr ended his activity in March 1821, after Tudor Vladimirescu arrived with the army on the outskirts of Bucharest and settled in Cotroceni Monastery. From the ideas of these movements, stated later Nicolae Bălcescu, a former student of Lazăr, would progressively develop the ideas of the Revolution of 1848.

In large part, the ideas of Gheorghe Lazăr are the same as those of the Transylvanian School, which developed a new type of culture for romanians, explaining the noble origins of the romanian people and language. Ion Ghica pointed out that the Avrig teacher was "from the School of Petre Maior and Gheorghe Șincai" and from them we have "the most demanding researches on the history of the nation". The pupils of Lazăr received the ideas of the Transylvanian School as a precious good, as an inheritance from their teacher and from the teachers of the Blaj school.

Alongside school and classroom learning, Gheorghe Lazăr also thought about the outside activity, sought his disciples to cherish the theater, to develop it as an educational tribune. Ioan Heliade Rădulescu reported the efforts made by Gheorghe Lazăr, together with Iancu Văcărescu, in organizing a theater in romanian. Thus, they encouraged Professor Ludovic Erdeli to translate in romanian the play "Penurious", by Molière, which was presented in romanian on stage for the first time. The actors were the students of Gheorghe Lazăr.

The heavy struggle that had gone on in these years had begun to weaken the forces of St. Sava's professor, who painfully witnessed the destruction of his labor. His health was shattered. His only satisfaction was the appointment in 1822 by the Ottoman Gate of Ioan Grigore Ghica as ruler, this change corresponding to the aspirations of Gheorghe Lazăr.

In the spring of 1823, Gheorghe Lazăr, although still young, weakened by power, lived in a cell at St. Sava. Then he moved to his cousin, who lived on the outskirts of the city. As the illness worsened, Gheorghe Lazăr wrote to the Avrig family to take him home. By June 1823, the bigger brother Onea came, and in a wagon, he led him to Avrig. In the cart he was carrying three hundred books, a violin, and some topographic instruments. At his departure he was led by his students: Ioan Heliade Rădulescu, Daniel Tomescu and Christian Tell.

After less than three months of suffering, Gheorghe Lazăr died in his father's house at Avrig on September 17, 1823, three months after he was 44 years old. He was buried near the parents' house in the courtyard of the Avrig Orthodox Church. In 1865, a former student, Carol Rosetti, raised him a marble monument. The epitaph on the tombstone would have been written by Gheorghe Lazăr before he died. To commemorate the memory of Gheorghe Lazăr, in May 1886, in Bucharest, his statue was inaugurated.

From the family attended an old nephew and some great grandchildren. The statue, the work of the sculptor Ioan Georgescu, was erected on the site of St. Sava's church.

Remembering the illustrious figures of our nation's past, the writers and leaders of the Revolution of 1848 should be recalled, such as Nicolae Bălcescu, Ion Ghica, Grigore Alexandrescu, Cezar Boliac, Dimitrie Bolintineanu, who studied and formed at the School of Gheorghe Lazăr, in the spirit in which he laid the foundations of modern national education.

The role of Gheorghe Lazăr's School is emphasized by the former student and collaborator, Ioan Heliade Rădulescu. He later said that "without Lazăr and that school, we

would not have until now been conscious of what we were, of what we are and of what we could become."

On the anniversary of the 200th anniversary of the foundation of the superior school of engineering and surveying in the national language in Wallachia and the 239th anniversary of the birth of the great scholar Gheorghe Lazăr, the servants of school and culture, the whole romanian nation, pay a great homage to the great founder of romanian school and culture.

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