

S Collections in the Jesuit Archbishop's Secondary Grammar School in Kalocsa (Hungary)

Magdolna Rébay^a

^a University of Debrecen, Faculty of Arts,
Institute of Educational Studies
and Cultural Management, Department
of Educational Studies, Hungary
rebay.magdolna@arts.unideb.hu

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Abstract In this paper, the author introduces the collections of the secondary grammar school in Kalocsa. The author researches: (1) the subjects that the formal collections were created to facilitate teaching, (2) what their purpose was, (3) the manner in which these collections were accumulated, and (4) how they were used. The annually published school yearbooks provided the main sources of this research. As a method, we applied historic document analysis. The value of teaching natural sciences was amplified in the course of the 19th century, primarily in its second half, as a result of industrial modern-

isation. Thus, a number of natural scientific subjects were taught on an obligatory basis (natural history, geography, physics, chemistry). Studying these subjects was facilitated by the collections, which were also established in this grammar school – besides the collections of humanities such as the historical one. The mineralogical collection constituted the most outstanding one in the Kalocsa secondary grammar school, but its animal and plant collection also burgeoned. Behind these outstanding collections stood one or other Jesuit teachers, who were driven, besides the aim of teaching, by the desire of scientific understanding. Among the Jesuits in Hungary, just as in other countries, the interest in natural sciences escalated. The collections grew during the study tours announced for students, in the course of the curators' acquisition excursions, and also as a result of donations, purchases and exchanges. Following the state appropriation, the material of the Kalocsa caches was dispersed.

Keywords collections, Jesuits, secondary grammar school, Kalocsa, Hungary, science, education, 19th and 20th century

Introduction¹

In our study, we introduce the history of the archbishop's secondary grammar school at Kalocsa, focusing on its collections. In 1860, the Society of Jesus took over the management of the school because of the decision of the school's maintainer. It was the only Jesuit secondary school in Hungary until 1912, when the Pécs Gymnasium was founded. In other areas of the Austro-Hungarian Monarchy, the Order ran several secondary schools from the 1850s onwards, following a favourable change in church policy, namely in Mariaschein (Šejnov-Bohosudov) in the Czechia, in Kalksburg in Lower Austria and in Feldkirch in Vorarlberg. These institutions were similar (for example, in their aims and methods of religious education), but they differed from each other, since they had to conform to the standards of the state, even after they had acquired the right of publicity. As the two governments were allowed to pursue independent educational policies after the Austro-Hungarian Compromise of 1867, the two halves of the Monarchy were governed by different laws. The curricula were adapted to the requirements of the time, so most of the subjects were the same.

Collections were set up in all secondary grammar schools to promote education, in line with the customs and standards of the time. This was also the case in Jesuit institutions. In our study, we will examine (1) the subjects that the formal collections were created to facilitate teaching in the Kalocsa secondary grammar school, (2) what their purpose was, (3) the manner in which these collections were accumulated, and (4) how they were used.

The annually published school yearbooks (1860/61–1943/44, 1947/48) provided the main sources of this research. The school director reported in the yearbooks on the content and growth of the scientific collections (“museums”), so changes can be easily tracked. Teachers at the school have also published articles on the use of the collections. The school history summaries from each school year also covered

1 The research was accomplished with the support of the Scientific Fund at the Faculty of Arts of the University of Debrecen. It was presented at the 43. ISCHE Conference in Milan, on the 31st of August, 2022.

them, as did the obituaries of the teachers. The yearbooks are therefore the richest primary source on the subject. They also contain histories of laboratories and collections that can be considered as secondary sources published (cf. Hegedűs, 1940; Hegyi, 1936; Nagyfalusy, 1936; Pap, 1936; Tóth, 1908). Information from the yearbooks has been added to summaries in older and more recent publications (Klamarik, 1896, pp. 189–193; Tóth ed., 1910; Adriányi, 2000, pp. 346–348; Lakatos, 2010; Bálint, 2021). In the paper are also included for illustration photographs of the collections, which can be found in the Hungarian Jesuit Archives². The research could be supplemented with other archival sources at a later stage, but these are locally researchable in Kalocsa, and our experience of previous archival research on school history suggests that the results would be very tentative. In the so-called mixed documents (5.48 linear metres), we could probably find sources from the correspondence of the Directorate.³ We therefore preferred to use the yearbooks. As a method, we applied the traditional historic document analysis.

The value of teaching natural sciences was amplified in the course of the 19th century, primarily in its second half, as a result of industrial modernisation. (In other European countries, similar processes took place [cf. McCulloch, 1987; Zott, 2007]). On the one hand, natural scientific expertise became a part of general knowledge, and on the other hand, secondary grammar schools had to assume the preparation for technical, natural scientific, and medical academic studies, as well. Thus, a number of natural scientific subjects were taught on an obligatory basis (natural history, geography, physics, chemistry). These were facilitated by the natural science laboratories and collections that were made compulsory in secondary grammar schools in Hungary. In fact, at the end of the 19th century, the role of the subjects in education was strengthened, as in other European countries

2 Archives of the Hungarian Province of the Society of Jesus.

3 Cf. KFL VI. 1. Kalocsai Érseki Főgimnázium. Kalocsai Főegyházmegyei Levéltár. Available at: <https://archivum.asztrik.hu/?q=oldal/kflvi1-kalocsai-erseki-fogimnazium>.

(cf. Insulander & Thorsén, 2023). It is therefore worth examining this process through case studies. This study focuses on a single school, the Jesuit College in Kalocsa, whose collections, especially in the natural sciences, can be considered to be outstandingly rich. Alongside these, collections of humanities (e.g. history) have also been established. In this study, we will also look at these collections, with the aim of giving a complete picture of all the collections and their role in the school.

Behind these outstanding collections stood one or other Jesuit teachers (e.g. Fr. Mike Tóth⁴, Fr. János Thalhammer⁵, Fr. Ferenc Speiser⁶), who were driven, besides the aim of teaching, by the desire of scientific understanding. Among the Jesuits in Hungary, just as in other countries, the interest in natural sciences escalated (cf. Udiás, 2019), which also contributed to the scientific research efforts, and through this, to establishing the collections. The Jesuit secondary grammar school was no longer an explicitly or more humanistic institution.

We do not attempt to compare the collections of the individual Jesuit grammar schools in this paper, although it would yield interesting

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- 4 Mike (Mihály) Tóth (1838–1932) entered the Jesuit order at the age of 16. He began teaching in Kalocsa in 1862 and spent 52 years at this gymnasium. For three years he taught at the Jesuit College in Kalksburg (Austria) and for one year at the Jesuit secondary grammar school in Pécs. His main subject was natural history, but he also taught many other subjects. He founded and published three religious journals and also scientific publications ('Tóth Mike [Mihály]'. *Jezsuita névtár*. Available at: <https://nevtar.jezsuita.hu/toth-mike-mihaly/>).
 - 5 Johann (János) Thalhammer (1847–1934) was born in Austria. He taught at the College in Kalocsa 1876–1878 and 1881–1912, mainly natural history, mathematics and geometry. From 1913 until his death, he was a teacher in Pécs, at the Jesuit secondary school. He did considerable research in natural sciences ('Thalhammer Johann'. *Jezsuita névtár*. Available at: <https://nevtar.jezsuita.hu/thalhammer-johann/>).
 - 6 Ferenc Speiser (Speiszer) (1854–1933) entered the Jesuit order in 1872. He taught for a long time in Kalocsa, mainly natural history, and also served as rector, director of the grammar school, head of the boarding school and caretaker. Between 1912 and 1918 he was the head of the Hungarian Province of the Society of Jesus. He carried out considerable research work in natural sciences. ('Speiser [1881-ig Speiszer] Ferenc'. *Jezsuita névtár*. Available at: <https://nevtar.jezsuita.hu/speiser-1881-ig-speiszer-ferenc/>).

results. Our preliminary research reveals minimal differences between them. In the Feldkirch secondary grammar school, for example, a botanical garden was established in the 1890s (Rébay, 2020, p. 249). The latter was not necessary in Kalocsa, where students could visit the Archbishop's Garden. The difference, as far as we know, was more in the richness of the individual collections. This was due to the different interests of the teachers. In each school there were teachers who were outstanding academics in different fields, teachers who at the same time considered visualisation to be of paramount importance.

