Kurucz György

Travel Narratives and Economic Discourse: The Technological Journey of Two Hungarian Agriculturists in Western Europe in the Early Nineteenth Century

AKADÉMIAI DOKTORI ÉRTEKEZÉS

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Acknowledgements

This thesis has taken me a long time to write and thus my debts of gratitude are many. I first approached this topic when I was on the staff of the Museum of Hungarian Agriculture in the mid-1980s. However, it was not until 2016 that I was able to elaborate on the various social, economic and epistemic aspects of the specific technological journeys undertaken by the professors of the *Georgicon*, the first college of agriculture in Hungary founded by Count György Festetics in 1797, when I joined a research project supervised by Lilla Krász, Eötvös Loránd University, Budapest. Funded by the Hungarian National Research, Development and Innovation Office of Hungary, the above project (No. 119577) was meant to be channelled into the current European discourse aimed at reconstructing the specific patterns of the circulation of knowledge in Hungary between 1770 and 1830. In order to achieve this, members of the project team were supposed to carry out complex analyses of various disciplines, such as philosophy, state sciences/statistics, history, aesthetics/classical philology, medicine, ethnology/anthropology, and agronomics as part of economics, along the lines of the special *Wissenschaft vom Menschen* narrative, which originated in Göttingen and which appears to be suited for presenting the radical change in science history as a result of which the various fields gradually arranged themselves into a new system. Thus, one of the main objectives of the said project was to attempt to explore the reception and primary influence of the University of Göttingen, including some other influences, mainly of Viennese, German and English origin. My task was to offer a detailed reconstruction of the role of the *Georgicon* in relation to the processes of the instrumentalisation of contemporary Hungary's agricultural science and the characteristics of the institution as a regional centre of knowledge, including the established network of personal connections of the

agricultural college to foreign centres of knowledge in Germany, the Netherlands, Britain, France, Switzerland and Italy. Inevitably, special attention had be paid to the exploration of the sources of technological journeys (*peregrinatio oeconomica*) which can be deemed as a valid representation of the school's foundation ethos and existence in the wider context of the contemporary processes of knowledge circulation.

The ideas on these pages evolved over many years and my initial thoughts were guided by Éva H. Balázs and György Szabad at Eötvös Loránd University. A British Council Fellowship under the supervision of Edward J. T. Collins, University of Reading, as well as discussions with Raine Morgan, proved to be instrumental familiarising me with the dissemination processes of the agricultural revolution in eighteenth-century England. At the same time, visiting manors, country houses and the traditional agricultural regions of England from Norfolk to Leicestershire with Len Woodford proved absolutely vital for me to fully grasp the legacy of previous centuries in rural England. A Senior Research Fellowship from the Herzog August Bibliothek in Wolfenbüttel and further consultations with Paul Raabe and Jill Bepler also helped me understand the role of specific forms and actors of knowledge transfers in late eighteenth-century Germany. My extensive research at the Archives of the Göttingen Academy of Sciences was also indispensable to exploring and reconstructing the scientific and social network that evolved between contemporary foreign intellectuals and the *Georgicon*, including the one-time Hungarian students of the Georg August University of Göttingen. During my frequent visits to Göttingen Hans-Erich Bödeker enhanced my understanding of late eighteenth and early nineteenth-century German academic life. In addition, I would like to thank Martin Gierl, Georg August University, Göttingen, for providing me an opportunity to have some parts of my manuscripts discussed online by a select group of international scholars.

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Chapter 1

Introductory Notes on the Misrepresentation of an Extravagant yet "Shrewd and Industrious" Aristocrat

In the memoirs he penned toward the end of his life, Sándor Ujfalvy, a Transylvanian nobleman and former official with the Hungarian Court Chancellery, spoke with great force of emotion of his 1831 visit to the estate of the Festetics family in Keszthely, Western Hungary. Paid in the company of esteemed Zala County Deputy Lord Lieutenant Antal Deák, it was the first time the Transylvanian traveller had met Count László Festetics, one of the wealthiest noblemen in the region of Transdanubia or, for that matter, anywhere in Hungary. However, neither the circumstances of the encounter, nor his remarks upon the person of the count himself leave any doubt as to the patriotic traveller's disappointment in the event or to the reservations with which he departed. He wrote:

> "From his father, the great György Festetics, he inherited not only the most bountiful of estates, but also a great deal of money. Yet in the space of just a few giddy years, he has—in that Hungarian 'rock of scandal', Vienna—sunk into a debt of nine million forints. At present, his entire fortune is under judicial lock and key, with all but the family estate subject to management by custodian. The Count himself receives 150,000 forints annually for his expenses, such that the rest of his income is used to repay his debts—it is said until the end of his days. While in reality a shrewd and industrious man, he is, in this way, of no further use to family or nation, but stands at most a barren rock, echoing back nought but sadness, in place of that bulwark that once loomed in the time of his great

> ancestors, the Zrínyis,[1] whose precious armaments and other Ottoman spoils of war—artefacts that have since been passed down to the Festetics family—impart great value to the Keszthely gallery of arms".[2]

It should be noted, however, that estimations of László Festetics both by contemporaries and by those who came after were likely influenced by his relationship with his cousin, the eminent Hungarian statesman of the era, Count István Széchenyi, whose writings and journal entries tended to judge the Keszthely count rather harshly, perhaps excessively so. When in 1821, in the wake of his father's death, Széchenyi visited Keszthely, and there learned in a letter from Festetics of the death of Countess Saurau, née Gabriella Hunyady, for whom he had cultivated some deep affection, Festetics—a good host and kinsman—suggested he spend a long period of time with him there at his estate. Széchenyi, however, declined the invitation, saying:

> "Laci proposed that I spend several months with him. I'd rather refine sugar on the colonial plantations. The world has never seen such a fool. I'm sure it would come to blows if I were forced to spend a week with him in close quarters. His wife, by God, has earned her place in heaven".[3]

Later entries on his cousin were notably succinct, a circumstance in which Festetics's clear advantage in wealth and financial opportunities may have

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[1] The erstwhile Croatian noble family that played a key role in the wars against the Ottomans in the 16 th and 17 th centuries. The family's former estates were purchased by György Festetics at the end of the 18 th century.

[2] Farkas Gyalui (ed.): *Mezőkövesdi Ujfalvi Sándor emlékiratai* [Memoirs of Sándor Ujfalvy de Mezőkövesd], Kolozsvár, Erdélyi Múzeum Egyesület, 1941, 217. For a comprehensive analysis of László Festetics's finances, see: György Kurucz: Adminisztráció, gazdálkodás, adósságkezelés. Gróf Festetics László pénzügyi helyzete az apai örökség átvételétől a zárgondnokság időszakáig (1820–1830) [Administration, Farming, Debt Management: The Finances of Count Laszló Festetics from the Assumption of his Paternal Inheritance until the Period of Trustee Management (1820–1830)], *Századok* 150 (2016), 535–584.

[3] "Latzy mir angetragen bei ihm einen Sejour von einigen Monaten zu Machen Ich möchte lieber in den Colonien Zucker rafiniren. – Einen *zweyten* solchen Narren gibt es nimmer. Ich würde ihn ganz gewiss prügeln wenn ich mit ihm 8 Tage *eng* leben müsste. Seine Frau verdient bey Gott den Himmel." Gyula Viszota (ed): *Gróf Széchenyi István naplói* [The Diaries of Count István Széchenyi], Vol. 2, Budapest, Magyar Történelmi Társulat, 1926, 225.

played some part. This likelihood is particularly apparent in an entry penned 9 January 1824, which read: "I have eaten with László Festetics. How rich he is, and how boring".[4]

In Keszthely, Ujfalvy, like Széchenyi before him, was received with faultless hospitality and would afterward speak with exceeding admiration of the *Georgicon*, the agricultural college founded by György Festetics in 1797, where "everywhere the comely [walked] arm–in–arm with the utilitarian". Indeed, it appears that the discussions he pursued far into the night with its professors, who demonstrated "great practical knowledge of both life and economics", had a decisive impact on him. This appreciation was nowhere better expressed than when, speaking of his days in the chancellery in Vienna, he lamented with evident regret that he had not spent his youth "profitably immersing himself in nature and agriculture".[5]

Ujfalvy's notes here are remarkable in several regards. On the one hand, they make references to László Festetics's squandered paternal inheritance, for which Ujfalvy clearly holds the count—who is no longer fit to "beautify"[6] the nation—responsible; on the other hand, he is compelled to mention the count's cultured intellect and readiness to action. These circumstances suggest that what he had likely discussed with Deák—who, according to a chancellery rescript, had served the previous year as chair of the Zala County committee that had reviewed Festetics's financial situation—was some account of the count's prior public activities. Noteworthy among these was his confirmation via Act 19 of 1827 of the 40,000 forints capital fund created by his father under Act 4 of 1802 on behalf of the "military academy" to be erected for use by the future Hungarian Army. The act itself states that

[4] "Bey Ladislas Festetich gegessen. Wie reich und langweilig." Ibid., 443.
[5] Gyalui: *Mezőkövesdi Ujfalvy Sándor emlékiratai* [Memoirs of Sándor Ujfalvy de Mezőkövesd], 218.
[6] A term attributed to Festetics's cousin, Count István Széchenyi, author of a programme in the 1830s to transform Hungary's traditional feudal political and economic system.

> "Count László Festetics de Tolna, in a doubly noble gesture, has not only ordained and established [this fund], voluntarily and readily, in *pengős* [silver coins],[7] but also enriched it with the addition of 10,000 forints of the same value;—the other, by virtue of which he has sacrificed monies equalling 10,000 forints, also in *pengős*, for the benefit of the scientific society or Hungarian academy yet to be constructed, specifically, for the financing of the mathematics department to elaborate upon various topics of military import within said academy, (...) has been drafted into the present act of law in everlasting commemoration of his extraordinary generosity and zealous patriotism."[8]

Also attributed to Festetics was an initiative whose aim was to create a network of libraries at county seats and in Hungarian royal free cities (*libera regiae civitas*), thriving municipal centres boasting economically and intellectually active middle-class populations. Zala County, for its part, gladly accepted the offered sum of 2,000 silver [pengő] forints as of its General Assembly of 13 March 1826 and called upon county estate holders to contribute to the cause.[9]

It is understandable, therefore, that Ujfalvy, too, would refrain from pronouncing superficial judgement. His praise for the *Georgicon* and accounts of his discussions with teachers demonstrate that, ultimately, the count had preserved—even expanded upon—his father's legacy. This is hardly surprising, given the strict and categorical programme of education by which the school's great patron had striven to prepare his son for life. László Festetics read, wrote, and spoke five languages fluently, having studied Latin, French, German, and

[7] The Hungarian word *pengő* is an onomatopoeic reference to the pinging sound made by silver coins. Thought to retain their value in a way not possible with bank notes, the coins were part of a system based on the silver standard used in the Habsburg-ruled Kingdom of Hungary during the 18th and 19th centuries.

[8] Kálmán Csíky (trans.): *Magyar törvénytár, 1740–1835* [Compendium of Hungarian Legislation. Acts Passed from 1740 through 1835], Budapest, Franklin, 1901, 456–457.

[9] István Kostyál: Festetics László kísérletei közkönyvtárak alapítására [László Festetics's Efforts to Found Public Libraries], in B. Dezsényi (ed.): *Az Országos Széchényi Könyvtár Évkönyve 1961–1962* [Yearbook of the National Széchényi Library 1961–1962], Budapest, Országos Széchényi Könyvtár, 1963, 280–290.

even English in addition to his native Hungarian. In the company of his tutor, József Takáts de Péter he had traversed every corner of Hungary, Transylvania, and northern Italy and had met every significant Hungarian personage of the age. Under the supervision of a later instructor, István Kultsár, he studied law at the university in Pest, completed a lengthy study tour of the hereditary lands of the Habsburg Monarchy, and made cursory visits to a large number of German principalities. On one such journey, he even called upon Johann Wolfgang von Goethe in Weimar. As per his father's wishes, he was also to develop a comprehensive mastery of both agricultural theory, and, not insignificantly, the art of gardening.[10] The modern appearance of the stately home and grounds in Keszthely, the beautification projects to which the entire landscape was subject, and the pyramid with which he planned to commemorate his father all suggest a flare for the grandiose, a trait that was, however, incommensurate with his financial options.[11] However, despite these qualities, Festetics remained committed both to science, and to the spirit of his father's legacy. When it became necessary to protect his assets from bankruptcy and to hand his fortunes over to a trustee in the person of Ferenc Szegedy de Mezőszeged, the relevant agreement did not stipulate the closing of the *Georgicon*, the dismissal of instructors, or any reduction in the number of comital scholarships among its various means of cost reduction.[12]

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[10] Róbert Stohl: *Fragmenta Takatsiana, források és kiegészítések péteri és téti Takáts József (1767–1821) életrajzához* [Fragmenta Takatsiana, Sources for and Supplements to the Biography of József Takáts de Péter and Tét (1767–1821)], PhD thesis, Szeged, University of Szeged, 2009, 97–98.; György Kurucz: *Keszthely grófja: Festetics György* [The Count in Keszthely: György Festetics], Budapest, Corvina, 2013, 181–191.

[11] For more on Festetics's ideas for the development of the estate, see: Gábor Alföldy: A keszthelyi Festetics-kastélypark rövid története [A Brief History of the Festetics Castle Gardens in Keszthely], in G. Alföldy (ed.): *Királyi és hercegi kertek Magyarországon: Eszterháza, Gödöllő, Keszthely, Visegrád* [Royal and Princely Gardens in Hungary: Eszterháza, Gödöllő, Keszthely, and Visegrád], Budapest, Mágus, 2001, 32–45.; Idem: *A keszthelyi Festetics-kastély parkja. Tudományos dokumentáció és helyreállítási javaslat* [The Festetics Castle Gardens: Scientific Documentation and Recommendation for Restoration], Vol. 1, Budapest, Ms, 2011, 23., 78–107. The latter manuscript was made available to me by its author, Gábor Alföldy, to whom I wish to express my sincerest gratitude.

