

Goldwater Memorial Hospital and died in New York City in 1973.<sup>59</sup>

As the War came nearer to Hungary, the non-quota contingent became filled for years ahead, mostly by pure and applied scientists, medical doctors and mathematicians. Yet, many did not succeed in getting an invitation. The celebrated Budapest surgeon, Professor Lajos Ádám was told that the Mayo Clinic in Rochester, Minnesota would not extend an invitation although Dr. C. W. Mayo counted him “as one of my very good friends.” Ádám’s well-known and well-connected Hungarian-American protector, the journalist and author Emil Lengyel, was told that “we are up against conditions here at present which make it impossible for us to guarantee bringing him here as a Professor or to guarantee any salary.”<sup>60</sup> Ádám stayed in Budapest and fortunately survived the War.

In the meantime, many non-scientists managed to get out. Refugees included many people from the world of film and theater, entertainers, literary people, actors, directors and musicians. In early 1940, Von Kármán had the distinct impression that “New York and Los Angeles are full of newcomers from Budapest, but almost exclusively artists, actors, and writers. Certainly more than half of the music and literature is now in the United States,” he commented to a friend in Hungary.<sup>61</sup> Much later, in the 1950s, Michael Polanyi himself sought to move to the University of Chicago, but because of his brother’s leftist political entanglement in pre-World War I Hungary, he was refused entrance to the United States.

For people naturally dependent upon their native language and culture, immigration was merely the lesser of two evils. It may have saved their life but, in many cases, emigration nonetheless turned out tragically.

## Conclusion

The close cooperation of Hungarian émigré scientists and scholars at times of trouble and need brought about a rather strong and durable exile community, international in nature and very personal in character. The remarkable presence of Hungarian scientists and scholars, artists and authors, musicians and film people on the international intellectual and professional scene at large is partly an outgrowth of what I’d prefer to call the chain reaction of support that ran across generations,

<sup>59</sup> *Magyar Életrajzi Lexikon*, Vol. III (Budapest: Akadémiai Kiadó, 1981), p. 311.

<sup>60</sup> Dr. C. W. Mayo to Emil Lengyel, May 19, 1941, Emil Lengyel Collection, Bakhmeteff Archives, Butler Library, Columbia University Library, New York, N.Y.

<sup>61</sup> Theodore von Kálmán to Lajos Bencze, February 19, 1940, Theodore von Kálmán Papers, File2.24, California Institute of Technology Archives, Pasadena, CA.

professions, race and, at times, gender. The intimate bonds of the home community were imported to and reestablished on the broader stage of the world. In a strange new sense, the personal ties with the fellow-Hungarians contributed to the strong international presence and success of Hungarian professionals as a virtual community abroad. Building this virtual community created a strong representation of scientific and scholarly Hungary in exile.

Only a thorough comparative research can determine how far the Hungarian case differed from other international examples. But it is safe to say in conclusion that networking, cohorting, and personal friendship did certainly contribute to what Laura Fermi and others in her footsteps called “The Mystery of Hungarian talent,”<sup>62</sup> the enormous intellectual contribution and success of Hungarians worldwide. Certainly it is worth giving more attention to this relatively neglected dimension of the social condition of science and scholarship.<sup>63</sup>

<sup>62</sup> Laura Fermi, *op. cit.*, p. 53-59.

<sup>63</sup> Cf. Jean Medawar & David Pyke, *Hitler's Gift. The True Story of the Scientists Expelled by the Nazi Regime* (Arcade, 2001).

## **POLANYI'S ENVIABLE ALMA MATER PART ONE**

**Presented by Tamás Bendik**

The Hungarian word 'Minta' stands for 'pattern', 'model', 'paragon' depending on the context. Michael Polanyi's alma mater was nicknamed 'Minta' from its very inception. Because it was meant to be and became a model of a new Hungarian teacher training college and high school.

The first teaching day of the school was the 7th of October 1872, with 25 students in two classrooms. 5 years after the compromise with the Habsburgs, the time was ripe for the Hungarian government to proceed to the implementation of its inspired and innovative ideas in the field of public education. The vision of nation-building as well as capitalist industrial production were gaining momentum and required urgent changes in schooling for the people and in training of its teachers and educators. New type schools were badly needed to shape clerks and officers for the independent Hungarian government departments and public offices. Civil engineers, scientists, entrepreneurs were in short supply, too. Even the military career required a so-called 'maturity' certificate of secondary education.

Institutional teacher training and accreditation in Austria meant that after three full university years the undergraduate could stand for a secondary school teacher's qualifying exam, but only in a few designated cities, all in Austrian provinces. The new Hungarian state needed its own system of teacher training centered in Budapest.