A Brief History of the Jesuit Secondary School in Kalocsa

The Kalocsa secondary grammar school's history is well documented (cf. Adriányi, 2000; Kerkai, 1942; Komárik, 1896, 1935; Lakatos, 1910, 2019; Rébay, 2022, 2023; Tóth ed., 1910), so we provide a list only of the elements that are by all means relevant regarding the present study. Count József Batthyány, archbishop of Kalocsa⁷, founded the school back in 1765. Until 1860, the Piarists directed it. Due to the strict regulations in the Austrian modernisation decree, the *Organisationsentwurf* (1849), the six-class institution had to be reorganised into a lower secondary grammar school consisting of four classes. The archbishop of that time, József Kunszt (1851–1866)⁸, wished to reinstate the institution as a complete main secondary grammar school; that is, a secondary school functioning with eight classes, and develop the institution into boarding school. For achieving his goals, instead of the Piarists, he sought the help of the Jesuits, and that order duly took over

7 Count József Batthyány (1727–1799) was consecrated bishop of Transylvania in 1759. He was Archbishop of Kalocsa from 1760 and of Esztergom from 1776. In 1778 he was appointed Cardinal ('Batthyány József'. *Magyar Katolikus Lexikon*. Available at: <http://lexikon.katolikus.hu/B/Batthy%C3%A1ny.html>).

8 József Kunszt (1790–1866) was appointed bishop of Kassa (today Košice, Slovakia) in 1850. He was Archbishop of Kalocsa from 1852 until his death. He made significant improvements to the city: he founded a Catholic girls' school and Archbishop's teacher training school, and had a new building built for the Jesuit College ('Kunszt József'. *Magyar Katolikus Lexikon*. Available at: <http://lexikon.katolikus.hu/K/Kunszt.html>).

the institution's management (1860). The secondary grammar school remained under the archbishop's maintenance, and thanks to the generous support by Kunszt, then Archbishop Lajos Haynald (1867–1891)⁹, a modern religious house and school building (a Jesuit college) were erected on a territory that continuously expanded.



Picture 1. The facade of the Jesuit secondary grammar school at Kalocsa (1896).

Source: Yearbook, 1895/96, p. 2.

From the school year 1861/62, the secondary school took on one new class every year. The first final exam was held in 1865. In 1878, the building (see Picture 1) accommodated the Haynald-observatory, the second of its kind in Hungary, to accomplish scientific work (see Mojzes, 1986, pp. 48–94). The scholarly archbishop – a botanist – intended to provide an opportunity for teachers dealing with natural sciences to engage in astronomical researches, and the students had a chance to acquire the basics of astronomy.¹⁰ He hoped to raise the interest of

9 Lajos Haynald (1816–1891) was bishop of Transylvania from 1852. He was deposed in 1863. He was archbishop of Kalocsa from 1867 until his death. He built a building for the teachers' training school and developed the Jesuit College. He founded several orphanages and in Kalocsa a seminary for priests ('Haynald Lajos'. *Magyar Katolikus Lexikon*. Available at: <http://lexikon.katolikus.hu/H/Haynald.html>).

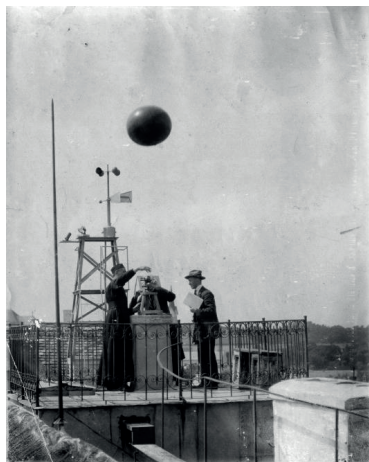
10 This actually came true: the students carried out astronomical observations. In 1912, the Ministry for Religion and Public Education granted permission for this

a few students for a scientific career. For designing and equipping the observatory, the archbishop commissioned Miklós Konkoly-Thege¹¹, the manager of the observatory in Ógyalla. Jesuit astronomers filled the institution's directorial position. Its first manager was the German Dr. Karl Braun, SJ¹² until 1884, then for a short time, another German, Adolf Hünigler, SJ¹³ and later Gyula Fényi, SJ¹⁴ establishing the institution's fame in the international scientific field between 1886 and 1913 (see Picture 2); finally, until the order's dissolution (1950), the Swiss Dr. Tivadar Angehrn, SJ.¹⁵ The institution received a state grant from

(Cf. Yearbook, 1912/13, pp. 119–120; Yearbook, 1913/14, p. 74; Yearbook, 1915/16, p. 59; Yearbook, 1917/18, p. 9).

- 11 Miklós Konkoly-Thege (1842–1916) studied law at university, but also attended lectures on natural sciences. In 1867 he established a meteorological observatory on his estate in Ógyalla (today Hurbanovo, Slovakia), and in 1869 he founded a private observatory where he carried out scientific research. He helped to establish several new observatories. Between 1890 and 1911 he was director of the Royal Hungarian National Central Institute of Meteorology and Geomagnetism (Ógyallai birtokáról formálta a magyar meteorológia sorsát Konkoly-Thege Miklós, 2023. *Múlt-kor*. Available at: <https://mult-kor.hu/ogyallai-birtokarol-formalta-a-magyar-meteorologia-sorsat-konkoly-thege-miklos-20230217>).
- 12 Karl (Carl) Braun (1831–1907) entered the Jesuit order in 1864. He obtained doctorates in theology and philosophy. However, his interests turned to mathematics and natural sciences (physics, astronomy). He became a student of the Italian astronomer Angelo Secchi. Between 1878 and 1884 he was director of the observatory in Kalocsa ('Braun Karl'. *Jezsuita névtár*. Available at: <https://nevtar.jezsuita.hu/braun-karl/>).
- 13 Adolf Hünigler (1876–1910) entered the Jesuit Order as a lay priest (1877). From 1882 he was assistant to Karl Braun at the Kalocsa Observatory, later becoming its director. He left Kalocsa in 1886, first teaching mathematics and then theology ('Hünigler Adolf'. *Jezsuita névtár*. Available at: <https://nevtar.jezsuita.hu/hunigler-adolf/>; 'Hünigler Adolf'; *Historia – Tudósnaptár*. Available at: <https://tudosnaptar.kfki.hu/historia/egyen.php?nemenev=hunigler>).
- 14 Gyula Fényi (Finck) (1845–1927) entered the Jesuit order in 1864. 1872–1874, 1878/1879, and from 1881 until his death he worked in Kalocsa. In 1881 he became assistant of the observatory, and from 1886 to 1913 he was its director. He made significant scientific achievements ('Fényi [Finck] Gyula'. *Jezsuita névtár*. Available at: <https://nevtar.jezsuita.hu/fenyi-finck-gyula/>).
- 15 Tivadar Angehrn (1872–1952) was born in Switzerland. He entered the Austro-Hungarian Province of the Society of Jesus in 1893. He studied not only philosophy and theology, but also astronomy, physics and mathematics. He worked as a teacher

1927. The observatory also possessed a reference library. The observations they completed here appeared in their own scientific publications. Besides astronomy, as far back as from the end of the 1880s, meteorological researches took place here, such as measuring the vibration of the earth.