[12] MNL OL Festetics Lt, Festetics László iratai [László Festetics's Papers], Zárgondnoksággal kapcsolatos iratok 1806–1847 [Documents Relating to Trusteeship 1806–1847] P 248 5. d. fols. 7–10v

That Festetics sought to use a visionary, broadly European approach to the development of the institution was already apparent at the time he took possession of his inheritance, when he sent two of the *Georgicon*'s young professors—physician and veterinarian Pál Gerics, who would be serving as director by the time of Ujfalvy's visit, and horticulture, oenology, and ampelology expert József Lehrmann—on a Western European study tour for several years. Thus, in the early 1820s, he did not look upon the financing of visits by *Georgicon* academics to foreign lands as a burden; rather, as his father's intellectual and cultural successor, he felt it essential that he seek out and adapt the latest models and processes as well as expanding the institution's international ties; in other words, he viewed time taken for market research and sums applied to the improvement of his school's professional expertise as long-term investments.

The documentation produced by Gerics and Lehrmann over the course of their nearly five-year journey offers an extraordinarily panoramic view of the two young men's activities over a considerable swath of time. Formerly held in the appropriate classes of the Festetics Family Archives and now found within the National Archives of Hungary, and among some other documents later transferred in part to the Manuscripts Collection of the National Széchenyi Library, the reports and diaries in question permit the reader to follow the travellers through Silesia, Saxony, Prussia, the Kingdom of Hanover, a number of northern German cities, the Rhineland, the Netherlands, England, Scotland, France, Switzerland, and Italy.[13] It should also be noted that Gerics, at

[13] MNL OL Festetics Lt, Központi birtokigazgatás és birtokgazdálkodás [Central Estate Administration and Management], Birtokigazgatással kapcsolatos iratok [Documents Relating to Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról (1819–1825) [Reports by Pál Gerics on His Travels Abroad (1819–1825)]; MNL OL Festetics Lt, Központi birtokigazgatás és birtokgazdálkodás [Central Estate Administration and Management], Birtokigazgatással kapcsolatos iratok [Documents Relating to Estate Administration], P 274 3. d. 6. Lehrmann József jelentései külföldi útjáról (1819–1825) [Reports by József Lehrmann on His Travels Abroad (1819–1825)]. The first to mention Gerics's reports was Sándor Süle, although he did not undertake any actual examination of the sizeable body of writings. Sándor Süle: *A keszthelyi Georgikon, 1797–1848* [The Georgicon in Keszthely, 1797–1848], Budapest, Akadémiai, 1967, 75. The route taken by the two men was first described, based on their reports, by Gábor Alföldy in his documentation of the history of the gardens of the castle in Keszthely. Alföldy.: *A keszthelyi Festetics-kastély parkja* [The Festetics Castle Gardens in Keszthely], Vol. 1,

Festetics's instruction, conducted all correspondence with his sponsor, compiled his journals, and wrote all the reports to the *Directio* (the central administrative body of the Festetics estates) in Hungarian; that is, the count regarded his native tongue as important as a means both of communication, and of strengthening scholarly consciousness in contemporary Hungary. In accordance with Festetics's wishes, therefore, Lehrmann recorded his experiences in German; however, the documentation generated by Gerics was clearly the superior in terms of both quantity, and variety, as evinced by the 55 letters to Festetics, 83 reports to the *Directio*, and more than 1,000 pages of "Európa míveltebb tartományiban tett utazási jegyzések" (Travel Notes on the More Cultured Provinces of Europe) he left behind. The last of these was authored years after the trip itself, presumably with the intent of publication.[14] Of course, the sheaf of documents attributed to Lehrmann was valuable in its own right: 24 letters to Festetics and 71 reports to the *Directio*. However, of his final report, or "Reisebeschreibung", written in German, only a fragment of scarcely fifty pages remains to posterity, as well as a of his relatively brief "Fortsetzung" of sixty-nine folios.[15]

Thus, it is hardly a matter of debate that the two professionals' reports, journals, letters, and other related documentation—instructions, itineraries,

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30–33. It was also Alföldy who first used the sketches of the greenhouses produced by Lehrmann in the course of his travels.

[14] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/1–10

[15] Lehrmann's reports are not exclusively held in one specific class of papers in MNL OL Festetics Lt, Központi birtokigazgatás és birtokgazdálkodás [Central Estate Administration and Management], Birtokigazgatással kapcsolatos iratok [Documents Relating to Estate Administration], P 274 3. d. 6. Lehrmann József jelentései külföldi útjáról (1819–1825) [Reports by József Lehrmann on His Travels Abroad (1819–1825)]. Some of them were probably circulated and copied for daily practices which probably explains why certain items are held in the various files of the *Directio*: MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate] P 279. A continuation of Lehrmann's first summary account of his travels and observations titled "Fortsetzung meiner Anmerkungen vom Jahr 822 über den Weinbau und der Gärtnerey in ganzen Angangen; so auch über Essig und Distillations fabriquen, etc." is held in the National Széchenyi Library: OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Germ. 1325. The study tours of Hungarian gardeners, including Lehrmann's summary reports, have recently been highlighted in: Kristóf Fatsar: Hungarian gardeners on western study tour in the early 19th century, in H. Fischer – J. Wolschke-Bulmahn – J. Beardsley (eds.): *Reisen und Gärten. Reisen, Reiseberichte und Gärten vom Mittelalter bis in die Gegenwart,* München, Akademische Verlagsgemeinschaft München, 2019, 273 –288,

sketches, etc.—represent source material of considerable historical value, whether the topic be culture, economics or even the contemporary mentality. The present study seeks to offer both a survey and analysis of this material, examining the two men's mission not merely by describing events as they occurred in chronological order, but also by taking as comprehensive an approach as possible based on the full range of available primary sources.[16] Since the elucidation of the two Hungarian professionals' mission should involve a comprehensive overview of the vast amount of available international and Hungarian secondary sources, it seems more expedient to integrate the results of previous explorations into the wider social, economic, scientific and cultural aspects of the period concerned together with specific issues relating to the foundation of the *Georgicon*, This explains why a separate chapter is dedicated to the school's founding, including the socio-political and intellectual backdrop against which it took place. Then the book inevitably turns to the peculiarities of travel of the age which leads us to the study of the individual instructions supplied to the two travellers for their journey. The subsequent chapters seek to reconstruct the actual routes of the two Hungarian intellectuals, and by doing so, to illuminate such personal and institutional ties as are documented to have developed at the time. Nevertheless, the precise representation of the scientific, practical, economic, agricultural, and individual sociocultural experiences will go beyond descriptions provided in a linear way. Encounters with foreign academics, aristocrats and financiers, including specific observations and experiences the two men gathered and recorded during their

[16] Published excerpts from the reports and letters of Pál Gerics: György Kurucz: Tanulmányúton Nyugat-Európában: Gerics Pál georgikoni tanár angliai levelei gróf Festetics Lászlóhoz [A Study Tour of Western Europe: Letters from England by Georgicon Professor Pál Gerics to Count László Festetics], *Agrártörténeti Szemle* 39 (1997), 655–724.; Idem: Válogatás Gerics Pál georgikoni tanár nyugat-európai jelentéseiből és leveleiből [Selected Excerpts from the Western European Reports and Letters by Georgicon Professor Pál Gerics], *Fons* 13 (2006) 245–296.; Idem: György Kurucz: *Technológiai utazás a modern kor hajnalán. Válogatás Gerics Pál és Lehrmann József georgikoni professzorok nyugat-európai jelentéseiből és naplóiból (1820–1825)* [Technological Journey at the Dawn of Modernity. Selected Reports and Journals by Georgicon Professors Pál Gerics and József Lehrmann on Their Study Tour of Western Europe (1820–1825)], Budapest, L'Harmattan, 2020.

travels, will be presented with references to wider European and national contexts. For this reason, a separate chapter will offer a broad overview of their technological observations as well as highlighting contemporary marketing techniques. In addition, another chapter is meant to give a mosaic picture of contemporary everyday life as seen and recorded by the two Hungarian travellers, thereby shedding some light on customs, manners, communications, religiousness, consumption, or the various representations of social status. Unfortunately, no portrait remains of the authors of this unique body of writings, although it is hoped that frequent quoting directly from their reports and letters to Count László Festetics or the *Directio* will have the effect of rendering the account of their experiences more personal.

The epilogue to our analysis is not merely meant to give a summary of the mission of the two *Georgicon* professors; it is also meant to evoke the figure of the *Georgicon*'s founder, as well as his nephew, Count István Széchenyi and his friend Baron Miklós Wesselényi, who visited Germany, France and England in 1822 when Gerics and Lehrmann were travelling round Europe. I am aware of the importance of later initiatives in Hungary to adapt and exploit the experience gathered by the *Georgicon* professors and the two Hungarian aristocrats over the course of their study tour. However, to reconstruct the processes and stages by which this took place exceeds the limits of this book and could only come about within the framework of a future research project. If the reading of this volume serves to make the want of such a work apparent, then it will not have been written in vain.

Chapter 2

Exigency and Vision: The Foundation of Hungary's First College of Agriculture

In a letter to György Festetics dated 5 November 1816, Dániel Berzsenyi, a minor nobleman with a meagre income who managed the lands he lived on in Somogy County, compared Keszthely, the seat of the Festetics estates, to the German city of Weimar. The reference raises the question as to what prompted the "poor poet", as he once called himself, in addressing a man far above him in status and wealth, to liken a small market town on the shores of Lake Balaton to a place as emblematic of European refinement and noble patronage as Weimar. The easiest route would be to write it off as mere flattery of a "great man", one whom even his contemporary, the politically compromised writer Ferenc Kazinczy, released from prison fifteen years earlier for his involvement in a Jacobin plot in the mid–1790s, had chastised for his vanity.[17] If, however, we weigh Berzsenyi's thoughts in the company of those expressed by the Transylvanian noble visitor, Ujfalvy, who judged the count's comportment from the perspective of the future of the nation, then it is upon the responsibility of an individual capable of acting on the basis of social privilege and financial position, or even the role undertaken by the Hungarian nobility in general, that one's focus necessarily falls.

Not surprisingly, it is a dilemma later generations would continue to debate. In 1889, for example, Independence Party member Lajos Mocsáry would reflect on a fellow politician's book, Béla Grünwald's *A régi Magyarország 1711–1824* (The Old Hungary 1711–1824) of the previous year,

[17] Oszkár Merényi (ed.): *Berzsenyi Dániel ismeretlen és kiadatlan levelei* [Previously Unknown and Unpublished Letters by Dániel Berzsenyi], Budapest, MTA Irodalomtörténeti Bizottság, 1938, 59–60. For more on the Hungarian Jacobin movement and the activities of Ferenc Kazinczy and associates, see: Kálmán Benda (ed.): *A magyar jakobinusok iratai* [Documents of the Hungarian Jacobins], 3 vols., Budapest, Akadémiai, 1952–1957. On the topic of Festetics's literary patronage, see the corresponding chapters in: Géza Cséby: *A keszthelyi Helikon. Gróf Festetics György szerepe a magyar művelődéstörténetben* [The Keszthely Helikon: The Role of György Festetics in Hungarian Cultural History], Zalaegerszeg, Pannon Írók Társasága, 2017.

now regarded as the first "critical analysis of feudal society and mentality", in a separate volume of his own authorship.[18] Titled *A régi magyar nemes* (The Old Hungarian Nobleman), Mocsáry's book began with an introduction, in which he accused Grünwald of having put into Hungarian an undeservedly and unjustifiably uncritical acceptance of the Habsburgs' absolutist system of governance. He wrote:

> "Béla Grünwald, who, since the publication of his book *A régi Magyarország* (The Old Hungary), has been styled a mouthpiece for Hungarian democracy, has treated the nation most harshly in his book. Among the reasons for which the country finds itself in such a regrettable state in the present age, he cites as first and foremost the links between the foreign ruling house and its hereditary lands, among them Hungary; however, in elaborating upon this point, he places the near-full burden of responsibility upon the nation. He finds excuses for the powers that rule over us, even portraying them as initiator in the trappings of progress, while casting blame upon the nation for its own backwardness. The constitutional liberty our nation has managed to keep alive in its breast under even the most grievous of circumstances he labels penury, praising instead the absolute monarchy that, having everywhere destroyed feudal constitutions, has created a state administration filled, as representative of the public good, with noble, ideal content. (...) The sons of this nation he denies all greater mental faculty, depicting contemporary generations as ignorant, uncultured, barren of ideas, incapable of grasping the

[18] Lajos Mocsáry: *A régi magyar nemes* [The Old Hungarian Nobleman], Budapest, Franklin, 1889. Lajos Mocsáry (1826–1916) raised many a contemporary eyebrow with his 1855 writing, *Magyar társasélet* [Hungarian Social Life], in which he opined that the forces of modernisation and urbanisation in Hungary might be strengthened through the active, public, scientific energies of the former noble classes, who possessed both the requisite culture and distinct national consciousness. Béla Grünwald (1839–1891), a writer and Deputy Lord Lieutenant of Zólyom County, was a personage of some note in his time. For more on his activities, see: Aranka Kocsis (ed.): *A Felvidék. Grünwald Béla és Michal Mudroň vitairatai* [Upper Hungary: Documents in the Debate of Béla Grünwald and Michal Mudroň], Pozsony [Bratislava], Kalligram, 2011.

> fundaments of politics, and both naive, and inexperienced in matters of public import".[19]

Then Mocsáry went on to raise an important question: "Is it true that the absolute monarchy did more to promote progress and healthy national development than the feudal constitution did?" Mocsáry's question has remained, if not in such explicit fashion, a fundamental one for Hungarian historiography as it strives to interpret developments in the 18th century. In the process, many have painted the Hungarian nobility—in a manner that is beyond simplistic—as a social and political barrier to progress. It is seen as clinging to the privileges it was accorded during the dark centuries of the Middle Ages, as obstructing all service to the common good and, although incapable of bearing the burden of taxes necessary for the operation of a modern state, as having oppressed the peasantry based on its prerogatives. The complementary element of this line of thinking was that true progress resided with the Habsburg dynasty and its government, as only the person and politics of its ruling head, the true representative—by virtue of his absolute power—of the notion of statehood, might rise to the status of single and legitimate embodiment of the common good and interest. In this oversimplified formulation, therefore, the original representative of all evil in the face of enlightened absolutism was the Hungarian nobility, which, by the late 18th century, had found itself unable to effect 'modern' responses to the challenges of centralised politics as practised by the enlightened Habsburgs, undertaking only what constituted the representation of its own provincial interests in the form of hidebound feudal nationalist projects.[20]

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[19] Mocsáry: *A régi magyar nemes* [The Old Hungarian Nobleman], 21.