The 'Minta' model school was preceeded by the teacher-training college of the Pest University's Faculty of Liberal Arts. The college was founded by József Eötvös, minister of public education and reformer of secondary education. He started out from the assumption that the bulk of the contemporary teaching staff were poorly trained in their disciplines and used rigid and soulless methods of teaching. In order to break the Prussian pedagogical tradition, it was necessary to adapt university training in scientific disciplines to the needs of teaching at secondary level and adopt new European trends of teacher training. But conservative university professors opposed both, referring to their professional independence. This allowed Eötvös to convince the government to establish a separate college attached to the faculty to train grammar school teachers, and another one attached to the Polytechnical University for vocational ('Real') school teachers. When building the two colleges, Eötvös and his followers used progressive examples from France and Germany. But unlike the French École

Normale Supérieure, for instance, Eötvös insisted that the ‘Tanárképezde’ (Hungarian word for ‘teacher training college’) be kept within the university structure to maintain a higher standard of scientific education and research for teacher trainees.

The departments of the college corresponded to the mix of school subjects the would-be teachers were supposed to teach. Their functioning was modelled after the German university seminars, but unlike in that country, department heads didn’t act independently from each other. In Budapest they were called ‘pilot teachers’ and acted in a concerted manner, under the guidance of the college director appointed by the minister of education in accordance with the collective recommendation of the staff.

The college’s statute adopted on the 3rd of May 1870 stipulated that all those who intended to become secondary school teachers must undergo thorough training in the chosen disciplines, in methods of their teaching, as well as be motivated for research. The statute also established the five departments of the college, such as:

1. classical languages and literature,
2. history and geography,
3. maths,
4. sciences,
5. educational and teaching studies.

The last one was decided to be launched after the first set of students completed studies at one of the other departments.

In 1871 the then 28 years old Mór Kármán, a protégé of József Eötvös, returned from his studies of philosophy and philology in Vienna and of teacher training in Leipzig. He was entrusted by the first director of the Teacher Training College to work out the concept of its educational department. Kármán’s concept contained the idea of *a grammar school to serve as an internship clinic and test ground for aspiring teachers*. To avoid the opposition of the conservative university management to a daring reform proposal by a young scholar fresh from abroad, Kármán consented that the concept be pushed through the bureaucracy under the name of Antal Bartal, the first college director. He even solved the problem of funding the grammar school, which hadn’t been earlier envisaged by the founders of the college. He argued that the study abroad grants for would-be teachers failed to provide an adequate return, since too many scholarship holders did not acquire adequate practical teaching skills abroad or avoided the teaching career altogether. The argument was found to be valid, and in 1872 the so-called ‘Practice (Demonstration) Grammar School’ was launched. In its mission statement one could read: ‘... *to serve as a model of a school life wherein the pupils’ moral and intellectual advancement is the concern of the entire teaching staff, the teacher-trainees find a motivating example to follow and the teachers an inspiring memory to take away when they retire or quit.*’

In 1875 legal regulations were adopted to allow for secondary school teachers to be accredited in Budapest, instead of in Vienna. This allowed the college and the Minta demonstration school to fulfill its pioneering vocation.

## POLANYI'S ENVIABLE ALMA MATER PART TWO

### Presented by Adorján Roknich

Michael Polanyi was not the only student of the Minta, who later became famous. His school, then called Demonstration Grammar School of the Royal Hungarian Teacher Training Institute, was the most outstanding educational institution of the country at the turn of the century.

Here learnt other prominent scientists, such as Kálmán Kandó, who gained success in the field of electrified railway locomotion, or Theodor von Kármán who was later called the 'father of jet-propulsion', or Edward Teller, founder of the H-bomb.

Michael Polanyi entered the Minta in 1900 and left it in 1908. This period of time between the turn of the century and World War I, was among the most prosperous in Hungary's history. The industrial revolution was completed ahead of some neighboring countries. Economy, business, international trade were booming. Budapest was rising as a rival of Vienna in Central Europe, new spectacular architectural complexes were built, such as the Houses of Parliament, the Museum of Ethnography, the Museum of Applied Arts etc.

Public education, sciences, mass culture, the arts were in unprecedented progress.

If we only mention those whom Michael Polanyi could see in the corridors of the school or in its yard, even then we could name quite a few prominent figures in any branch of science.

Among the philosophers and sociologists the most important is the elder brother of Michael's, Karl Polanyi, who passed his 'maturity exam' in 1904 and a few years later became president of the Galilei circle.

Vilmos Szilasi graduated in 1906 and after World War I, he was the disciple of E. Husserl, later became head of the department of philosophy at the University of Freiburg.

Ambassador Pál Sebestyén, who also left the school in 1906, belongs to the well-known experts of international law, just as István Szászy, a scholar of private law.

Dénes König, after graduating in 1902, became an important mathematician researching the Graf-theory.

The medical science too, received a lot of talented researchers, who learnt in our school. Here belongs István Rusznyák, who was the colleague of Albert

Szentgyörgyi in the 1930s and later was awarded the prestigious Kossuth prize, and between 1949-70 he was the president of the Hungarian Academy of Sciences. He passed his 'maturity exam' in 1907, one year before Elemér Hainiss, the well-known pediatrician.

Béla Zolnai, who became famous for his research in the field of linguistical ethics and stylistics, later became a teacher of the University of Szeged, and helped a lot to launch the career of the famous poet Miklós Radnóti.

In conclusion, I would like to underline that the above mentioned and many other remarkable alumni of those times could thank their successful careers to the fact that they could learn from the best high school teachers of the country and in the best equipped labs and classrooms.