Picture 2. Fr. Fényi (middle) and Fr. Anghern (left) in the Observatory (1912). Source: Photo Collection Archives of the Hungarian Province of the Society of Jesus (AHPSJ).

In the school year 1904–1905, during the archbishopric of György Császka (1891–1904)¹⁶ and Gyula Városey (1905–1910)¹⁷, both former students of the Kalocsa secondary grammar school, the institution

at the Jesuit colleges of Mariaschein (today Bohosudov, Czechia), Kalksburg and Kalocsa. He spent nearly 40 years in the latter. He was the last director of the observatory ('Anghern Tivadar'. *Jezsuita névtár*. Available at: <https://nevtar.jezsuita.hu/anghern-tivadar/>).

16 György Császka (1826–1904) was appointed Bishop of Szepes in 1874. He founded several girls' schools and an orphanage for girls. He became Archbishop of Kalocsa in 1891. He made a significant donation to the building of the House of Teachers (Tanítók Háza) in Kalocsa ('Császka György'. *Magyar Katolikus Lexikon*. Available at: <http://lexikon.katolikus.hu/C/Cs%C3%A1szka.html>).

17 Gyula Városey (1846–1910) was appointed Bishop of Székesfehérvár in 1901, and then Archbishop of Kalocsa in 1905 ('Városey Gyula'. *Magyar Katolikus Lexikon*. Available at: <http://lexikon.katolikus.hu/V/V%C3%A1rosey.html>).

again underwent significant extensions. Among others, the laboratories with the largest collections acquired their permanent housing in the newer part of the building, which was completed in 1905. In 1912, yet another reconstruction occurred, and in the 1920's, a grandiose renovation was implemented, financed from a state grant (Adriányi, 2000, pp. 333–345; Komárik, 1896, pp. 81–98; Lakatos, 2010; Lakatos, 2019, pp. 170–171; Angehrn, 1928, p. 8).

Following the secondary school act of 1924, the Kalocsa grammar school turned into a 'reálgimnázium' (secondary grammar school with an emphasis on science) for a short period.¹⁸ Aside from this intermezzo, up until the state appropriation that took place in 1948 throughout the whole country and affected every single public education institution, it functioned as a secondary grammar school ('gimnázium'), running first shared classes, then their own primary school classes after 1945¹⁹ (Yearbook, 1924/25, p. 1; Yearbook, 1925/26, p. 1; Yearbook, 1947/48, p. 17). The institution wasn't restored to Jesuit management even after the regime change in 1989/90, remaining under state management; however, it bears St. Stephen's name again.

After the re-authorisation of the Jesuit Order (1852), the grammar school in Kalocsa was the only Jesuit grammar school in Hungary until 1912 (when another grammar school was founded in Pécs). It was therefore the only place where young people could receive a Jesuit education, while other monastic orders (e.g. Piarists, Benedictines, Franciscans, Cistercians) maintained several institutions. (Most of the secondary schools were owned by religious denominations until 1948.)

18 Besides the secondary grammar school and the 'reálskola' (in German 'Realschule', school with an emphasis on science), the law brought in the 'reálgimnázium' (in German 'Realgymnasium' as an intermediary type, where Latin was taught on a compulsory basis, but Greek was not.

19 In 1945, the Hungarian school system was transformed: the eight-grade secondary grammar schools became four-grade schools. So that the lower classes didn't get lost, the maintainers endeavoured to open primary-grade institutions – where none were available. Precisely this happened in Kalocsa. The basic-grade school obtained the name 'general school' (in Hungarian 'általános iskola').

The Jesuit grammar school in Kalocsa was particularly popular with the Catholic aristocracy.

The number of students enrolled (see Figure 1) exceeded 400 in 1865/66 and 500 20 years later. After the First World War, the number of pupils decreased due to the border changes. After the partition of the Kingdom of Yugoslavia (1941) and the annexation of some former Hungarian territories, the number of students started to increase again. The loss of territory after the Second World War (1945) was compensated by the start of classes providing primary education.

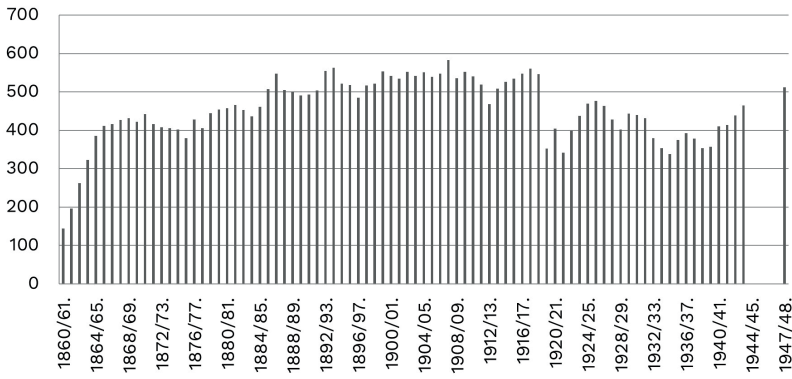


Figure 1. Number of students enrolled at the Jesuit secondary school in Kalocsa (in 1947/48 with primary school' pupils). Source: Yearbooks, 1860/61–1943/44, 1947/48.

The high number of students also led to a large teaching staff. In 1876/77, the first year for which the school yearbooks published data, there were 18 teachers, of whom only the gymnastics teacher was lay (Yearbook, 1876/77, pp. 12–13). From 1885/86, the number of teachers, including the extraordinary teachers, exceeded 20 (Yearbook, 1885/86, pp. 4–5). In later years it typically ranged between 20 and 30 teachers (cf. yearbooks).

Secondary Grammar School Education

The humanities-oriented education that traditionally characterises Jesuit schools, namely the command of Classical languages and the importance of acquiring poetic and rhetoric skills, manifested in the researched period. The humanities subjects within the curriculum, as well as the linguist's circles or academies primarily focusing on deepening Latin language command, served this very purpose; this framework also provided the opportunity to enhance the knowledge of Hungarian, Greek, at times the German language, and as a sign of modern times, even mathematical skills. The students presented their best writings on festive occasions (Yearbook, 1885/86, pp. 35–36; Komárik, 1896, pp. 70–71).

The world of industrial modernisation amplified the value of teaching natural sciences, and these subjects' social usefulness increased; thus, the need for teaching them heightened. (As noted, in other European countries, similar processes took place [cf. McCulloch, 1987; Zott, 2007]). Natural scientific expertise became a part of general knowledge, so secondary grammar schools had to assume the preparation for technical, natural scientific, and medical academic studies, as well. Thus, a number of natural scientific subjects were taught on an obligatory basis (natural history, geography, physics, chemistry) (Lakatos, 2019, pp. 170–171).