[20] Since the 1970s, the principal influence on the concept of "feudal nationalism", its connotations and related problems has been the interpretation furnished by Domokos Kosáry. For a more detailed reflection on Kosáry's views, see: Andor Tarnai: Magyar jakobinusok, bonapartisták, nyelvújítók [Hungarian Jacobins, Bonapartists, and Language Reformers], *Irodalomtörténet* 54 (1972), 383–396. For more on this particular set of issues and the dilemma of Hungarian progress, see Ambrus Miskolczy: A felvilágosodás és liberalizmus között. Folyamatosság vagy megszakítottság? Egy magyar történészvita anatómiája [Between Enlightenment and

As to whether the Hungarian nobility were actually—to use Grünwald's phrasing—wholly 'uncultured, barren of ideas, [and] incapable of grasping the fundaments of politics', there is plenty of room for doubt. Firstly, while nationalist theory and its collateral political and intellectual movements do not conform to the privileged, feudal structure of a given society, they do presume the emergence of a broadly based cultural, linguistic, and spiritual community and corresponding national identity. Beyond that, however, is the evidence provided by the processes that defined Hungary in the final decades of the 18th century. When in 1790, following the death of Joseph II, the Diet of Hungary convened for the first time in more than two decades, deputies conspicuously focused their attentions not only on the practice of constitutionality and the protection of their privileged status, as had been the case in the past, but also on the advancement of Hungary's commercial and business interests, and even on the matter of the Hungarian language.[21] In reaction to what had been considered the arbitrary practice of the Habsburg government, the Hungarian nobility did not restrict its initiative to the political realm alone; rather, prompted by the arguments of the enlightened gentry and aristocracy, it went as far as to pass a resolution on regular preparatory work on the part of the Diet committees, signalling to the new ruler, Leopold II, that real change had begun in Hungary, and that he might well concede to having detected signs of the emergence of a new mentality.[22] It is revealing, therefore, that for the government, that great representative of the "common good", to discredit the aristocratic movement via power politics and targeted communications became a priority objective. Agents with persuasive pens argued that it was only the "Hunnic barbarism" of

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Liberalism—Continuity or Disjunction? Anatomy of a Hungarian Historical Debate], Budapest, Lucidus, 2007. Offering a critical survey in relation to a prominent Hungarian historian's views in the interwar period, Gyula Szekfű's use of "feudal nationalism", as a category in post-1945 historiography is an essay by András Gergely, published in a book commemorating the birth of Hungarian author, poet and language reformer Ferenc Kazinczy. András Gergely: Kazinczy a történelemben [Kazinczy in History], in A. Debreczeni – M. Gönczy (eds.): *Ragyogni és munkálni. Kultúratudományi tanulmányok Kazinczy Ferencről* [To Shine and to Labour: Cultural Studies Research on Ferenc Kazinczy], Debrecen, Debreceni Egyetemi, 2010, 285–293.

[21] See the Diet of 1790, Articles 12–13, 16, and 67.

[22] Éva H. Balázs: *Hungary and the Habsburgs 1765–1800*, Budapest, CEU Press, 1997, 312–317.

the Hungarians that hindered the "benevolent" monarch from effectively advancing the matter of public welfare[23]

There can be little doubt that the reforms enacted by Maria Theresa and Joseph II during the second half of the 18th century, with particular reference to the consistent regulation of the rights and obligations of the feudal peasantry with respect to their landlords, were of considerable socio-political significance, or that the institutional processes founded in relation to professional education in medicine and other aspects of healthcare met European standards.[24] It should not be forgotten, however, that with the exception of the Academy of Mining and Metallurgy (the *Bergschule*) in Selmecbánya (present-day Banská Štiavnica, Slovakia), which, subsequent to its inauguration in 1735, operated under the supervision of the Royal Chamber, the central government founded no educational institutions with the potential to enhance the nation's economic performance.[25] Furthermore, such campaign-like initiatives on the part of the government as did affect the production sector, e.g. the publication of books or pamphlets on agricultural or veterinary practices, brought no measurable change of any kind.[26] It is not of negligible import, therefore, that the Habsburg government, having in the years following the Diet of 1790 become embroiled

[23] Kálmán Benda: A magyar nemesi mozgalom 1790-ben [The Hungarian Noble Movement in 1790], in K. Benda (ed.): *Emberbarát vagy hazafi? Tanulmányok a felvilágosodás korának magyarországi történetéből* [Altruist or Patriot? Studies from the History of the Age of Enlightenment in Hungary]. Budapest, Gondolat, 1978, 64–104. For more on the reign of Leopold II (1790–1792), heir to Joseph II, see: Helga, Peham: *Leopold II. Herrscher mit weiser Hand*., Graz–Wien–Köln, Styria, 1987. For an example of the infamously commissioned flyers see: [Leopold Alois Hoffmanns]: *Babel. Fragmente über die jetzigen politischen Angelegenheiten in Ungarn*. Gedruckt im römischen Reiche, 1790.; [Idem]: *Ninive. Fortgesetzte Fragmente über die jetzigen politischen Angelegenheiten in Ungarn*, Auch im römischen Reiche gedruckt, 1790.

[24] Dezső Szabó: *A magyarországi úrbérrendezés története Mária Terézia korában* [A History of Feudal Tenure Regulation in the Age of Maria Theresa], Budapest, Magyar Történelmi Társulat, 1933; Lilla, Krász: "A mesterség szolgálatában": Felvilágosodás és orvosi tudományok a 18. századi Magyarországon ["In Service of the Profession". Enlightenment and the Medical Sciences in Eighteenth-Century Hungary], *Századok* 139 (2005), 1065–1104.

[25] János Mihalovits: Az első bányatisztképző iskola alapítása Magyarországon [The Founding of the First Mining Academy in Hungary], in *Bányászati, kohászati, és erdészeti felsőoktatásunk története 1735–1935. 1. füzet* [History of Tertiary Education in Mining, Metallurgy, and Forestry in Hungary 1735–1935, Booklet 1], Budapest, Magyar Királyi József Nádor Műszaki és Gazdaságtudományi Egyetem Bánya -, Kohó-, Erdőmérnöki Karának Könyvkiadó Alapja, 1938, 5–24; Antal Tárczy-Hornoch: Mikoviny Sámuel, a selmeci bányatisztképző tanintézet első tanára [Sámuel Mikoviny, First Instructor at the Selmec Academy of Mining], Ibid: 25–42.

[26] Jenő Dóczy – Imre Wellmann – István Bakács (eds.): *A magyar gazdasági irodalom első századainak könyvészete (1505–1805)* [Bibliography of the First Centuries of Hungarian Agricultural Literature (1505–1805)]. Vol. 1, Budapest, Magyar Mezőgazdasági Múzeum, 1934. 98–185.

in the French wars sweeping Europe continued to ignore the issue, or, that the actual groundwork in professional education in the matter of agricultural production, a sector responsible for the majority of state revenues, was in fact laid by one highly cultured member of a Transdanubian aristocratic family, Count György Festetics, through the founding of an institution charged with transmitting the modern principles of husbandry and related practical knowledge.

To understand Festetics's unparalleled decision, the personal motivations behind it, and the elements that composed his vision for the future, one must consider both his family background, and the events that marked the various stages of his life. The justifications for doing so are many and include not only the palpable influence Grünwald's judgement—or the chief elements of it as described by Mocsáry—continues to exert on perceptions today, but also, and not incidentally, the attitudes of contemporaries Berzsenyi and Ujfalvy. Certainly, the count's family background and financial position would have required no more of him than that—identifying in full with the politics of the central government and accepting the current state of affairs—he choose a life of leisure spent in private circles, coloured from time to time by entertainments appropriate to his social status: balls, hunts, theatrical performances, gambling, or even the diversion of the *salonnières*. Still, the count's life path, nourished by the spirit and ideals of the Enlightenment, diverged from the pattern set down by his family in a manner that must have seemed irregular to even his contemporaries and that was necessarily attended by a measure of conflict. The paths to success pursued by various members of the Festetics family included options in both public administration and the military, yet, for Festetics, recognition at the national and European levels derived precisely from having broken with such traditions.

The wealth and status of the Festetics family had its origins in the transactions of György Festetics's great grandfather, Pál Festetics, veteran of the

1686 recapture of Buda from the Ottomans, who expanded upon the family fortune partly through trade with Turkish prisoners in the service of the Batthyány family, and partly through serendipitous marriage.[27] Of his three sons to reach adult age, two entered military service. Only the youngest, Kristóf, acceded to his father's desire that he undertake a career in administration, studying law at the University of Nagyszombat (present-day Trnava, Slovakia) before accepting, by virtue of his experience in county administration and the meetings of the Diet, an appointment to the Hungarian Royal Council of the Governor-General (*Statthalterei*) in 1736. Eight years later, he would be found serving as a justice on the Court of the Seven, a judicial body that dealt primarily with cases of escheat.[28] Unlike his predecessors, Kristóf had his own first-born son, Pál, educated not only in his home country, but also abroad. The chosen institution he chose was the Protestant university in Leipzig, where he was accompanied and supervised by András Károly Bél, son of the culturally accomplished Lutheran pastor and teacher, Mátyás Bél. The intellectual atmosphere of the Saxon city in which the young Pál found himself is perhaps best reflected in the words of Johann Wolfgang Goethe, likewise a student of law in the city, who would later describe Leipzig as "little Paris".[29] It is not surprising, therefore, that the Festetics family library should have been expanded during the time of Pál's studies there with books purchased from Leipzig booksellers, in particular works by Montesquieu, Voltaire, John Locke, and other French, English, and (naturally) German authors of the Enlightenment.[30]

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[27] For more on the early history of the Festetics family, see the relevant sections of Dezső Szabó: *A herceg Festetics család története* [A History of the Princely Family Festetics]. Budapest, Franklin Társulat, 1928. Pál Festetics also participated as an officer in the siege of Buda in 1686 under Transdanubian Captain–In–Chief, Count Ádám Batthány (1662–1703). MNL OL Festetics Lt, Memorabilia, P 235 117. d. fol. 40.

[28] Kurucz: *Keszthely grófja* [*The Count in Keszthely*] 65-67.; Martyn Rady: Customary Law in Hungary. Courts, Texts, and the *Tripartitum*. Oxford, Oxford University Press, 2015, 150–152.

[29] Johann Wolfgang Goethe: *Faust. Eine Tragödie,* Tübingen, Cotta'schen Buchhandlung, 1808, 134.

[30] Kurucz: *Keszthely grófja* [The Count in Keszthely], 63. Of Leipzig's special role in transmitting English literature, economic and political thinking, see: Jennifer Willenberg: London – Leipzig. Das „Zentrum des Buchhandels in Teutschland" als Umschlagplatz für Englisches Schrifttum im 18. Jahrhundert, *Neues Archive für Sächsische Geschichte* 75 (2005), 125–153.

The career opportunities that opened up for Pál Festetics through his education and legal training were indeed prodigious, and as a chancellery official, he would eventually become an indispensable advisor to the Habsburg sovereign, Queen Maria Theresa, in matters pertinent to Hungary, particularly as regards his work toward the development of an urbarial decree that would regulate the situation of the peasantry against seigneurial excesses.[31] In 1772, having become vice-chairman of the Hungarian Court Chamber, the office which administered Hungarian state finances, the Queen elevated him to the rank of count.[32] This success in administrative affairs Pál held up as an example to his own first-born son, György, who was the product of his marriage to Countess Julianna Bossányi and to whose education he dedicated considerable attention. Born in 1755, György Festetics was twelve years old when he was sent to the *Theresianum*, an elite Viennese academy for career administrators founded by Queen Maria Theresa in 1746, where in addition to traditional classical languages and literatures, he had the opportunity to master the basics of law, state administration, feudal state finance, mathematics, statistics, geography, and even military studies, defence, and architecture.[33] At the academy in Vienna, however, care had also been taken to incorporate into the curriculum a general course in agriculture, one that in his time was taught by Lajos Mitterpacher, a member of a family of understewards in Bellye (present-day Bilje, Croatia), who would go on to lecture on agronomics at the university in Pest following the dissolution of the Jesuit Order.[34]

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[31] Szabó: *A magyarországi úrbérrendezés története* [A History of Feudal Tenure Regulation], 64–65.

[32] István Nagy: *A Magyar Kamara 1686-1848* [The Hungarian Chamber of Finances 1686–1848], Budapest, Akadémiai, 1971, 178-180.; Alfréd Czobor (ed.) and Antal Áldásy (trans.): *A Magyar Nemzeti Múzeum könyvtárának címjegyzéke. II. Címeres levelek.* [The Registry of Titles of the Hungarian National Museum Archives. II. Letters Patent Granting Armorial Bearings], Vol. 6, Budapest, Magyar Nemzeti Múzeum Könyvtára, 1940, 2–3.

[33] Kurucz: *Keszthely grófja* [The Count in Keszthely], 76.

[34] The teaching material for the students at the *Theresianum* was compiled by Lajos Mitterpacher: *Entwurf der oekonomischen Kentnisse, welche in dem kaiserlichen königlichen Theresianum der adelichen Jugend beygebracht werden*, Wien, Kurzböck, 1773.