## POLANYI'S ENVIABLE ALMA MATER PART THREE

### Presented by Petra Darvas

We can not fully examine Polanyi's life-work without knowing his teachers, who played such a big role in his life.

Sándor Pályi was the 'Minta's' geography and biology teacher from 1904 for 25 years. After graduation, he became an assistant at the Department of Industrial Botany of the Politechnical University. He initiated the microscopical method of food product examination. Later he considered the teacher's vocation as his primary mission. He was one of the initiators of grammar schools for girls. He was among the founders and the headmaster of an all-girl grammar school between 1896-1904. According to the 1928/29 school report: Pályi only taught '*...children what fits them, in a way that is suitable for their soul, and only as much as satisfies their curiosity.*'

Besides his activity at school he also worked a lot in the field of shorthand writing, as the developer of the system, created by Sándor Nagy. He also played an important role in adult education. In 1903 he was one of the launchers of the liberal 'Szabad Lyceum' (Free Grammar School). First he was the secretary, later became the vice president of this adult education institution. He was the director of the 'Szabad Egyetem' (free university), established by the 'Szabad Lyceum'. The Erzsébet Népakadémia (Elizabeth Folk Academy), in which he took part as co-president, was founded in accordance with his design, too.

For decades he was active in dissemination of scientific knowledge for the general public, having delivered hundreds of lectures. He left the Minta demonstration school at the age of 70.

Péter Szabó, who was Polanyi's math teacher, came to the Minta 10 years after graduation. Later he became one of the most outstanding colleagues of Manó Beke, head of the Reform Commission of Mathematics Teaching. He participated with Beke at the 4th International Council of Mathematicians. He was a descendant of an ancient family of intellectuals from Transsylvania, a many-sided person. Besides his interest in methods of teaching, Szabó was very active in researching the life-work of the two Bolyais. He too, contributed to the development of shorthand writing, and taught it at school. Moreover, he was the teacher-president of the Youth Music Circle, and was active in organizing concerts at the school.



Zsigmond Ritoók senior (left the school in 1920), in his memoirs mentions Péter Szabó, as an excellent teacher and a distinguished man. He died at the beginning of World War I, after a short illness.

Miklós Szíjártó, the pupil of Lóránd Eötvös taught at the Minta school for almost 30 years. During his career he trained generations of mathematicians and physicists, among them world-famous scientists such as Michael Polanyi or Edward Teller. He was a pioneer of teaching experimental physics. He encouraged students to draw their own conclusions from what they saw or experienced in the labs. He worked out the arrangement and equipment of the physics auditorium and laboratory consisting of 4 rooms.

He held extra lessons for the curious students, where they could try themselves the various experiments. Following his idea, part of the school's terrace was transformed into an observatory. During its construction he gave up his summer vacations to be there. He was the author of school text books in physics and mathematics which received broad recognition.

He routinely took part in the planning of curricula, in 1899 he co-operated with Lóránd Eötvös. He was commissioned by the Museum of School Equipment to draw up a list of the equipment needed at physics labs. He took part in adult education as well, held lectures at the 'Szabad Lyceum' and at the 'Erzsébet Népakadémia'.

The memoirs of some of his students also prove, how popular he was among his followers. Zsigmond Ritoók Senior remembers that Szíjártó invited the volunteers to come to school on Sundays. He retired in 1926, after 36 years of teaching at the Minta school. For this occasion, the school organised a memorable farewell party for him. An academic excellence fund named after Szíjártó was established by his pupils and their parents.

At the beginning of the century one of the most prestigious and popular teachers of the Minta was László Négyesy. He studied in Budapest and Vienna. He was the teacher-trainee of György Volf, who after his appointment as director, invited Négyesy to teach. His career at the Minta lasted for 20 years, from 1891 to 1911. His activity in the field of literary history and esthetics was also significant. He published plenty of studies, was a co-editor of the Great Pallas Encyclopedia. In 1896 he became a member of the Academy of Sciences, in 1904 of the Kisfaludy Society. In 1911 he was elected vice president of the Society of Hungarian Literary History. The same year he got an independent professorship at the University of Budapest. Négyesy also played an important role in shaping the educational system. He became a member of the National Council of Public Education, took part in preparing curricula and ordinances of the ministry of education. He was also very active in the public life of teachers. Between 1896-99 he was the editor of the journal *Hungarian Pedagogy*.

He was the secretary-general , later the president of the National Grammar School Teachers Society, in 1904 he also edited its bulletin. It was the year when the Teachers Society's member organizations in Budapest and in the country were engaged in a heated dispute about the pay rise of the teachers. But these many-sided activities didn't hinder Négyesy in his outstanding tutorial performance. In the first decades of the 20th century, he became famous for his lectures in stylistics at the Faculty of Arts. Among his students we can find well-known writers and poets such as Gyula Juhász, Árpád Tóth, Mihály Babits and Dezső Kosztolányi.

For many years Négyesy was the teacher president of the Minta's literary and debating club. In the school year of 1907/8 the 8th grader Michael Polanyi, who for 2 years was the student-president of the club, delivered a lecture on the poetry of Endre Ady, one of Hungary's world famous poets.