Figure 2 show the changes in Hungarian state curricula; the Jesuit secondary grammar school also followed the regulations issued by these. Between 1861 and 1879, the number of natural science lessons grew considerably. Later – with the number of natural science subjects even decreasing – the most conspicuous change shifted from quantitative to qualitative, namely the school subject selection becoming more differentiated (see Figure 3), with chemistry, as the last one among the natural science subjects, becoming independent in 1934. In a contrary tendency, in 1924, descriptive geometry was cancelled, while the number of mathematics classes grew to some extent, but at a smaller rate. In 1934, several new, formerly at best optional subjects were introduced, such as stenography and singing besides health studies and homeroom classes, while the number of drawing classes increased.

Thus, at this time, a spurt of arts and crafts subjects can be observed (Mészáros, 1991, pp. 110–117).

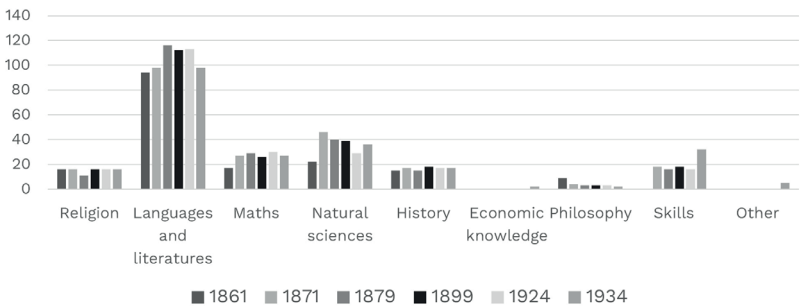


Figure 2. Weekly number of secondary grammar school subjects in the state curricula. Source: own editing based on Mészáros, 1991, pp. 110–117.

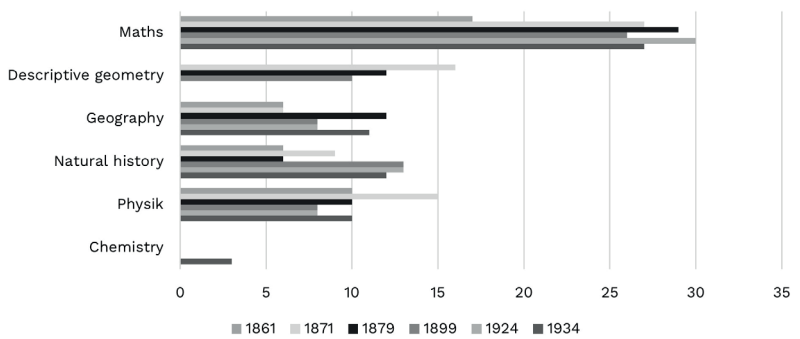


Figure 3. Weekly number of mathematics and natural science subjects in the state curricula. Source: own editing based on Mészáros, 1991, pp. 110–117.

Concerning the contents of natural science education, let us highlight an ideologically sensitive issue: when did Charles Darwin’s evolution theory find its way into the secondary grammar school curriculum?²⁰

20 I am grateful to Lada Hubatová-Vackova for raising this question.

The 1879 state curriculum for natural history prescribed observing and comparing the more interesting groups of animals and plants, applying a taxonomic approach – which was, however, not yet based on the concept of evolution. That theory appeared by the 1890s, and the 1899 curriculum already contained elements referring to it. Getting acquainted with phenomena, processes, and natural laws formed another part of the general goals. Similarly to previous curriculums, this new one continued to accommodate a religious interpretation, since it aimed at revealing the divine harmony of the universe. Thus, the 1899 curriculum reflects a kind of dichotomy due to the parallel presence of old religious attitude and new scientific interpretation. The Catholic school books based on this curriculum illustrate how the theory of evolution was slowly gaining ground: while it featured in the school book written by the Piarist Miklós Ormándy²¹, it was missing from the work by a fellow Piarist Lajos Tőkés²². According to István Tasi's evaluation, the parallel presence suggests a kind of uncertainty, while at the same time clearly demonstrating the openness of the period's thinking. The lack of unambiguous stance-taking left a broad range for teachers' interpretations (Tasi, 2016, pp. 340–245).

Fr. Mike Tóth, who taught natural sciences for a long time in the Kalocsa school, emphasised the possibility of reconciling faith with natural sciences, which indicates the presence of the aforementioned parallelism at Kalocsa. For the youth, Tóth constructed a list of natural

21 Miklós Ormándy (1846–1911) entered the Piarist Order in 1868. In 1880 he graduated as a teacher of natural history and chemistry. From 1888 he was principal and director in Sátoraljaújhely. From 1900 until his death he taught in Budapest. He wrote textbooks on natural history for secondary grammar schools and for teacher training schools. He also acquired botanical articles ('Ormándy Miklós'. *Historia – Tudósnaptár*. Available at: <https://tudosnaptar.kfki.hu/historia/egyen.php?name=nev=ormandy>).

22 Lajos Tőkés (1873–1951) entered the Piarist Order in 1890. In 1898 he graduated as a teacher of natural history, geography and physics. He was a teacher at several Piarist grammar schools. Besides his scientific articles, he wrote textbooks on natural history for secondary grammar schools and for teacher training schools ('Tőkés Lajos'. *Magyar Katolikus Lexikon*. Available at: <http://lexikon.katolikus.hu/T/T%C5%91k%C3%A9s.html>).

scientists who were believers, remarking on several of them that they fought against Darwin's theory, which suggests that he didn't accept it either (Tóth, 1928, p. 18). The students themselves could get acquainted with the theory itself. At least we know that one of the lectures held by a member of the Natural History Circle dealt with it, while it remains unknown whether this lecture carried a positive or negative connotation (Yearbook, 1897/98, p. 72). In 1908, Fr. István Komárik²³, a teacher of Latin-Greek, history, and philosophy, held a lecture in town for those who were interested: in this lecture, he expounded on the necessity of creation, endeavouring to refute the 'monkey theory' with scientific means (Yearbook, 1907/08, p. 110). Then in 1911, Fr. Ferenc Pinzger²⁴, a teacher of geography and natural history, treated the issue having the same goal, expressing a similarly negative judgement while at the same time going as far as accepting a few elements of the Darwinian theory (Yearbook, 1910/11, p. 130). Darwin's name and the concept of race theory never came up in the yearbooks again, so it remains unknown when rejection turned into acceptance.²⁵

Prior to World War I, the youth associations providing a framework for the students' leisure activities – beyond the Congregation of Mary, founded in 1870 – primarily possessed a humanities character: from the 1880's, besides the academies and linguistic circles, a Literature Circle also functioned. It was the need to react to new scientific theories that led to founding the Natural Scientific Philosopher Circle

23 István Komárik (1855–1940) entered the Jesuit order in 1877. He graduated as a teacher. He worked as a teacher in Kalocsa for most of his life (1891–1903, 1906–1919, 1923–1926, 1927–1937), teaching mainly philosophy, Latin and history ('Komárik István'. *Jezsuita névtár*. Available at: <https://nevtar.jezsuita.hu/komarik-istvan/>).

24 Ferenc Pinzger (1872–1841) was born in Austria and entered the Jesuit order in 1888. He graduated in history and mathematics at the University of Budapest. He taught natural history and geography in Kalocsa from 1898 to 1900 and from 1908 to 1918. From 1912 he was the head of the natural history collection. In 1919 he continued his teaching in Pécs until his death ('Pinzger Ferenc'. *Jezsuita névtár*. Available at: <https://nevtar.jezsuita.hu/pinzger-ferenc/>).