Festetics's interest in the professions is reflected, among other things, in his juvenile library, which included, for example, both Adams Smith's classic *Inquiry into the Nature and Causes of the Wealth of Nations* in its original English-language edition, and Part I of a German translation published at nearly the same time.[35] For an understanding of finances and economics in the world beyond the borders of the Habsburg Monarchy, Festetics turned primarily to source material in French and German.[36] Within the count's private library, which he maintained independently from that of his family, his 388-item catalogue on state and general philosophy reflected the clear influence of Karl Anton Martini and Joseph Sonnenfels. From Martini's textbooks on legal philosophy, Festetics would have absorbed the ideals of the classical thinkers in natural law, and would certainly have fallen under the influence of such authors as were frequently mentioned by his Viennese teacher—Grotius, Hobbes, Wolff, Thomasius, Pufendorf and their followers.[37]

Both his library and his correspondence reveal Festetics as a man with a broad education in literature, the basis for which was largely laid down by his other instructor, another member of the Jesuit Order, Michael Denis.[38] It should not be forgotten, of course, that beyond his own mother tongue, the young count also spoke, read, and wrote Latin, German, French, English, and Italian fluently. In the years following his return from Vienna, Festetics first served briefly as a financial administrator with the Royal Chamber in Zagreb, where he met Miklós Skerlecz, a member of the Banate Council, who, as a member of the trade

[35] Adam Smith: *Untersuchung der Natur und Ursachen von Nationalreichthümern*, Vol. 1, Leipzig, Weidmanns Erben und Reich, 1776.

[36] [J. J. L. Graslin]: *Essai analitique sur la richesse et sur l'impôt*, Londres–Paris–Nantes, Guillyn et Vatar, 1767.; [François-Veron Forbonnais]: *Élémens du commerce*, Nouv. éd partie 1–2, Leyde, Briasson et al, 1766. The latter work covers factors influencing trade from antiquity to the 18th century, including the role of the monetary loan and fluctuations in exchange rates. Its pages have been marked by Festetics in numerous places. Two other books in Festetics's early library merit mention here: [J. B. B. Durban]: *Essais sur les Principes des finances*, Londres, Prault père,1769; [Nicolas Dutot]: *Reflexions politiques sur les finances et le commerce*, 2 vols., La Haye, Dole, 1740.

[37] György Kurucz: Könyv és főnemesi műveltség: Festetics György magánkönyvtára katonai pályára lépésének kezdetén [Books and Aristocratic Education: The Private Library of György Festetics at the Start of his Military Career], *Aetas* 21 (2006), 93–108.

[38] Kurucz: *Keszthely grófja* [The Count in Keszthely], 78–80.

committee created by the Diet of 1790–1791, would later draft proposals articulating the adverse effects of Habsburg economic policy on developments in Hungary.[39] In opposition to his father's wishes, however, the young Festetics soon turned his back on administrative work to join the hussar regiment of Count Ferenc Nádasdy. In a bid for speedy promotion, he followed this with service in other regiments, including the Hungarian Noble Bodyguard.[40] In 1782, under pressure from his father and in acceptance of his family's dynastic strategy, he took a wife, a decision clearly prompted by the rather serious debt in which the family found itself due to ongoing expansion of the Festetics estate. Indeed, the count's father had threatened to disinherit him should he eschew the proposed marriage, as the girl chosen for him, Countess Judit Sallér, came with a substantial dowry.[41] As Festetics's hopes of military promotion crumbled, however, the young count was compelled to identify with the efforts of the emerging Hungarian aristocratic opposition to the planned general tax reforms under Joseph II, measures intended to restrict the constitutional privileges of the Hungarian nobility. With the participation of his fellow officers, Festetics dispatched a high-profile petition to the Diet that convened after the sovereign's death, essentially declaring the primacy of legislative power *vis-à-vis* the ruling dynasty in a manner that could potentially have served as a basis for the creation of an independent Hungarian military.[42] The incoming Leopold II, however, in a shrewd sequence of plays, succeeded in isolating the aristocracy's aspirations, first initiating court martial proceedings against with the clear intention of making an example of him, then, again out of consideration for the political situation, refraining from any actual act of retribution. Instead, the Hungarian nobleman was subjected to multiple reassignments until it became clear that his

[39] For a Hungarian translation of Skerlecz's works, see Pál Berényi: *Skerlecz Miklós báró művei* [The Works of Miklós Skerlecz], Budapest, Grill, 1914.
[40] In a letter dated 27 July 1778, General Ferenc Nádasdy, Ban of Croatia, expressed delight at his regiment's gaining "such a worthy new member". MNL OL Festetics Lt, Festetics Györgyhöz intézett levelek [Letters to György Festetics], P 246 1. d. fol. 430; Kurucz: *Keszthely grófja* [The Count in Keszthely], 103–105, 118.
[41] Kurucz: *Keszthely grófja* [The Count in Keszthely], 106–109.
[42] Kriegsarchiv, HKR, Akten 1790/44/420 fol. 59–60

career in the Imperial and Royal Army had come to an impasse. In 1791, with the sovereign's approval, he left military service.[43]

Despite the enormous debt encumbering his estates and a private life that was far from ideal, Festetics did not refrain from commencing the practical work on several large-scale projects intended as service for the "common good". In the early 1790s, for example, despite his own Roman Catholic affiliation, he founded a Hungarian Reformed (Calvinist) secondary school in the old Somogy County town of Csurgó, Southern Transdanubia, while also sponsoring publication of the fictitious letters of Count Kelemen Mikes, an act that preserved for posterity the exiled emblematic figure of an early eighteenth-century anti-Habsburg leader, Prince Ferenc Rákóczi II.[44] It is hardly surprising, therefore, that his name crops up in relation to numerous other initiatives. With the aid of the young poet and intellectual József Kármán, the physician Gáspár Pajor, and the University of Pest aesthetics professor Lajos Schedius, Festetics lent his support to the publication of the periodical *Uránia*, a project intended by its authors to spark public discussion in matters of the Hungarian language in literature and science, offer a measure of practical knowledge, and promote the moral values necessary for social progress. From the relevant correspondence, it is clear that Festetics was also the "anonymous patriot" behind the publication of its first volume, a result achieved by way of the director of his estates, János Nagyváthy, and his ties to the Freemasons.[45] At the same time, as regards long-term plans now taking shape, including those related to the founding of the professional training institution that would open at the end of the decade, there can be no doubt about a private motive as well, since the practical need of

[43] Kurucz: *Keszthely grófja* [The Count in Keszthely], 135–136.

[44] György, Kurucz: Adósság, hitel, törlesztés [Debt, Loan and Repayment], 545-546.; MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 245. d. fol. 13; István Kostyál: Kultsár István levele Festetics Györgyhöz [Letter from István Kultsár to György Festetics], *Irodalomtörténeti Közlemények* 64 (1960), 475–476.

[45] György Kókay: Kármán József és az Uránia (1794-1795) [József Kármán and Uránia (1794–1795)] in Gy. Kókay (ed.): *A magyar sajtó története.* [A History of the Hungarian Press], Vol. 1, Budapest, Akadémiai, 1979, 224–225. MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 6. d. fol. 371–372

running his estates on a daily basis had exposed a decided want of trained stewards and officials.[46]

In the end, the agricultural school, founded in 1797 and opened after a lengthy period of preparation, was to represent the better part of the count's life achievement, and he proceeded with due circumspection as regarded its character, the content and structure of its curriculum, and the selection of instructors. Festetics understood the value of assessing the experiences of other institutions and, where suitable, adapting their teaching and organisational practices. Of decisive significance in this regard were proposals made by Viennese university professor and former Göttingen student Peter Jordan on an array of potential subjects (e.g. agrochemistry) and the usefulness of each. As raegards the subjects Festetics himself wished to include in the curriculum, a brief hand-written compilation entitled "Entwurf eines Planes für den oekonomischen Unterricht", presumably dating to 1794, is particularly revealing.[47] As the document is unsigned, the identity of its author can only be surmised indirectly. Its handwriting suggests it was neither Nagyváthy, author of the first Hungarian-language agricultural textbook, nor Lutheran pastor and primary school founder Sámuel Tessedik; rather, by comparison to the handwriting of a letter to Festetics dated 1 January 1799, its authorship can clearly be attributed to Austrian agricultural expert Peter Jordan.[48] In terms of structure, "Entwurf" introduces each subject area by defining concepts and posing questions, then offering a brief explanation as to why a grasp of the material in question is important. Topics covered include, among other things, soil cultivation, phytobiology, fertilisation, soil typology, soil quality, and stock

[46] Zsigmond Csoma: A „Közönséges Instructio…" szerepe Nagyváthy János életművében [The Role of "Regular Instruction..." in János Nagyváthy's Life Work], in G. Lukács – É. Tóth (eds.): *Nagyváthy János 260. Tanulmányok Nagyváthy János „Közönséges Instructio" című könyvéről* [János Nagyváthy 260. Studies on János Nagyváthy's "Regular Instruction"], Keszthely, Pannon Egyetem, 2015, 34–48.; Gábor Lukács: Nagyváthy János keszthelyi munkássága: a „Közönséges Instructio" és annak hatásai [The Work of János Nagyváthy in Keszthely: 'Regular Instruction' and its Impact], in: *Nagyváthy János 260*, Ibid., 55–70.

[47] MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 5. d. fols. 259–268

[48] MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 15. d. fols. 1–1v, 11–11v

breeding. Fundamentally, however, "Entwurf" puts forward not a detailed syllabus with material organised into sequenced blocks, but a set of insights into the significance of each subject area—what specifically is to be gained from the study of, say, edaphology.

At the conceptual level, the project was shaped by consultations with the director of the Festetics estates, János Nagyváthy, albeit via correspondence, with Sámuel Tessedik, the Lutheran pastor of Szarvas, a small town in Central Hungary, who in 1791 had founded an agricultural primary school for youth of common parentage.[49] In a letter dated 3 June 1795, Tessedik appended a description of the school in Szarvas, likely in response to a desire on Festetics's part to use the pastor's experiences as a point of departure for his own endeavours. Such a view would explain Festetics's known sponsorship of the studies of two young men at Tessedik's institution, although neither of the individuals in question, of whom Tessedik wrote in disparaging terms, would later play any part in events at Keszthely.[50]

That Festetics exercised circumspection in his quest for models, however, there can be no doubt, a conclusion for which his correspondence with the Prague-born Viennese newspaper editor Johann Ferdinand von Schönfeld stands as compelling evidence. It can be no coincidence, for example, that Schönfeld, who did not speak Hungarian, launched an agricultural journal in Vienna in 1796 written entirely in Hungarian and, indeed, the editor's correspondence with Festetics permits the conclusion that the count himself was behind its publication.[51] In a letter dated 13 March 1797, Schönfeld recommended Ferenc Pethe as a person whose "accumulated knowledge and national pride" made him unequivocally suited to a teaching position.[52] Such incidents serve to

[49] MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 8. d. fols. 381–382v
[50] MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 6. d. fol. 67; MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 8. d. fols. 131–132v; MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 9. d. fol. 79
[51] MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 10. d. fol. 156
[52] Ibid., fol. 316

demonstrate that when it came to his intentions as founder, considerations of quality, professional standards, and personal commitment were regarded as of inseparable value. The choice of Pethe, however, merits particular attention in that Pethe came to Keszthely following several years' study in Western Europe that included personal experience with agricultural practices in England. Incidentally, the first executive professor of the newly opened academy in Keszthely was the Czech Karl Bulla, upon whose recommendation Festetics was to christen his institution "the *Georgicon*" to reflect both its patronage, and its academic character.[53]

Also of conceptual relevance is a letter dated 17 October 1799 from Festetics to Archduke Joseph, Palatine of Hungary and President of the Council of the Governor-General, in which Festetics refers to England's agricultural achievements as exemplary and exceeding those of any other European country, clear indication that Pethe's engagement in the project was, in fact, no arbitrary matter. As regards the documentation and dissemination of results achieved on the practical side of institutional operations, the count held the labours of Arthur Young and Sir John Sinclair, Secretary and Chairman, respectively, of the Board of Agriculture as instructive, as he did the role played by Albrecht Thaer in ensuring a proper reception for Britain's achievements on the continent.[54] Thaer, incidentally, would later express admiration for the ten-stage crop rotation system used on the *Georgicon*'s experimental farm, an innovation developed by Pethe from experiences gleaned in England and the Netherlands.[55]

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[53] OSZK Kézirattár [Manuscript Department of the National Széchényi Library], Quart. Germ. 1240 fols. 2–3.

[54] In Council review 13140, dated 4 June 1799, Festetics reported on the theoretical and practical considerations behind the operation of the Keszthely school. OSZK Kézirattár [Manuscript Department of the National Széchényi Library], Quart. Germ. 1240 fols. 79–84v. For more on the reevaluation of Young's oeuvre, see: Liam Brunt: Rehabilitating Arthur Young, *Economic History Review* 56 (2003), 265–299.; See also the biography on Sinclair: Rosalynd Mitchison: *Agricultural Sir John: The Life of Sir John Sinclair of Ulbster, 1754–1835*, London, Bles, 1962.

[55] Albrecht Thaer's letter to Festetics is dated 25 January 1801. MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 23. d. fol. 183–183v. For further treatment of Thaer's activities, see: Volker Klemm: Die Entstehung eigenständiger Landbauwissenschaften in Deutschland (1800-1830), *Zeitschrift für Agrargeschichte und Agrarsoziologie* 44 (1996), 162-173.; Idem: *Von der königlichen Akademie des Landbaus in Möglin zur Landwirtschaftlich-Gärtnerischen Fakultät der Humboldt-Universität zu Berlin*, Berlin, Landwirtschaftlich-Gärtnerische Fakultät, Humboldt-Universität, 1998. On Thaer's role as mediator, see: István

In assessing the readiness with which Hungary absorbed and adapted the latest developments in agricultural science, this point is not insignificant.

In the contemporary Hungarian-language press, Festetics's aim of establishing the foundation for a national higher education in agricultural science was repeatedly portrayed as the best means to raise the level of affluence of the Hungarian countryside to compare with that of England. The author of an article in the 14 September 1798 edition of *Magyar Hírmondó,* for example, concluded his own assessment of the character of rural England with the note: "Applying his kind industries to achieve for our rural areas that rare happiness that is enjoyed in England we have—György Festetics". It was for this precise reason, the article remarked, that while "the *Georgicon* was developed for the training of the count's officers, others [might] also enter".[56] In another piece trumpeting Festetics's aims, a writer for *Magyar Kurír* reported that both lectures, and examinations were open to anyone wishing to attend and were not subject to payment of tuition or fees; moreover, the founder himself provided scholarships for students who had no desire of obtaining a position on his estates or whose wish to attend lectures stemmed from a mere interest in learning.[57]

The development of a curriculum, on the other hand, took considerably more time, although, thanks to the labours of Karl Bulla and Ferenc Pethe, the contours of an initial "*oeconomicalis institutum*" had been drawn as early as 1797–1798.[58] In it, subjects were divided into three basic groups: general agriculture (*rustica*), mathematics and technology, and veterinary medicine.[59] First-year students were to begin with the study of horticulture, gardening,

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Orosz: Albrecht Thaer és a „racionális" mezőgazdaság [Albrecht Thaer and 'Rational Agriculture'], in I. Orosz (ed.): *Széchenyi és kortársai Válogatott tanulmányok a reformkorról* [Széchenyi and his Contemporaries. Select Studies on Hungary's Reform Era], Debrecen, Debrecen Multiplex Media, 2000. 134–149.

[56] *Magyar Hírmondó* (1798) II. 338.

[57] *Magyar Kurír* (1804) I. 174–175. For analysis of other contemporary news items on the *Georgicon*, see: Katalin Fehér: Felvilágosodás kori újságok híradásai a Georgikonról [Enlightenment-Era Articles on the Georgicon], *Magyar Könyvszemle* 112 (1996), 108–115.

[58] Karl Bulla's report to the Directió is dated 6 September 1797. MNL OL Festetics Lt, Georgicon alapításával kapcsolatos iratok [Documents on the Founding of the Georgicon], P 283 13. d. fols. 82–86

[59] Ibid., fols. 89–91.

pasture and meadow management, viticulture, and forestry. In the second year, they examined related "crafts and trades and the internal management of the same", and in the third, estate management and law. Subjects under the final year's thematic headings included: (1). "Decrees of His Royal Highness as pertain to farming"; (2). "Farm building management"; and (3). "Guidelines for His Lordship's officers". In the study of practical matters, students received in-depth training in both architecture and the technical side of farm building construction, with a particular emphasis on arithmetic, accounting, and geometry. The "senior practicants", that is, the students at the most advanced level of agricultural training, were additionally expected to gain an adequate mastery of drafting and design, a requirement to which a number of surviving examination drawings attest.[60]

According to an examination plan dated 28 August 1803, several years into the school's operation, students gave account of their understanding of each subject over a period of two days. At 7:30 a.m. on the first day, the count's three scholarship recipients were examined in "*oeconomia*" as were the rest of the school's external senior practicants in the hour to follow. At 9:30 a.m. the three students who had been granted scholarships by the count sat for an hour-long examination in geometry. A short break preceded an examination in botany, which lasted from 10:45 a.m. until 12:30 p.m. The final examinations on Day 1 were in "hydroengineering" at 2:00 p.m. and technology at 3:00 p.m. On Day 2, students were tested in mathematics and business accounting.[61] It is important to note that the original version of the published hand-written document specifying all the basic study requirements was personally read and countersigned by the count himself.[62]

[60] Kurucz: *Keszthely grófja* [The Count in Keszthely] 212.; OSZK Kézirattár [Manuscript Department of the National Széchényi Library], Fol. Germ. 1460. fols. 2–3; Magyar Mezőgazdasági Múzeum [Museum of Hungarian Agriculture] Adattár [Department of Records] II. 1077

[61] MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 35. d. fols. 601–602v

[62] OSZK Kézirattár [Manuscript Department of the National Széchényi Library], Quart. Hung. 3714, 8708

As regards the stock breeding courses taught at the *Georgicon*, the sense is of a desire to impart practical principles and methods in a manner that was both rational, and thorough, an approach that would have students delving into such topics as stabling and the use of crop rotation in producing quality animal feed. Typifying this spirit was the production during the tenure of Ferenc Pethe of both perennial ryegrass (or "ray grass"), and white clover at the school's experimental farm. A report on ongoing development at the farm dated 4 February 1800 states for its planned thirty-two acres of pasture "a necessity of 130 measures each of red, white, and yellow clover seed, and an equal quantity of Ray gras [*sic*] seed".[63] By all appearances, students of the "farming school" also received an intensive education in improving livestock through judicious selection of desirable traits, as well as in contemporary veterinary procedures. Considerable time was also dedicated to such pursuits as the fattening of cows, milk production, and for sheep breeding, the study of wool and wool production. Key in this regard was the instructions provided by Moravian-born Gyula Liebbald, chief veterinary surgeon for the Festetics Estates and author of a specialist book on protecting sheep against sheep pox which had garnered national attention.[64] As evidence of both Festetics's recognition for Liebbald, and the latter's success as a veterinarian, Liebbald filled the position of director of the *Georgicon* at various times over the course of the school's operation. As an instructor, he took advantage of his duties in inoculating the count's herds, thereby providing a learning opportunity for his students.[65]

Following Pethe's departure in 1801, academic life at Keszthely continued to be shaped by professors educated at Western European Protestant institutions. Two key figures in particular, János Asbóth and Károly György

[63] *Lolium perenne*, MNL OL Festetics Lt, Georgicon alapításával kapcsolatos iratok [Documents on the Founding of the Georgicon], P 283 13. d. fol. 137; MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 19. d. fols. 314–315

[64] Julius Liebbald: *Über die zweckgemässste Methode die Schaafe von den Blattern zu sichern*, Wien, Strauss,1817.

[65] MNL OL Festetics Lt, Georgicon alapításával kapcsolatos iratok [Documents on the Founding of the Georgicon], P 283 12. d. fol. 7

Rumy, had acquired their knowledge of farming from lectures by Professor Johann Beckmann at the University of Göttingen, an institution founded by the King of England and Elector of Hanover, George II.[66] Indeed, every applicant for Pethe's vacated position, including Asbóth's future brother-in-law, the Győr-born Lutheran educator László Németh, listed a Göttingen education, including Beckmann's lectures, among his qualifications.[67]

In 1806, Festetics instructed Asbóth to prepare a new curriculum, as a result of which the three initially defined categories—"Agricultural Subjects", "Subjects Belonging to Mathematics", and 'Natural History and Veterinary Medicine"—were expanded to include hydraulics and hydroengineering under the second heading and chemistry under the third. Lectures lasted one hour per day for each subject, yielding a total of 18 hours of theoretical study per week.[68] The specifics of Asbóth's lectures can be found in an extant set of notes taken in Latin by senior practicant Károly Zimányi (?-?) and dated 1805. The lecture in question centred on the properties and uses of various vegetable oils, food processing and preservation, the uses of industrial plants, and basic mineralogy. The information presented relies largely on Beckmann's *Anleitung zur Technologie*, a book whose 1802 edition—one of several pre-dating the curriculum—was among the holdings of Festetics's own specialist library.[69] It may in any case be observed, that both theoretical studies, and practical training at Keszthely were combined and organised according to the principles applied at

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[66] For a comprehensive analysis of Beckmann's activities, see: Günter Bayerl – Jürgen Beckmann (eds.): *Johann Beckmann (1739-1811). Beiträge zu Leben, Werk und Wirkung des Begründers der Allgemeinen Technologie*, Münster–New York–München–Berlin, Waxmann, 1999.; For Beckmann's relationship with the professors of the Georgicon, see: György Kurucz: Göttingentől Keszthelyig: Asbóth János (1768–1823) tanári és uradalmi tiszti tevékenysége, 1801–1818 [From Göttingen to Keszthely: The Activities of János Asbóth (1768–1823) as Teacher and Estate Official, 1801–1818], *Századok* 147 (2013), 1031–1060. For more on the relations of the *Georgia Augusta* with various generations of Hungarian students, see: István Futaky: *Göttinga. A göttingeni Georg-August Egyetem magyarországi és erdélyi kapcsolatai a felvilágosodás idején és a reformkor kezdetén* [Göttinga: Relations Between Hungary, Transylvania, and the Georgia Augusta in Göttingen from the Age of the Enlightenment to the Early Period of Hungary's Reform Era], Budapest, Akadémiai, 2007.

[67] MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 22. d. fols. 384–385

[68] MNL OL Festetics Lt, Georgicon alapításával kapcsolatos iratok [Documents on the Founding of the Georgicon], P 283 4. d. (no folio)

[69] OSZK Kézirattár [Manuscript Department of the National Széchényi Library], Quart. Lat. 3916/1–2.

Göttingen, a conclusion Asbóth's own thematically differentiated examination tables plainly support.[70]

Indeed, by itself, employing instructors with qualifications from Western European educational hubs or, as seen previously, personal experience from a country on the cutting edge of western agriculture would not have been sufficient to achieve any broader implementation of much-needed agricultural management principles, methods of cultivation, or technological best practices. Providing the necessary knowledge base and flow of information for an educational programme of this scope and duration clearly required a comprehensive library of professional literature; and given both the imperative nature of assembling one, and what is known of the resulting collection of contemporary English agricultural literature within the Festetics library, it may be gathered both that the founder's efforts were highly targeted, and that his mention in the letter to the Palatine of two prominent authors distinctly important to the communication of England's achievements was by no means an accident. Not incidentally, it was at this time that Festetics procured the modern textbooks and study aids required to develop and systematise his library, having already merged—with his mother's consent—the collections in Keszthely with the family library held at Ság in 1793.[71]

Additions to the Keszthely library dating to the last decades of the 18th century and the specific acquisition of books published at the turn of the 19th century allow for two important conclusions the collection was deliberately shaped along professional lines and its development was closely related both to the official and conceptual reasons behind the *Georgicon*'s founding and to the

[70] MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 31. d. fol. 345; MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 65. d. fols. 167–170

[71] [Paulin Erdt]: *Anleitung für Angehende Bibliothekare und Liebhabers von Bücher*. Augsburg, Riegers, 1786.; Johann Georg Schelhorn,: *Anleitung für Bibliothekare und Archivare*, 2 vols., Ulm, Stett'nsche Buchhandlung, 1788.; Albert Christoph Kayser: *Ueber die Manipulation bey der Einrichtung einer Bibliothek und der Verfertigung der Bücherverzeichnisse*. Bayreuth, Zeitungsdruckerey, 1790; Michael Denis: *Einleitung in die Bücherkunde*, Part 1. *Bibliographie*, Part 2. Literargeschichte, Wien, Trattner, 1795.; Immanuel Vertraugott Rothe: *Die Kunst sich eine Bibliothek zu sammeln und zu ordnen*. Ronneburg, Schumann, 1798. MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 3. d. fol. 875

school's eventual operations. Supporting this supposition is the observation that acquisitions of the period included all the works on natural science, medicine, agriculture, and technology written by the renowned professors at the *Georgia Augusta* in Göttingen.[72] Thus, the book orders submitted to Vienna regularly featured books by Johann Beckmann, and indeed, according to a "roster of Books procured from Vienna and placed in the Library" on 24 July 1800, it was at this time that both Volume 4 of Beckmann's *Beyträge zur Geschichte der Erfindungen*, published in Leipzig in 1799, and Volume 20 of *Physikalische ökonomische Bibliothek*, edited by Beckmann and published in Göttingen the same year, were purchased.[73] Consequently, we can assume that Festetics was primarily influenced by the activities of German authors regarding his openness to political, literary and technological phenomena and developments in England which can at the same time be deemed as an awareness of the importance of cultural transfers undertaken by specific German centres of knowledge.[74]

English specialist literature presumably included in the Festetics library to serve as a model for the Hungarian adaptation of modern agricultural practices not only covered every conceivable field, but also served as a sort of regional survey. Of particular note in this regard were the county surveys of the English Board of Agriculture,[75] a series of volumes that—although not dealing with the peculiarities of local agricultural production in terms of thematic

[72] Lilla Krász: Bibliofil főurak: gróf Festetics György orvostudományi könyvgyűjteményéről [Magnate Bibliophiles: The Medical Science Collection of Count György Festetics], in J. Nyerges – A. Verók – E. Zvara (eds.): *MONOKgraphia. Tanulmányok Monok István 60. születésnapjára* [MONOKgraphs: Studies on the Occasion of the 60th Birthday of István Monok], Budapest, Kossuth, 2016, 425–434.

[73] MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 21. d. fol. 346; For the unique status of the *Georgia Augusta* in the overall network of European intellectuals, see: Anne Saada: Die Universität Göttingen. Traditionen und Innovationen gelehrter Praktiken, in: H. E. Bödeker – P. Büttgen – M. Espagne (eds.): *Die Wissenschaft vom Menschen in Göttingen um 1800. Wissenschaftliche Praktiken, institutionelle Geographie, europäische Netzwerke*, Göttingen, Vandenhoeck & Ruprecht, 2008, 23–46.

[74] For an overview of the origins and concommittant features of Anglomania in German speaking territories, see: Michael Maurer: *Aufklärung und Anglophilie in Deutschland*, Göttingen, Vandenhoeck & Ruprecht, 1987.