25 Analysing schoolbook use might provide some base points for this but we did not have the means for that within the framework of this article.

in 1884. The circle acquired its members from higher-grade students (Komárik, 1896, pp. 70–72; Adriányi, 2000, pp. 349–350; Riegl, 1906, p. 34). The circle continued to function after World War I. Students of grade 8 discussed issues of natural philosophy and social ethics during its sessions (see Yearbook, 1935/36, pp. 49–50).

Extra-curricular classes were established for the purpose of supporting natural science education and scientific research, providing a field for self-educational types of leisure activities. The pupils could become members of the Technical Circle, Photographer Circle, Physics Circle, Chemistry Circle, Mathematics Circle and Aero Circle – even though not at the same time. The first two were mentioned as far back as the 1920's. Members of the Technical Circle made, among others, physical tools and radios, fixed bicycles, did carpentry work with a chainsaw. The circle educated its members to value manual work while strengthening their character. From the end of the 1930's, in the framework of the Physics Circle, it was possible to complete physical observations and measurements one afternoon per week. The circle had so many applicants that many of them had to be turned down. The Chemistry Circle and the Mathematics Circle as well as the Aero-Circle was founded at the beginning of the 1940's. All this clearly signals the enhancement of interest in natural sciences. In human science and arts fields, launching new extra-curricular classes occurred much less frequently (Komárik, 1935, p. 15, p. 36; Yearbook, 1928/29, p. 23, p. 29; Yearbook, 1929/30, p. 32; Yearbook, 1937/38, p. 94; Yearbook, 1942/43, pp. 23–24; Yearbook, 1943/44, p. 20).

Laboratories and Collections of the Secondary Grammar School in Kalocsa

Implementing State Prescriptions

In the course of the 19th and 20th centuries, modernising secondary education resulted in stricter conditions regarding school buildings in Hungary. School prescriptions had to be followed by denominational authorities, as well. Laboratories were needed for the purpose of storing demonstration tools and experimenting equipment. This ensured

realising the aim of empirical learning in natural science education. The individual grammar schools sought to expand their existing collections and to establish new ones in response to the needs of the state, social expectations and the development of science. The form this took depended on local conditions (financial situation, teachers' knowledge and interests). In the case of the secondary school of Kalocsa, its science collections have become a national reference.

In the 1860's, subjects of physics and natural history were still housed in the same room. No separate physics lecture room existed, so the experiments related to the curricula were carried out in the classroom or the laboratory. In 1889, the physics laboratory (see Picture 3) was separated via constructing a new drawing and physical exercise room and setting up a teachers' study room.



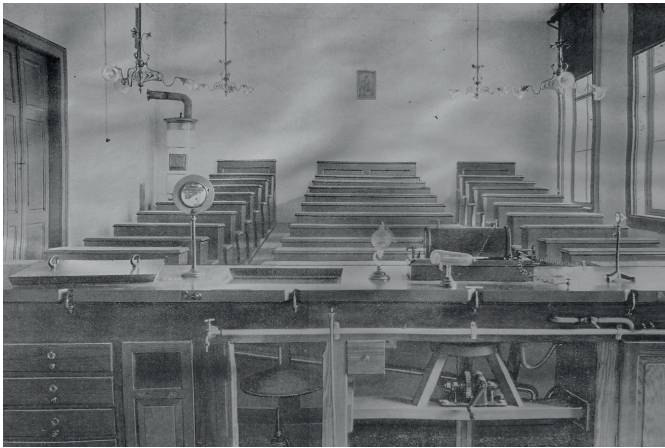
Picture 3. The physics laboratory between 1889 and 1905. Source: Riegl, 1906, p. 10.

In 1892, a ministerial act mandated that every secondary grammar school must possess a physics laboratory (72 m²), a physics lecture room

(72 m²) that could also be used as a chemistry lecture room, a chemistry laboratory (approx. 40 m²), a natural history laboratory (72 m²), as well as a history and philology laboratory (72 m²). The 72 m² sized laboratories could be set up in two smaller rooms, as well (Pintér, 1928, pp. 358–360).

The Kalocsa College conformed to these conditions in 1904/05. The wide spaces allowed for exhibiting objects and tools formerly kept in storage rooms, besides motivating the maintainer and the management to purchase new items (Tóth, 1908, p. 3, 7). As a result of these reconstructions, the physics laboratory was housed on the ground floor (77.5 m², see Picture 4), as well as the chemistry and physics experiment classroom (84 m², see Picture 5), the physics teacher's room for preparing the experiments (23 m²), a separate physics instructor room for scientific work (17 m²), the chemistry laboratory (37 m²) and the chemistry storeroom (12 m²). Dangerous chemicals went into special cubicles. For constructing and equipping this part of the building, the designers garnered ideas through inspecting foreign institutions (Riegl, 1906, pp. 9–13).

Acquiring precision tools appeared as an idea in the 1880's. This aimed, on the one hand, at enabling the teachers to do scientific research work themselves, and on the other hand, at getting the students accustomed to more accurate perception and measurement (*ibid.*, p. 27). The Observatory also helped in teaching physics, for the students were granted opportunities to use its equipment: in the evening hours, grade 8 students carried out their observations in smaller groups, led by teachers (*ibid.*, p. 31).



Picture 4 and 5. Physics laboratory and experiment classroom (1906). Source: Riegl, 1906, p. 24, 15.

The Jesuit secondary grammar school at Kalocsa possessed remarkably rich collections, outstanding even on a nationwide level. Student groups arriving to the town as part of a study tour frequently visited these – besides the observatory (Yearbook, 1941/42, p. 17). The collections

survived both World Wars almost unscathed.²⁶ At the time of the state appropriation, the following compilations aided teaching:

- physical education,
- history and ethnography,
- natural history,
- natural science,
- chemistry laboratory and
- map store (Yearbook, 1947/48, p. 4, p. 32).

Earlier, a separate geography and drawing collection was also established (Yearbook, 1885/86, p. 38). Some of the collections had their own reference libraries (Hegedűs, 1940, p. 16).

The first pieces in the Kalocsa collections originated from the Piarists: upon taking over the school, for example, the natural history laboratory consisted of a 146-piece natural history collection, 246 pieces of minerals and 20 coins (Yearbook, 1862/63, p. 9). In the Jesuit period, the value of school demonstration as a pedagogical method became amplified, completed with the education for scientific research, which was obvious judging from the size and number of collections. The Jesuits endeavoured to gain specialty teachers for every subject, in order to guarantee the appropriate teaching of the entire school material. The collections were organised according to the teachers' scientific interests, for educational purposes, then later increasingly for research, no doubt influenced partly by the state regulations. The maintainer (archdiocese) and the manager (Jesuit order) probably wouldn't have wanted to fall behind the other secondary schools; which also led to support for improvements.

The collections accumulated through purchases, the teachers' repeated collecting tours and donations, exchanges, as well as the students' field trips. Many of the donors were students. Some students drew anatomy illustrations, others completed the animal collection.

26 The physics laboratory's radio receiver station suffered damage during the time of the Hungarian Soviet Republic; however, at the beginning of the 1920's, it was reinstalled (Yearbook, 1922/23, p. 11).

Archbishop Lajos Haynald, a botanist and numismatist, also greatly promoted the collections' development. The Jesuit missionaries also contributed to their enlargement. The school's natural history teachers frequently organised brief study tours for the pupils (see Picture 6), with the aim of augmenting the plant and animal compilations. From time to time, the specialist subject teachers reorganised the collections, updated the inventories, and corrected the occasional mistakes. Changes in the curriculum made the acquisition of new objects necessary (such as physical tools), which also resulted in completing laboratories and collections (Yearbook, 1863/64, p. 6; Yearbook, 1877/78, pp. 37–38; Yearbook, 1878/79, pp. 28–29; Yearbook, 1909/10, pp. 95–97; Yearbook, 1910/11, pp. 128–129; Yearbook, 1912/13, p. 138; Yearbook, 1923/24, p. 16; Yearbook, 1927/28, p. 40; Pap, 1936, pp. 3–8).