[75] György Kurucz: Az „új mezőgazdaság" irodalma az egykori Festetics-könyvtár anyagában [Literature on the 'New Agriculture' in the Former Festetics Library]. *Magyar Könyvszemle* 106 (1990), 32–44.; For an analysis of how contemporary agricultural literature made its impact, see: Pamela Horn: The Contribution of the Propagandist to Eighteenth-Century Agricultural Improvement, *The Historical Journal* 25 (1982), 313–329. For a brief biography of English writers on agriculture, see: John Donaldson: *Agricultural Biography*. London, Author,1854.

chapters—did include in each published volume explicit mention of the general editorial principles applied.[76] In addition, the Board wished to evaluate both its statistics, and the phenomena and processes its survey had identified according to criteria tied to the general national economy; essentially, the idea was to illuminate the potential for "community growth and development". The Board even undertook to compare recent scientific and practical findings to additional control experiments, an approach fully in line with that taken by other, similar European agricultural bodies.[77]

Another of the authors featured in the Festetics collection, Arthur Young of the count's petition to the Palatine, had written his earliest articles on agriculture at the age of only twenty-three.[78] His book *The Farmer's Letters to the People of England* would later earn him a name and reputation throughout the Isles and, certainly not coincidentally, a place among his contemporaries in the Keszthely library.[79] Young, who himself farmed an estate in the Suffolk town of Bradfield, had additionally undertaken several study tours, summarising his experiences in northern and southern England in a pair of works published in 1768 and 1770.[80] The latter volumes rapidly garnered attention not only in England, but on the continent, as well, and were read by many in Hungary in German translation. It speaks to Young's appeal, for example, that his writings were found as naturally in the libraries of Count Festetics and the University of

[76] Nathaniel Kent: *General View of the Agriculture of the County of Norfolk*, London, Nicol, 1813, IV.
[77] For a comprehensive survey of European agricultural bodies with emphasis on the development of agricultural science in the German territories, see: Hans–Heinrich Müller: *Akademie und Wirtschaft im 18. Jahrhundert, Agrarökonomische Preisaufgaben und Preisschriften der Preußischen Akademie der Wissenschaften*. Berlin, Akademie, 1975.; Hans-Erich Bödeker: Economic Societies in Germany, 1760–1820: Organisation, Social Structures and Fields of Activities, in K. Stapelbroek – J. Marjanen (eds.): *The Rise of Economic Societies in the Eighteenth Century. Patriotic Reform in Europe and North America*, London, Palgrave Macmillan, 2012, 182–211.
[78] The value of Young's work has been called into question from time to time. Such valuations are, however, rooted in the writings of Young's rival, William Marshall. For a more recent rehabilitation of Young's work based on exceptionally thorough research and critical analysis, see: Brunt: Rehabilitating Arthur Young, 265–299.
[79] Arthur Young: *The Farmer's Letters to the People of England: Containing the Sentiments of a Practical Husbandman*, London, Nicoll, 1767. György Festetics owned a 1771 edition of the book.
[80] Arthur Young: *A Six Weeks' Tour through the Southern Counties of England and Wales*, London, Strahan, 1768.; Idem: *Six Months' Tour through the North of England*, 4 vols., London, Strahan,1770.

Pest as in the collections of other cultured and enlightened Hungarian aristocratic families.[81] Also published in the 1770s were some of Young's later reflections, along with a volume on farming that would become one of the most quoted works of both contemporaries, and generations to come. Publication of the latter—which Festetics heeded with his customary interest—coincided with certain changes in the English agricultural sector, including some of a structural nature.[82]

For the Scotsman Sir John Sinclair, on the other hand, it was the *The History of the Public Revenue of the British Empire*, published in London in 1784, which brought widespread recognition in the field, though he had also performed considerable labours as founding member of the Edinburgh Society, a group whose stated objective was to improve the overall quality of English wool. It may be noted that the first Hungarian agricultural journal, *Vi'sgálódó Magyar Gazda,* edited by Ferenc Pethe, published a brief article on Sinclair in its 22nd edition for the year 1797. *Georgicon* professor Pál Gerics would meet Sinclair in Edinburgh two decades later to offer a personal account of the workings of the Hungarian institution.[83] Of the two Britons, however, it was Young who dedicated himself to continual publication, and when not writing or editing periodicals, spent his time criss-crossing the country. It was also Young who performed surveys toward the publication in 1794 and 1813 of two volumes on the agriculture of Suffolk in East Anglia, a

[81] György Kurucz: A racionális gazdálkodás könyvészete az egykori Podmaniczky és Prónay családi könyvtárak állományában [A Survey of Books on Rational Farming in the Former Podmaniczky and Prónay Family Libraries], in D. Gurka (ed.): *A báró Podmaniczky család szerepe a 18-19. századi magyar kultúrában* [The Role of the Baronial Podmaniczky Family in Eighteenth- and Nineteenth-Century Hungarian Culture], Budapest, Gondolat, 2017, 200–201.

[82] Arthur Young: *Political Arithmetic, Containing Observations on the Present State of Great Britain and the Principles of Her Policy in the Encouragement of Agriculture*. London, Nicoll, 1774.; Idem: *Political Arithmetic,* Part 2, *Containing Considerations on the Means of Raising the Supplies within the Year. Occasioned by Mr Pulteney's Pamphlet on that Subject*. London, Cadell, 1779.; Charles Wilson: The British Isles, in C. Wilson – G. Parker (eds.): *An Introduction to the Sources of European Economic History 1500–1800*, Ithaca–New York, Cornell University Press, 1977, 121.

[83] György Festetics owned the third edition of the work, dated 1803–1804. MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administrations], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 433v–434

county famed for the fruits of its cultivated lands. Of the two latter books, a revised edition of the second would also make its way into the Festetics library.[84]

Beyond the writings of Young and Sinclair, the Festetics collection also included two surveys from Norfolk, the county on Suffolk's northern border known throughout Europe for its crop rotation practices. Of these, the first was written in the 1780s by William Marshall, a contemporary of Young's, without a commission from the Board of Agriculture. The version kept at Keszthely was a German translation.[85] The other book in this vein was a revision of Nathaniel Kent's 1813 volume on the same topic,[86] which, though conforming to the structure laid out in Young's Suffolk assessment, did not display nearly the sensitivity to problems seen with the board secretary's work. Kent's examination of the county's developing productivity, for example, did not offer anything by way of retrospective, nor did it delve into recent changes in specific conditions such as rate, duration, or terms of leasehold. Thus, Kent's work limited itself to the specifics of one period—the early 1800s—in the agricultural life of Norfolk alone, without reference to detailed progressive data or dissection of the more subtle components of land management processes.

Norfolk and Suffolk were not, however, the only English counties to earn a place in the Festetics library: representing Leicestershire, famed not for its agricultural methods or arable farmland products, but for its stock breeding and pasture and meadow management, was a study drafted by Wolverhampton native William Pitt.[87] Extraordinarily thorough, this Leicestershire survey, unlike Kent's treatment of Norfolk, strove to illuminate the processes that led up to the period studied, going so far as to compare

[84] Arthur Young: *General View of the Agriculture of the County of Suffolk*, London, Macmillan, 1813.

[85] William Marshall: *The Rural Economy of Norfolk*, 2 vols., London, Cadell and Nicol, 1787. Title in German: *Beschreibung der Landwirtschaft in der Graffschaft Norfolk. Aus dem Englischen übersetzt von dem Graf von Podewils auf Gusow*, 2 vols., Berlin, [unknown], 1797–1798. For more on Marshall's work, see Pamela Horn: *William Marshall (1745–1818) and the Georgian Countryside*, Abingdon, Beacon, 1982.

[86] Kent's first survey in reference to Norfolk appeared in 1796. For more on Kent's work, see: Pamela Horn: An Eighteenth Century Land Agent: The Career of Nathaniel Kent (1737–1810), *Agricultural History Review* 30 (1982), 1–16.

[87] William Pitt: *A General View of the Agriculture of the County of Leicester*, London, Phillips, 1809.

various parameters with those of other counties. Of particular interest is Pitt's analysis of changes in leasehold rates, from which it emerges that while the average rate for an acre (0.4 hectares) of Leicestershire land was five shillings during the early 1700s, it had risen to as high as five pounds by 1805.[88] Thus, in the space of a century, land tenure had become twenty times more expensive. Given that leasehold rates varied with the profitability of farming in general, this necessarily implies an increase in the effectiveness of the farming methods applied. Perhaps equally interesting is the chapter on crop rotation, which in Leicestershire featured a cycle composed largely of six stages, an expansion of the four-element system used in Norfolk. The book also reveals a widespread use of various vetches and, among sources for hay and straw, a preference for grasses, with particular reference to perennial ryegrass or "ray grass".[89]

Compared to East Anglia, however, meadowlands and pastures occupied a considerably greater area in Leicestershire and were frequently enhanced through irrigation, surface watering, and the regular addition of manures. Given the traditional prevalence of animal husbandry in Hungarian agriculture, it is no accident that Festetics's library should include books on this particular topic, such as a treatise by Scotsman John Johnstone purchased in 1801.[90] Still, the cutting edge in the matter of pastures and meadowlands was represented by the work of Robert Bakewell and the Culley brothers, three of the most celebrated animal breeders of the age and, to be sure, Bakewell would never have achieved the enormous weight gains for which his Dishley Sheep were famous had he not kept them on pastures and feeds of superior quality.[91]

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[88] Ibid., 45.

[89] Ibid., 92–93.

[90] MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 27. d. fol. 438; John Johnstone: *An Account of the Mode of Draining Land, According to the System Practised by Joseph Elkington*, London, McMillan,1801. Added to the library at the same time: Thomas Greg: *A System for Managing Heavy and Wet Lands without Summer Fallows*, London, Ridgway, 1803.

[91] John D Chambers – Gordon E. Mingay: *The Agricultural Revolution 1750-1880*, London, Batsford, 1966, 65-68.; Anne Orde (ed.): *Matthew and George Culley. Travel Journals and Letters, 1765–1798*, Oxford, Oxford University Press, 2002, 79–80. For Bakewell's life and activities, see: David L. Wykes:

For a Hungarian aristocrat with a plan to create a model farm, Pitt's chapter on milk production must have been a particular enticement, as it spoke of profits in some cases reaching as much as 11 pounds, 10 shillings per animal, per annum.[92] The Western model Hungarian "*Schweizereyen*" (or *svájcerájok*) established around this time would not have been nearly as lucrative, as there were no cities to provide permanent markets for the dairy foods they produced. In fact, following the purchase of Muraköz, a rich estate along the River Mura in what was then southwestern Hungary (northern Croatia today), one of Festetics's stewards recommended that he forego dairy farming and expand his sheep breeding operation instead, remarking that "His Lordship would derive greater profit from that host of sheep than from the whole of the *schweizeria*".[93]

At the same time, the Festetics library included an 1805 survey of Northumberland authored jointly by John Bailey and George Culley,[94] a pair of breeders of whom Culley represented the greater expert, having done much as both an agricultural writer, and practising farmer to promote the dissemination of effective methods.[95] During the 1760s, Culley, together with his older brother, had studied under Bakewell, who had taught them the fundamental principle of building herds from only the healthiest and best-developed animals. Several years later, the Culley brothers would move to Northumberland in the north of England, where relatively large farms were available for lease and the rates for land quite favourable. Farming methods there were of a strongly traditional vein at the time, and it is to the brothers' credit that a modified version of the Norfolk crop rotation regimen increasingly came to be used. In the beginning, this consisted of seven rotations. By the turn of the century, it

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Robert Bakewell (1725–1795) of Dishley: Farmer and Livestock Improver, *Agricultural History Review* 52 (2004), 38–55.

[92] Pitt: *A General View*, 218-219.

[93] MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 1. d. fol. 91v

[94] John Bailey – George Culley: *General View of the Agriculture of the County of Northumberland*, London, Phillips, 1805.

[95] D. J. Rowe: The Culleys, Northumberland Farmers, 1767–1813, *Agricultural History Review* 19 (1971), 156–174.

had been narrowed down to five, comprising cereals and various animal feed plants supplemented by a fifth rotation of pasturage. Incidentally, it was also the Culley brothers who, as leaseholders, introduced to the county the practice of row planting in the production of carrots. Still, it was primarily for their breeding operations that the pair made their name. By crossing the Bakewell Dishley with the Teeswater, they obtained what came to be known as the Border Leicester, or Culley, a breed that was far more resilient than its finer-boned ancestors. With his *Observations on Livestock*, published in 1786, George Cully gained national fame among writers in the field, and naturally, this book, too, could be found in the Festetics library.[96] It should be noted that Bakewell, Culley's former master, never published a work of independent authorship, leaving the details of his career to be recorded exclusively by his contemporaries. The value of Culley's work, however, which conformed in terms of both structure, and content to previous surveys, resided in two features, both of which were important to the Hungarian project. Firstly, its discussion of machinery, tools, and agricultural technological methods delved much deeper than had any previous survey; and in fact, its inclusion of engraved illustrations rendered it akin to a handbook in quality. Also of exceeding significance was the accuracy and technical quality of its chapters on stock breeding, with particular reference to the sections on sheep breeding, all the more so given that, with the conclusion of the wars with France, wool was experiencing an export boom. It is perhaps this circumstance that underlies the acquisition for the Keszthely library of a book on yet another British county—Inverness—compiled by the Scottish James Robertson. Significantly, the highland counties of Scotland claimed sheep and goat herding as their primary source of income,[97] and while Robertson's work, being of seemingly minor significance in scope and quality, may not in and of itself have compared to the surveys dicussed

[96] George Culley: *Über die Veredlung und Auswahl der vorzüglichsten Hausthiere*, Berlin, Maurer, 1804.
[97] James Robertson: *General View of the Agriculture of the County of Inverness*, London, Phillips, 1808.

above, beyond marking the county's weight from an agricultural standpoint, it would certainly have provided information important to the picture of British stockkeeping as a whole.

One final book to earn its place in the Festetics library, an agricultural analysis of Middlesex by John Middleton, likely piqued the count's interest for its general characterisation of county food production and, more specifically, of a region specialised in satisfying the needs of a single large city.[98] Although Middlesex ranked second smallest among English counties after Rutlandshire, its farms in the vicinity of London could be regarded as some of the most prosperous in the country. There, where average holdings came to just 100 acres, a farm of 500 to 600 acres would have been classed among the more impressive.[99] The proximity of the English capital was also reflected in the region's unusual crop rotation practices, in which the potato—used both for human, and animal consumption—featured alongside more traditional produce. From a technical standpoint, potatoes were grown with wheat and clover in what was known as the Stratford rotation, or with cabbage and clover in the Kensington rotation.[100]

That the Festetics library was the product of a process of conscious selection can also be surmised from the presence of a second category of literature, namely, that offering either a thematic breakdown of English agriculture as a whole, or a discussion of some relevant subtopic. Of these, the most impressive were certainly the handbooks by Richard W. Dickson, including an 1813 second edition of the two-volume comprensive opus, *The Farmer's Companion*, published in London, along with a German translation of an earlier edition of the same book, published in Berlin.[101] The set is noteworthy for having been edited for publication by the highly influential

[98] John Middleton: *General View of the Agriculture of the County of Middlesex*, London, Sherwood, Neely, and Jones, 1813.
[99] Ibid., 53.
[100] Ibid., 190.
[101] R. W. Dickson: *Der Praktische Ackerbau*, 2 vols., Berlin, Realschulbuchhandlung, 1808.

German agronomist and expert on English agriculture, Albrecht Thaer. Festetics's second edition discusses the particulars of English agriculture over a total of 946 pages and features 103 individual engraved illustrations. Its thematically titled chapters cover topics from horticultural processes to the design of farm buildings to the planting of fruit trees. Of particular note is the chapter on farm implements and machinery, which includes copiously illustrated descriptions of sowing machines, ploughs, harrows, and other equipment. Dickson's assiduous approach extends to such details as the tables of weights of wool obtained from various breeds of sheep included in his chapter on stock breeding. The author even offers a chapter dedicated exclusively to technical issues surrounding land enclosure, relating them directly to his sections on specific production techniques and other practical concerns. The discussion in question includes a critique of the communal land management system as prohibitive of the conversion to modern crop rotation, asserting that meaningful results might be achieved with and only with land parcels that were enclosed and contiguous.

Given the market demands based on which the Festetics estate was managed, it is not surprising that its library should have held numerous additional books concerned specifically with the breeding, raising, and care of sheep. One of these, a celebrated treatise by John Luccock, not only evaluated the husbandry practices associated with various English ovine breeds, but also offered a wealth of indispensable information on the topics of wool quality, handling, and sale,[102] and even—perhaps its most salient feature—a discussion of various issues related to changing investments and expenditures. To the Hungarian breeder working under entirely different conditions, however, its computations on the ratio of land parcel size to number of animals kept may well have been even more useful. To produce pasture and feed in sufficient measure for the proper maintenance of Dishley sheep, for example,

[102] John Luccock: *An Essay on Wool, Containing a Particular Account of the English Fleece*, London, Harding, 1809.

Luccock calculates eight acres as the base land area required.[103] Incidentally, Luccock, who cites many of the great English stockmen of the age, did not fail to credit Young for his role in the dissemination of ideas. Additional books on sheep in the Festetics collection include a volume by Charles Hunt and Charles Lasteyrie on the uses of the Spanish Merino—a breed introduced to English farming by royal decree—an earlier German translation of which was procured for the library as early as 1800.[104] Naturally, the sheep husbandry section also included a work by that esteemed purveyor of English agricultural achievement, Albrecht Thaer, specifically, a handbook published in Berlin in 1811.[105]

Completing this amalgamation of specialised literature were a number of works on ancillary topics, such as John Plaw's *Ferme ornée, or Rural Improvements*[106] in the category of architecture and technology, and a treatise by George Mackenzie—drafted at the behest of the Edinburgh Society—on the subject of veterinary medicine.[107] Also of the latter category was a dictionary by cavalry veterinary surgeon Thomas Boardman published in London in 1805, which was commonly regarded as one of the great reference works of the age.[108]

One final work of note, *Elements of Agricultural Chemistry* by Humphry Davy, concerned a field of science that was still relatively young. Published in London in 1813, Davy's book was translated and published for the Hungarian reader two years later by Ferenc Pethe,[109] who attempted to put its findings into a form that could be widely read and understood in accordance with principles set down by the Hungarian language reform movement of the 1810s. The first such work of modern provenance ever to appear in Hungarian,

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[103] Ibid., 206.
[104] Charles Hunt: *A Practical Treatise on the Merino and Anglo-Merino Breeds of Sheep*, London, Plant Piercy, 1809.; Charles Lasteyrie: *An Account of the Introduction of Merino Sheep*, London, Harding, 1810. MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 22. d. fol. 450
[105] Albrecht Thaer: *Handbuch für die feinwollige Schaafzucht*, Berlin, Realschulbuchhandlung,1811.
[106] John Plaw: *Ferme Ornée, or Rural Improvements*. London, Taylor, 1796.
[107] George Mackenzie: *A Treatise on the Diseases and Management of Sheep*. Edinburgh, Constable,1809.
[108] Thomas Boardman: *A Dictionary of Veterinary Art*. London, Kearsley, 1805.
[109] Humphry Davy: *A földmívelési Kímia gyökerei* [Elements of Agricultural Chemistry], Trans. Ferenc Pethe, Bécs, Nemzeti Gazda Hivatal, 1815.

Pethe's translation was financed via subscription—effectively advance purchase—according to the system typical of the age. Naturally, Festetics was among the subscribers, as evinced by a 21 November 1814 entry in the cashier's log at his Viennese agency: "*Prenumeratio* for Davy's chemistry".[110]

In laying the groundwork for an institution of higher education, however, Festetics grasped the need to look beyond teachers with Western European experience and a solid professional library to the matter of travel abroad for the purposes of study and consultation. Although not mentioned in his letter to Palatine Joseph, it is clear that he viewed the concept of sending teachers and students on academic tours as a key means of gathering experience. That the count never expressed this in explicit terms can be explained in part by his employment of individuals—Pethe and, later, Asbóth and Rumy—for whom this was already a reality, and in part by the ban enacted in 1797 for his part in the opposition movement of the early 1790s, the same series of events that led to the loss of both his Royal Chamberlain title, and his right to enter the Imperial capital. In this same vein, from the complications surrounding his founding of the Calvinist Secondary School in Csurgó, southern Transdanubia, he may rightly have suspected that he was being watched.[111] If true, this would explain why Festetics's stewards were only known to have engaged in major travel within the territory of the Habsburg Monarchy for the purposes of business and study only after 1801, the year of Palatine Joseph's visit to Keszthely.[112] The observation pertains, for example, to Asbóth's extended trips in Hungary, Lower Austria, and Moravia in 1802 and 1806, and to senior practicant Károly Fleckel's circuit of multiple German

[110] MNL OL Festetics Lt, Számadások [Accounts], P 276 767. d. fol. 203

[111] Kurucz: *Keszthely grófja* [The Count in Keszthely], 175–179.

[112] Among these was the prolonged Western European study trip of gardener Gergely Bene, which the Count financed and – though limited to the continent – corresponded to that of Lehrmann and Gerics at several junctures. Alföldy: *A keszthelyi Festetics-kastély parkja* [The Festetics Castle Gardens in Keszthely], Vol. 1., 30–33. For more on Bene's trip: Idem., 29–30.

principalities and Philipp Emanuel von Fellenberg's school in Switzerland in 1810.[113]

In many instances, Festetics's plans for the development of a professional network—his educational and communicational aims interpreted in their broadest sense—would seem integrally linked to his experiences at the *Theresianum* in Vienna. In 1795, for example, Festetics's former professor, Joseph von Sonnenfels, authored a proposal for the Habsburg Monarchy's newly instituted *Studien-Revisions-Hofkommission*, which listed a number of fundamental principles and practical action items toward the reform of the Habsburg education system. Citing several individuals with significant scientific achievements to their names, as well as the impressive results attained by Germany and England, the proposal in question sought to point out the sociocultural significance of the influence exerted by scientific institutions and personalities salutary to state and society. In the proposal, Sonnenfeld underscored the idea of foreign study tours as a means of gaining the sort of direct experience that would allow for the control and analysis of previous art, and even the elimination of attendant prejudices.[114]

Beyond questions of experience and literature, however, was the matter of international recognition and publicity, to which Festetics also gave due consideration. It speaks for itself, for example, that on 8 November 1801, János Asbóth, hired after Pethe, was elected a corresponding member of the Göttingen Scientific Society in the wake of a petition submitted by one of his own former professors, Heinrich August Wrisberg.[115] This high-level recognition of the former Göttingen student likely served to strengthen Festetics, who consciously built on his ties to foreign intellectuals and societies to promote the *Georgicon*'s

[113] Kurucz: *Keszthely grófja* [The Count in Keszthely], 234–235. MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 66. d. fols. 362–363

[114] ÖStA AVA Studien-Revisions-Hofkommissionsarchiv Kart. 1. No. 1. "Reisen sind zur weiteren Ausbildung des jungen Mannes eben so nothwendig als nützlich. Sie erweitern die einmal gefaβten Begriffe, bereichen mit Kentnissen, tilgen manches Vorurtheil, stärken die Kraft und Richtigkeit im Vergleichen und Prüfen, und üben und bewähren die Urtheilskraft".

[115] Göttingen, Archiv der Academie der Wissenschaften Pers. 12 Nr. 38

reputation. Asbóth sent a detailed description of the Keszthely institution to Göttingen under the title *Beschreibung des Georgikons, oder der Gräflich-Georg-Festetitschischen Schule der Oeconomie zu Keszthely am Balaton im Szalader Comitate in Ungarn*, which Professor Christian Gottlieb Heyne subsequently published in the eminent review *Göttingische Gelehrte Anzeigen*, an act that greatly raised the *Georgicon*'s profile abroad.[116] György Festetics was subsequently granted the title of honorary member of the Society in a vote taken on 1 August 1802, of which he was notified by Professor Heyne in a letter dated the 19th of the same month.[117] Additional acknowledgements of the esteem to which Festetics was held within the Habsburg Monarchy included his elections to membership in the Imperial and Royal Agricultural Society in 1808 and to honorary membership in the Bavarian Agricultural Society in 1812.[118]

Playing a significant role in pedagogical life at the *Georgicon* from the mid-1810s onward was a former student of Asbóth's by the name of Károly György Rumy. Like Asbóth, Rumy had received his education at Göttingen and, given his authorship of a book on agriculture in German very early in his career, he may be regarded as a person with considerable expertise in his field.[119] In the introduction to the work in question, Rumy made a point of noting that the foundations of this knowledge had been established during his lessons with Asbóth at the Lutheran Lyceum (grammar school) in Késmárk (present-day Kežmarok, Slovakia) and that he had also attended the lectures of Johann Beckmann and others at Göttingen. Rumy's book, though a compendium in the

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[116] Göttingische Gelehrte Anzeigen, referred to here as GGA (1803) I. 745–749. On Festetics's instruction, copies of Asbóth's missive to Göttingen were made for use by the *Directio*. MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 35. d. fol. 38v

[117] Göttingen, Archiv der Academie der Wissenschaften Pers. 12 Nr. 41; MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 30. d. fol. 514-514v. For the ornate certificate dated 9 August 1802 certifying Festetics's membership, see: MNL OL Festetics Lt, Festetics Györgyhöz intézett levelek [Letters to György Festetics], P 246 1. d. fol. 3; The news item published in the Göttingen scientific journal: GGA (1802) II. 1909.

[118] MNL OL Festetics Lt, Memorabilia, P 235 120. d. p. 581; MNL OL Festetics Lt, Memorabilia, P 235 121. d. p. 57

[119] Karl Georg Rumy: *Populäres Lehrbuch der Oekonomie. Mit besonderer Rücksicht auf die Bedürfnisse Oesterreichs und Ungarns, und auf den Zustand der Landwirtschaft im österreichischen Kaiserthum*, 2 Vols., Wien, Schaumburg, 1808.

tradition of the cameralist writers, places key emphasis on its specialist information on agroengineering and related technology, restating with clarity the view of the new philosophy of science that farming, having emerged from the world of *ars*, now demanded a place for itself in the world of *scientia*. According to Rumy, the "regularities and observations" involved—as well as the inclusion of ancillary subjects, such as agrochemistry—required that farming be handled in a different dimension than had been applied in times previous. A man of diverse industries, Rumy was elected corresponding member of the Göttingen Scientific Society as early as 1806, at a mere twenty-six years of age.[120]

Beyond their appearances in the Göttingen review and other German periodicals, the *Georgicon* and its founder were also the focus of a book that recorded the experiences in Hungary of the foreign—and indeed, English—traveller Richard Bright. Born in Bristol, Bright was a highly educated physician who had travelled extensively in numerous European countries and whose arrival in Keszthely in the mid-1810s came with a letter of presentation from László Festetics, György Festetics's son in Vienna. Four years later, his travel experiences were published in a volume of more than six hundred pages, in which Bright unequivocally recalled the *Georgicon*'s founding aim as the advancement of Hungarian agriculture through the training of estate management experts and workers within the framework of higher and secondary education, respectively.[121] Naturally, in the course of his visit, Bright had the occasion to consult at length not only with Festetics, but also with the school's various professors. Not surprisingly, his experiences coincide fully with the thoughts expressed several years earlier by János Asbóth, the former Göttingen student turned Keszthely professor who had done so much to promote the school's good name. As Asbóth had stated in his German-language description, by training experts, the *Georgicon* hoped to serve the economic interests of the country as a

[120] GGA (1806) II. 1930.

[121] Richard Bright: *Travels from Vienna through Lower Hungary*. Edinburgh, Constable, 1818, 361–362. For a biography of Bright, see: Pamela Bright: *Dr. Richard Bright (1789–1858),* London, Bodley Head, 1983.

whole.[122]

Thus, there can be little doubt that the words quoted from Berzsenyi phrasing in the chapter title, which he uttered after receiving the *Georgicon*'s German-language publications ("presented to him by Rumi"), was not born of empty flattery—that is, that the comparison to Weimar was a sincere one.[123] Moreover, in judging the "poor Hungarian poet's" education and worldview, it is imperative to remember that at the school he attended, the Lutheran Lyceum of Sopron, a Transdanubian city on the Austrian border, many students, in addition to mastering German, Latin, and French, also paved the way for a fluency in English and thus became readers of the Western European literature of the age. In consonance with the contemporary movement toward expanding literary education beyond the classical tradition, Berzsenyi had had the opportunity to gain familiarity with the influential authors of the Enlightenment. Furthermore, the Lutheran school in Sopron placed considerable emphasis on the teaching of subjects in the natural sciences.[124] To imagine that the poet from Somogy was motivated by petty calculations would be inconsistent with the sense of self-awareness one discerns in his letters. It is much more likely, therefore, is that he judged the count's activities as institutional founder and private patron, particularly with reference to the circumstances in Hungary during the period in question, as serving the process of strengthening a national identity founded on intellectual values, and, consequently, he saw the count

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[122] Johann Asbóth: *Kurze Darstellung der Bestimmung der Einrichtung und des Studien-Plans des Gräflich Georg Festetitsischen Georgicons und der damit verbundenen Anstaltung zu Keszthely*. OSZK Kézirattár [Manuscript Department of the National Széchényi Library], Fol. Germ. 1460. fol. 1

[123] The publications cited in Berzsenyi's letter: Karl Georg Rumy: *Von der jetzigen Beschaffenheit des Georgikons zu Keszthely und den Mitteln, dasselbe dem Zwecke landwirtschaftlicher Institute überhaupt näher zu bringen*, Oedenburg, Sieszische Erben, 1814.; Idem: *Bewillkommungsrede an die Theilnehmer des ökonomischen Besuches im Georgikon zu Keszthely*, Oedenburg, Sieszische Erben, 1815.; Idem: *Aehrenlese des Georgikons zu Keszthely. 1. Jahrgang*, Wien, Schaumburg, 1816.