Picture 6. Fr. János Thalhammer, SJ with his students (1912). Source: Photo Collection, AHPSJ.

The teachers also encouraged their students to collect in their leisure time or at home. In 1907, the natural history teacher Fr. Ferenc Speiser specifically provided the students with instructions in the school yearbook. In a way that was understandable to them, he described in detail how bug collecting has to happen: what kinds of equipment are necessary, how to stalk it, kill it, dissect and preserve it (Speiser, 1907,

pp. 4–61). He phrased his goals as follows: “I intend these lines first of all to my dear students, so that getting acquainted with the God-created beautiful insect world, or finding a beloved activity and amusement during their school holidays, or later, as independent people, pastors, doctors, foresters or missionaries cast away in foreign faraway lands, and so on, they may have the opportunity in their free hours to observe these animals, to marvel at them and their Maker while scouting their wondrous habits, their complex way of life” (Speiser, 1907, p. 3).

Natural Historic Collections

Mike Tóth (see Picture 7) founded the natural science collections. Fr. Tóth contributed to the enlargement of several compilations, among which we have to mention in the first place the mineralogical collection possessing a museal value. He was a prominent expert of this field, even writing a book about Hungary’s minerals. In the course of his researches, he toured the mines and other sites in historic Hungary, inspecting the more significant foreign collections. As a result of the lengthy compilation work, a mineralogical collection was established (see Picture 8) that possessed a national, moreover, even a European significance, containing minerals from all five continents. With a lengthy, persistent work, he increased the collection inherited from the Piarists to a manifold degree: About this, he declares as follows: “It cost me a lot of work, to which I was only urged by the passionate love of science, making it dear to me” (Quoted by Pap, 1936, p. 5). A separate unit demonstrated the minerals’ application for industrial and economic purposes (such as jewellery, medicine, objects d’art, chemistry, melting metals). Another unit served the purpose of making the minerals’ general characteristics: their structure, colour, and so on, demonstrable. A separate precious stone cache also existed, and even a so-called school collection was put together, containing the minerals and rocks featured in the study material.

Fr. Tóth taught until 92 years old, at the end only teaching mineralogy, that is, natural history, in one class, again and again (Tóth, 1901, p. 3–4; Tóth, 1908, p. 4; Matkovics, 1929, pp. 10–11; Nagyfalusy, 1933, pp. 4–6; Hegedűs, 1940, pp. 6–8). He also took his share from equipping

the mineralogical collection of the Pius secondary grammar school in Pécs (Matkovics, 1929, p. 9). Fr. Tóth also contributed to equipping the physics laboratory. With the permission of his order's superiors, he even invested the royalties he received during his writing career to acquire tools and equipment (Riegl, 1906, p. 26). Moreover, the very construction of the chemistry laboratory can be attributed to his name, besides laying the foundations of the plant collection (Pap, 1936, p. 6).



Picture 7. Fr. Tóth Mike, SJ (1838–1932) (1909).

Source: Photo Collection, AHPSJ.

Fr. Tóth was labelled “The man of conscientious accuracy”. From his students, he demanded concentration: “In science, all clichés, chitchats, empty expressions have to be avoided. Every concept has to be conveyed with the most fitting and succinct expressions,” as he stated (quoted by Nagyfalussy, 1933, p. 8). His students were wary of him but looking back, they accepted his attitude. His former student, later Secretary of State, György Steuer²⁷, preserved the following story about him:

27 György Steuer (1875–1943) studied at the secondary grammar schools in Kalocsa and in Zombor (today Serbia), and received his doctorate in political science at the University of Budapest. From 1907 he worked in the state administration. In 1917–1918 he was state leader (főispán) of Torontál County. From 1919 he was State Secretary in the Ministry of Minorities, and from 1922 to 1928 he was Government Commissioner for Germans in Hungary. He also did considerable national organizational work in the social field (‘Steuer György’. *Magyar Katolikus Lexikon*. Available at: <http://lexikon.katolikus.hu/S/Steuer.html>).

“When one of our fellow students got scared and his hand holding the mineral shivered, contrary to his better knowledge, he didn’t receive the expected and perhaps even deserved grade. ‘What are you shaking for, like a jelly,’ said P. [Pater] Tóth, ‘either you know your lesson or you don’t. But the little you know you should present courageously, otherwise you are lost, not only in the school but in life, as well!’” (Quoted by Nagyfalusy, 1933, p. 8.)



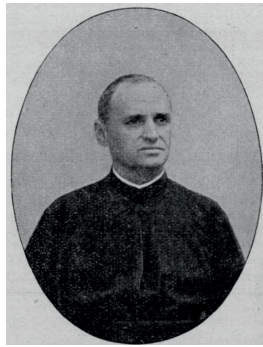
Picture 8. The mineralogical collection in 1908. Source: Tóth, 1908, without page number.

Among the natural science collections, the animal cache was also outstanding (see Picture 11); within this, the Diptera²⁸ collection can be considered of European significance. The insect compilation was created by László Menyhárh²⁹ (see Picture 9), Ferenc Speiser (see Picture

28 The order of two-winged insects.

29 László Menyhárh (1849–1883) entered the Jesuit order in 1866. He worked as a teacher at the secondary grammar school in Kalocsa for three intermittent

10), and László Thalhammer (see Picture 6). Fr. Menyhárth carried out botanical research with Archbishop Haynald in Kalocsa's surroundings. After his teaching career in Kalocsa, he served as a missionary in Africa; he continued his scientific researches there. Menyhárth sent his collections (plants, insects, bugs) home to be identified and the individual specimens to be sorted out. Several species were named after him, just as after Fr. Speiser and Fr. Thalhammer (Hauer, 1913, pp. 9–56; Hegedűs, 1933, p. 12; Pap, 1936, pp. 6–8).



Pictures 9–10. Fr. László Menyhárth, SJ (1849–1897) and Fr. Ferenc Speiser, SJ (1854–1933). Source: Pap, 1936, p. 6, p. 7.

Another Jesuit teacher of natural history, László Hegedűs³⁰, paid his tribute to Fr. Speiser and his work for the collection upon his death as

periods. He taught mainly natural history. He also carried out botanical research. In the 1880s he was the director of the boarding school and later the rector of the whole college. From 1890 he worked as a missionary in Boroma, East Africa. He also founded a meteorological station and continued his scientific work in botany ('Menyhárth László'. *Jezsuita névtár*. Available at: <https://nevtar.jezsuita.hu/menyharth-laszlo/>).

30 László Hegedűs (1889–1963) entered the Jesuit order in 1908. He graduated as a teacher of geography and natural history. He first taught in Budapest, then from 1925 – except for 1934/35 – until the state appropriation in Kalocsa. Then for one year (1949/50) he taught natural history at the Archbishop's private school in Kalocsa ('Hegedűs László'. *Jezsuita névtár*. Available online: <https://nevtar.jezsuita.hu/hegedus-laszlo/>).

follows: “He enclosed geography into a framework of interesting journeys, demonstrating natural history, utilising the rich collection of the large laboratories and his even richer experiences. He carefully bore in mind his younger and older students’ mental diameter. His manner of oral testing was also lively and fast-paced. He never requested anything superfluous, only demanding as much as what an educated student easily understands and can turn to practical use. But woe to the ‘eminent youngster’ who did not want to live up to even the lowest measure requested of him; this could only be ascribed to laziness, and that he did not condone. Earlier, he could frequently be spotted during the afternoons surrounded with nature-loving young students, armed with all kinds of insect collecting tools, industriously gathering the insects of his closer and more distant environment, mainly the Coleoptera. Then, once home, he set to the preparation and identification. What an exhausting and time-consuming work this is, to define this host of insects out of the many thousand species, spending long, warm afternoons (because he primarily used the summer holidays for this purpose) among bottles of carbon disulfide, potassium cyanide and creosote, and arsenic-doused animal corpses, hunched over dusty boxes and books: only those who have done this know what it is like” (Hegedűs, 1933, p. 13).



Picture 11. Individual pieces of the bug collection (1938). Source: Photo Collection, AHPSJ.

Assembling the collections entailed considerable scientific research work. Fr. Speiser and Fr. Thalhammer stated after a collection involving students in the area of Kalocsa in 1882 that we know too little about our homeland's insect world; in several counties, similar work has barely been inaugurated. During their decades-long research work, the two Jesuits did their best in order to map the area (Yearbook, 1882/83, p. 5; Speiser, 1893, pp. 1–4). Moreover, later at the turn of the century, P. Thalhammer collected as far as in Transylvania during two consecutive holidays (Thalhammer, 1902, pp. 3–5).

Fr. Speiser even expressed his special thanks to János Frivaldszky, zoologist at the Hungarian National Museum³¹, proving that classifying every insect is, indeed, not a simple task (Yearbook, 1882/83, p. 5). Fr. Thalhammer again stressed this: “It is only possible to acquire a comprehensive picture about our homeland's natural historic treasures if everybody researches, collects and demonstrates, according to their opportunities and talents.” (Thalhammer, 1885, p. III). In his case, the scientific goal was coupled with a pedagogic goal: “To our students who are helping me with the utmost zeal in sifting through countryside fauna, and who especially contributed to collecting data relevant to this topic, so that I may offer them orientation at least regarding one animal family, to demonstrate how to study a small circle of animals in meagre-sized areas, fully, even though not entirely” (ibid. p. IV). Getting the pupils to love studying and doing scientific research actually featured among the school's goals (Menyhárh, 1888, p. XIII).

The insect collection became the largest, scientifically valuable part of the animal collection. Besides this, the animal cache also contained species from other classes of the animal kingdom, primarily

31 János Frivaldszky (1822–1895) graduated as an engineer in 1848. In parallel with his studies, from 1840, however, he carried out research in zoology and then in botany. He participated in several collecting trips. From 1852 he worked in the natural history department of the Hungarian National Museum. He was the first head of the Zoological Department, which was established in 1870. He held this post until his death (‘Frivaldszky János [1822–1895]’. *Magyar Rovartani Társaság*. Available at: <https://www.rovartani.hu/az-entomologia-nagyjai/frivaldszky-janos/>).

with educational purposes (Yearbook, 1885/86, pp. 37–38); the institution also possessed, thanks to a gift, a trophy collection (Hegedűs, 1940, p. 13).

Fr. Erik Brandis³² laid the foundations for the most peculiar part of the plant collection, namely the comparative crop compilation. Later, the school endeavoured to expand it through exchanges. Their aim was to let the crop seeds of the country's other counties feature in it; moreover, they even requested seeds from abroad, Europe, and other continents, as well (Yearbook, 1882/83, p. 50–52; Yearbook, 1883/84, p. 41; Yearbook, 1885/86, p. 38).

The natural history equipments' storeroom housed the tools aiding natural history education; they were housed in the physics laboratory. These typically expanded through purchases (Yearbook, 1883/84, p. 42; Yearbook, 1884/85, p. 26; Yearbook, 1903/04, p. 87). In the physics laboratory, even an air-electronic observatory was assembled (1909/10), which, however, had to be deconstructed following World War I due to the lack of parts. The radio telegraph, on the other hand, was reinstalled, and a movie projector room was also constructed. Furthermore, they obtained tools that contributed to enhancing the students' manual skills and enriching their mechanical knowledge. That is, regarding physics, it was rather the practical aspects than the theoretical that took the lead. This stood in the background of founding the Technical Circle (later Physics Circle) (Hegyi, 1936, pp. 9–10; Yearbook, 1935/36,

32 Erik (Erich, Erick) Brandis (1834–1921) was born in what is now Slovenia. He studied law, theology, philosophy and natural sciences. He started teaching in 1863 and worked in several Jesuit secondary grammar schools (Kalocsa, Kalksburg, Zagreb, Pozsony [Bratislava, today Slovakia], Travnik). Between 1872 and 1876 he was director of the gymnasium in Kalocsa. In 1884, he founded the natural history collection of the Travnik secondary grammar school [then part of the Austro-Hungarian Monarchy, today Bosnia and Hercegovina]. He discovered numerous species and published widely ('Brandis, Erick'. *Hrvatska Enciklopedija*. Available at: <https://www.enciklopedija.hr/natuknica.aspx?id=9252>; 'Brandis, Erick'. *Hrvatski Biografski Leksikon*. Available at: <https://hbl.lzmk.hr/clanak.aspx?id=2700>; Yearbook, 1895/96, p. 126).

p. 44; Yearbook, 1937/38, p. 94). The laboratory's x-ray room was utilised for medical purposes during World War I (Yearbook, 1914/15, p. 71).

The tools of chemistry education found their place in the chemistry laboratory (Yearbook, 1885/86, p. 37). In 1941/42 and 1942/43, chemistry practices were launched for interested 7–8 grade students, where they were provided the opportunity to perform special experiments (Yearbook, 1941/42, p. 51; Yearbook, 1942/43, pp. 23–24). The geography collection primarily consisted of maps and globes that were used in teaching, as well as cultural history pictures (Yearbook, 1885/86, p. 38).

Humanities Collections

Due to the longer traditions of teaching human sciences in secondary schools, we would assume that assembling a historical collection predated creating the natural history collection. But this wasn't the case: by the time of (the Jesuits) taking over the school, compilations had been established in both large fields, and the natural history collection became larger and more significant over time. Namely, in natural science teaching, the demonstration method appeared earlier (Klamarik, 1881, p. 34, pp. 103–108, 116, 121–122). Nevertheless, several human science collections were formed in the school; the first one being the numismatics treasury, where coins from Antiquity and the Middle Ages also found their niche. The first pieces were inherited from the Piarists. The newspaper editor János Török³³ among others also contributed to expanding this collection, as he bequeathed his entire array to the institution, as did Archbishop Lajos Haynald (Yearbook, 1877/78, p. 38; Nagyfalussy, 1936, pp. 10–11).

33 János Török (1807–1874) first worked as an economic clerk, and from 1839 he was a teacher at the agricultural school in Rohonc (today Rechnitz, Austria). Between 1841 and 1848 he was editor of the newspaper *Magyar Gazda*. In 1846, he established a farmers' training institute in Szőkehalma, which operated until 1852. After that he worked as a journalist. Between 1853 and 1855 he was editor of the *Pesti Hírlap*, and later took on the editorship of several other newspapers. In 1866 he was appointed national archivist (főlevéltárnok) ('Török János'. *Magyar Életrajzi Lexikon*. Available at: <https://www.arcanum.com/en/online-kiadvanyok/Lexikonok-magyar-eletrajzi-lexikon-7428D/t-ty-780F8/torok-janos-7837F/>).

Numerous items of the historical collection arrived at the school as ‘excavation finds’, so it was also referred to as the ‘Archeology’ Collection (Yearbook, 1890/91, p. 63). Then for a few years, ‘only’ the numismatics assembly represented the humanites collections, named at times the Antiquity Collection, then Numismatic and Antiquity Collection. In 1912/13, these two collections were assigned the name ‘History Museum’, then it underwent a two-year organising, so that it would also be presentable to visitors (Yearbook, 1891/92, p. 63; Yearbook, 1897/98, p. 78; Yearbook, 1902/03, p. 80; Yearbook, 1912/13, p. 131; Yearbook, 1914/15, p. 70). In 1924/25, the history collection was gifted with a new, spacious, light-filled room (see Picture 12), which bestowed a more transparent and expedient arrangement (Yearbook, 1924/25, p. 18). In 1941/42, it was rearranged again. The school’s collection was so rich that in the autumn of 1941, it served as the basis of a County Pest exhibition in Kalocsa (Yearbook, 1941/42, p. 38).

Two teachers of the school, namely Fr. Frigyes Weiser³⁴ and Fr. Kálmán Rosty³⁵, carried out the first excavations in the territory of the Kalocsa Archbishop’s estate in 1877. These two teachers established the history collection’s foundations. Later, this compilation was again expanded several times thanks to the archaeological excavations: landlords donated the school artefacts found on their estates. Even from the Jesuit missions, mainly from the African and Chinese, objects which were considered interesting from an applied

34 Frigyes Weiser (1840–1916) was born in present-day Poland and entered the Jesuit order in 1859. He taught Latin grammar in Kalocsa between 1865 and 1868, and history and German between 1875 and 1890. In later years he worked mainly as a clergyman (‘Weiser Frigyes’. *Jezsuita névtár*. Available at: <https://nevtar.jezsuita.hu/weiser-frigyes/>).

35 Kálmán Rosty (Roszty) (1832–1905) entered the Jesuit order in 1853. He was first a teacher at boarding school in Szatmárnémeti (today Satu Mare, Romania), then a homilist in Pozsony. From 1866, except for a short period, he taught in Kalocsa, mainly Hungarian language and literature. He was a prolific writer and poet who also wrote several school plays. He performed them with his pupils (‘Rosty [1866-ig Roszty] Kálmán’. *Jezsuita névtár*. Available at: <https://nevtar.jezsuita.hu/rosty-1866-ig-rosty-kalman/>).

art or ethnographic aspect landed in the museum, which also lodged objects from the American and Australian continents. From Kalocsa and its surroundings, they acquired folk art objects. The interest in ethnographic objects rose following World War I (Yearbook, 1912/13, pp. 131–132; Yearbook, 1927/28, p. 38; Yearbook, 1931/32, 58; Yearbook, 1933/34, p. 3, p. 37; Yearbook, 1935/36, p. 52; Yearbook, 1936/37, p. 62; Yearbook, 1937/38, p. 129; Yearbook, 1940/41, pp. 46–47; Yearbook, 1941/42, p. 39; Yearbook, 1942/43, p. 20).



Picture 12. The history and ethnography laboratory (1936). Source: Nagyfalusy, 1936, p. 11.

Classifying historic objects was not simple in this age; completing a scientific background work was indispensable for the collection supervisor. Namely, for a long time, reliable scientific reference works were missing from numerous fields, such as Hungarian numismatics, and thus period classification was wrought with several difficulties (Nagyfalussy, 1936, pp. 12–13).

The so-called Cultural History Picture Collection was first mentioned in 1906/07. Pictures and charts aiding linguistics, history, and geography education were placed along the secondary grammar

school's corridor, as well as in the geography laboratory (Yearbook, 1906/07, p. 116). They also acquired artistic reproductions (Yearbook, 1935/36, p. 52) and (art) historic diapositive pictures (Yearbook, 1939/40, p. 41).³⁶ As for the seal collection, the foundations were laid in 1910/11 with 500 pieces. In these works, two pupils actively participated (Yearbook, 1910/11, p. 129). Completed with a herald collection, a year later, this collection received the name Cultural History Collection (Yearbook, 1911/12, p. 91).

The Collections' Fate

From the 1930's, as elsewhere, film education became more and more common also in the Jesuit secondary grammar school. The Ministry of Religion and Public Education promoted this. For example, in the school year 1940/41, 142 films were projected upon approximately 170 occasions, primarily with natural history subjects. At this time, however, they were far from thinking the collections were superfluous and films would supersede them (Yearbook, 1940/41, p. 40).

After the state appropriation, the collections' pieces were dispersed. The main reason for this was probably the change in circumstances. The secondary school continued to function but under state management. The Jesuit order was prohibited in 1950. They lost their properties, which were transferred into the state's possession.

The mineralogical collection's fate remains unknown up to this day. The insect collection ended up in the Natural History Museum in Budapest. It wasn't managed separately; instead, the individual specimens were classified among the existing ones. The catalogue disappeared. The butterflies, including the specimens that Fr. Menyhárth

36 However, the art collection was by far not as significant as the one in the Kalksburg Jesuit college, established by Fr. László Velics, SJ. (László Velics [1852–1923] was nephew of Archbishop Haynald. He entered the Jesuit Order in 1869. Between 1875 and 1877 he taught Latin grammar and French in Kalocsa. From 1878 he was a teacher of Hungarian at the Jesuit college in Kalksburg for two years, and from 1866 to 1899. He established a museum of fine arts there. He gave regular lectures on the history of Christian art [‘Velics László’. *Jezsuita névtár*. Available at: <https://nevtar.jezsuita.hu/velics-laszlo/>]).

collected in Africa, probably ended up in the same place. However, the curator appropriated the material, stealing specimens and falsifying the finding-place labels. As a result, items of the former Jesuit butterfly collection (see Picture 13) have become very difficult to identify (Bálint, 2021, pp. 380–381). The fate of the humanities collections is unknown.



Picture 13. A few specimens of the butterfly collection (1938).

Source: Photo Collection, AHP SJ.

Summary

From the second half of the 19th century onwards, the Kalocsa secondary grammar school developed and expanded its laboratories and collections. These helped to teach natural sciences (natural history, geography, physics, chemistry) and history, as well as gymnastics and drawing. The collections served both educational and scientific purposes. Their growth was determined both by curricular requirements and the scientific interests of teachers, and by chance, thanks to donors. The students were partly involved in the collection work, and some teachers prepared them professionally, but it was not only the pupils who donated objects, but also parents and school supporters. The educational use of the collection is shown by the fact that the mineral collection had a special section for school displays.

Collections that went beyond curricular requirements, i.e. did not only consist of compulsory subjects closely related to the curriculum,

gained national importance. Moreover, the mineral and insect collections were also of international scientific value, thanks to the dedicated and demanding work of the teachers who created them. After state appropriation, some of the collections were transferred to the Natural History Museum in Budapest and incorporated into its holdings. However, the fate of most of the collections and laboratories is unknown.

The history of the collections shows that in the Jesuit schools, in line with international examples of the time, the natural sciences were given greater emphasis in the period under study. We have tried to illustrate this process. However, the school continued to attach importance to the teaching of classical (and modern) languages, Hungarian language and literature, as well as history. It therefore strove for a balance to meet the demands of the modern world.

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