[124] János Kis: *Kis János superintendens' emlékezései életéből. Maga által feljegyezve* [Memoirs of Superintendent János Kis: Written in His Own Words.], Sopron, özv. Kultsárné, 1845. 47., 50. For more on the history of the institution, see: Sámuel Németh: *A soproni evangélikus líceum egy százada, 1681–1781* [A Century of the Lutheran Lyceum of Sopron, 1681–1781], Sopron, Berzsenyi Dániel Ev. Líceum, 2007.

himself as interpreting the cause of progress for Hungary exclusively within a broader European context.

In Berzsenyi's view, by operating his school in Keszthely according to the latest models and instituting a system of study tours, scholarships, and ties to scientific societies, Festetics was working to incorporate the *Georgicon* into an established Western European network. It was with reference to these things that the truth in the poet's otherwise somewhat dramatic remark—and more distinctively, the various dimensions of Festetics's life's work and legacy—gained deeper meaning, as in Berzsenyi's own words, the count had "laid the foundation stones of a glorious edifice, such as only the crumbling ruins of the Homeland might bury".[125]

[125] Merényi: *Berzsenyi Dániel ismeretlen és kiadatlan levelei* [Previously Unknown and Unpublished Letters by Dániel Berzsenyi], 60.

Chapter 3

Travel Instructions and Receptiveness

The 1797 opening of the *Georgicon* in Keszthely marked a new era in agricultural higher education in Hungary; however, to truly grasp the immediate human, financial and intellectual environment in which it was founded and operated—the structure that permitted its integration into the broader historical panorama—requires a closer look at the cultural and sociohistorical interpretive framework applicable generally to the Europe of the age. While there can be little debate that at this particular juncture in history, the stream of new ideas followed a classic centre-to-periphery model, at the same time, in parallel with the theoretical and methodological influence of Western European intellectual hubs, for some forms of knowledge—and for the relatively new field of agricultural science in particular—the usual mode of transmission via professional literature existed side-by-side with that of adaptation by direct experience, a factor whose decisive influence on the overall developmental landscape cannot be ignored.[126]

The founder of the *Georgicon*, as the foregoing makes clear, left to his son a prodigious intellectual and material inheritance, having laboured to establish the human, material, and institutional conditions necessary for communication with various centres of European knowledge and, therefore, an ability to adapt ongoing advancements to Hungarian needs. The later memoirs of physician and

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[126] See the relevant chapters of the following book on this topic: Timothy Lenoir: *Instituting Science: The Cultural Production of Scientific Disciplines*, Stanford, Stanford University Press, 1997, especially 35–55. For a complex analysis of the evolvement of contemporary philosophical approach to life sciences, as well as highlighting the activities of the most oustanding academic figures in German-speaking territories, see: John H. Zammito: *The Gestation of German Biology, Philosophy and Phisiology from Stahl to Schelling*, Chicago, University of Chicago Press, 2018. The patterns of knowledge transfers and receptions in specific disciplines seem to prevail contemporary theoretical discourse: Leandro Rodriguez Medina: *Centres and Peripheries in Knowledge Production,* New York - London, Routledge, 2014. For a most recent analysis, including a theoretical introduction to the concomitant topic of the differentiation of academic subjects in Germany, see Marian Füssel: Disciplined Sciences? Differentiation of Academic Subjects at Eighteenth and Nineteenth Century German Universities, *Historical Studies on Central Europe*, 2 (2022) 149–178.

Georgicon professor Pál Gerics also confirm that at the time of his hiring in 1818, the elderly count, eager to expand his network had already begun planning trips for him both to Berlin, and to Alfort in France, noting also: "to my eternal gratitude he placed me in his debt, if only in that on his death bed, he commended me specially to his son, the Honourable Count László". In fact, the count's heir, László Festetics, would appear not only to have taken his father's conceptual wishes to heart, but to have expanded on them, as, in Gerics's words, "His Excellency not only fulfilled his blessed Father's intentions for me, but was so kind as to broaden them to still greater compass and duration".[127] Sent on his way after Gerics, Lehrmann also stressed that when, on 26 July 1820, the younger Festetics oversaw the second *Georgicon* professor's departure, it was in accordance with the founder's desire that he did so.[128]

To understand both the conceptual significance of the two men's journey, and the peculiar manner in which their acquired knowledge and experience were recorded and communicated, one must first and foremost grasp something of the customs surrounding travel during the period in question. This exercise is further justified in that, while there did exist models upon which preparations for such an undertaking might be based—i.e. the tradition of the "Grand Tour", a requisite part of the educational regimen of the sons of aristocratic and wealthy middle-class families from the late 17th century onward;[129] or the custom among

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[127] Alfort was the site of the École Royale d'Économie Rurale et Vétérinaire. OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/1 fol. 4

[128] After completing his studies at Keszthely, Lehrmann interned on the Batthyány estate in Ruszt (present-day Rust, Austria). It was after the elder Festetics's death that his heir summoned him to Vienna. MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 130. d. T. III. fol. 81

[129] Thomas Martyn: *The Gentleman's Guide in His Tour through Italy*, London, G. Kearsley, 1787.; Count Leopold Berchtold: *An Essay to direct and extend the Inquiries of Patriotic Travellers; with further Observations on the Means of preserving the Life, Health, & Property of the unexperienced in their Journies by Land and Sea,* 2 vols., London, Robinson, Debrett, Payne, Jeffrey, 1789.; Idem.: *Anweisung für Reisende, nebst einer systematischen Sammlung zweckmäßiger und nützlicher Fragen. Aus dem Englischen des Grafen Leopold Berchtold mit Zusätzen von Paul Jacob Bruns,* Braunschweig, Schulbuchhandlung, 1791. Of the prodigious literature that analyses the various aspects of the Grand Tour, see Christopher Hibbert**:** *The Grand Tour*, London: Hamlyn Publishing Group, 1974.**;** Chloe Chard: *Pleasure and Guilt on the Grand Tour,* Manchester, Manchester University Press, 1988.; Charles Fitzroy: *Italy: A Grand Tour for the Modern Traveller*, London, Macmillan, 1991; Justin Stagl: Der „Patriotic Traveller" des Grafen Leopold Berchtold und das Ende der Apodemik, in W. Griep: *Sehen und Beschreiben. Europäische Reisen im 18. und frühen 19. Jahrhundert*, Heide, Westholsteinische Verlags-Anstalt, 1991, 213–225.; Jeremy Black: *The British Abroad: The Grand Tour in the*

families of the Hungarian Protestant intelligentsia of sending their young sons to study at foreign universities[130]—the Western European tour made by Gerics and Lehrmann nonetheless stands out as a decidedly peculiar affair. Both the travel customs of the early modern period, and the way of thinking that emerged with the late-sixteenth-century *ars apodemica*, for example, offered something of an integrated theory of travel; indeed, the scientific societies that had begun to form from the mid-17th century onward, in verifying the information provided by earlier travelogues, frequently laid out applicable patterns of their own.[131] Yet,

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Eighteenth Century, Stroud, Alan Sutton, 1992.; Michèle Cohen: The Grand Tour: Constructing the English Gentleman in Eighteenth-Century France, *History of Education* 21 (1992), No. 3, 241–257.; Thomas Gessner: Reisen und soziale Eliten, Kavalierstour – Patrizierreise – bürgerliche Bildungsreise, in M. Maurer (ed.): *Neue Impulse der Reiseforschung*. Berlin, Akademie Verlag, 1999, 135–176.; Uwe Hentschel: *Studien zur Reiseliteratur am Ausgang des 18. Jahrhunderts. Autoren, Formen, Ziele*, Frankfurt/Main – Berlin–Bern–New York–Paris–Wien, Lang, 1999.; Winfried Siebers: Ungleiche Lehrfahrten – Kavalieren und Gelehrte, in H. Bausinger, – K. Beyrer, – G. Korf (eds.): *Reisekultur: Von der Pilgerfahrt zum modernen Tourismus.* 2nd ed. München, Beck, 1999, 47-56.; Morris Brownell: *The Prime Minister of Taste: A Portrait of Horace Walpole*, London, Yale University Press, 2001.; Mathis Leibetseder: *Die Kavalierstour. Adelige Erziehungsreisen im 17. und 18. Jahrhundert*, Köln–Weimar–Vienna, Böhlau, 2004.; Jean Boutier: Le Grand Tour des gentilshomme et les académies d'éducation pour la noblesse: France et Italie, XVIe-XVIIIe siècle, in R. Babel – W. Paravicini (eds): *Grand Tour. Adeliges Reisen und europäische Kultur vom 14. bis zum 18. Jahrhundert*, Stuttgart, Thorbecke, 2005, 237–253.; Bill Roberts: *Grand Tour Revisited. Thomas Gray's Jouney to France and Italy from 1739 to 1741 with a Commentary Following the Same Route*, Penrith, Northern Academic Press, 2010.; Henry R. French – Mark Rothery: *Man's Estate. Landed Gentry Masculinities, 1660-1900*, Oxford, Oxford University Press, 2012. See especially Chapter 3 in it: "Seeing the World: The Grand Tour and Other Travels" 137–184.; Rosemary Sweet, *Cities and the Grand Tour: The British in Italy, c.1690–1820*, Cambridge, Cambridge University Press, 2012.; Rosie MacArthur: Gentlemen Tourists in the Early Eighteenth Century: the Travel Journals of William Hanbury and John Scattergood, in J. Stobart (ed.): *Travel and the British Country House. Cultures, Critiques and Consumption in the Long Eighteenth Century*, Manchester, Manchester University Press, 2017, 86–105.; Sarah Goldsmith: *Masculinity and Danger on the Eighteenth–Century Grand Tour*, London, University of London Press, 2020.

[130] Miklós Szabó: Erdélyi diákok külföldi egyetemjárása a XVI–XVIII. században [Transylvanian Students at European Universities from the 16th to the 18th Centuries], in E. Csetri – Zs. Jakó – G. Sipos – S. Tonk (eds.): *Művelődéstörténeti tanulmányok* [Studies on Culture History], Bucharest, Kriterion, 1980. 152–168.; Ádám Hegyi: *Magyarországi diákok svájci egyetemeken és főiskolákon 1526-1788 (1798)* [Hungarian Students at Swiss Universities and Academies 1526–1788 (1798)], Budapest, ELTE Egyetemi Könyvtár és Levéltár, 2003.; Réka Bozzay – Sándor Ladányi: *Magyarországi diákok holland egyetemeken 1595–1918* [Hungarian Students at Dutch Universities 1595-1918], Budapest, ELTE Egyetemi Könyvtár és Levéltár, 2007.; Réka Bozzay: *Die Peregrination Ungarländischer Studenten and der Universität Leiden 1595–1796*, Budapest, ELTE Levéltára 2009.; László Szögi – Péter Kónya: *Sáros megyei diákok az európai egyetemeken 1387–1918 - Šarišskí študenti na európskych univerzitách, 1387–1918* [Sáros County Students at European Universities, 1387–1918], Budapest, ELTE Egyetemi Könyvtár és Levéltár – Centrum excelentnosti sociohistorického a kultúrnohistorického výskumu Prešovskej univerzity, 2012.

[131] For a comprehensive analysis of this issue, see the relevant sections of the revised and expanded German edition of Justin Stagl's 1995 work, *A History of Curiosity: The Theory of Travel 1500–1800*, i.e. *Eine Geschichte der Neugier. Die Kunst des Reisens 1550–1800*, Wien-Köln-Weimar, Böhlau, 2002, with primary reference to 94–102. See also: Winfried Siebers: Beobachtung und Räsonnement. Typen, Beschreibungsformen und Öffentlichkeitsbezug der frühaufklärischen Gelehrtenreise, in H.-W. Jäger (ed.): *Europäisches Reisen im Zeitalter der Aufklärung*, Heidelberg, Carl Winter Univetsitätsverlag, 1992. 16–34.; Winfried Siebers: Bildung auf Reisen. Bemerkungen zur Peregrinatio academica, Gelehrten- und Gebildetenreise, in M. Maurer (ed.): *Neue*

in the period around the turn of the 19th century, and particularly with regard to the mission of the two Keszthely professors under scrutiny here, the underlying motives and objectives were, at the outset, quite different.

Obviously, for the aristocratic youth of previous—i.e. mid-18th century—generations, foreign travel depended heavily on opportunities afforded by social background, although both the physical distances involved, and the necessity of rubbing elbows with members of the foreign elite still involved sizable expenditures. Of course, one must also consider the influence of fashion on trends in the world of travel: following the appearance in *The Spectator*—and later in book form—of *Remarks on Several Parts of Italy* by the nimble-penned writer, editor, and politician Joseph Addison, Italy and France became the destinations of choice for several generations of English gentlemen, though for the wealthy and cultivated aristocrats and urbanites of the German realms, the appeal of Paris, the "hub of gallantry", and antique Rome, dubbed "capital of the world" by Goethe himself, remained self-evident.[132] It should be noted at this

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Impulse der Reiseforschung, Berlin, Akademie Verlag, 1999, 177–188.; Daniel Carey: Inquiries, Heads, and Directions: Orienting Early Modern Travel, in J. A. Hayden (ed.): *Travel Narratives, the New Science, and Literary Discourse, 1569–1750*, Farnham-Burlington, Routledge, 2012, 25–51.; Vanja Hug: Naturgeschichtliche Wissensgenese und Wissensaustausch, in V. Hug – M. Schmid – G. Folkers (eds.): *Adolf Traugott von Gersdorfs Schweizer Reise 1786*, Zürich, Chronos, 2018, 237–272.

[132] Joseph Addison: *Remarks on Several Parts of Italy, &c. In the Years of 1701, 1702, 1703*, London, Tonson, 1705. Cf. Alexander Drummond: *Travels through Different Cities of Germany, Italy, Greece, and Several Parts of Asia, as far as the Banks of Euphrates. In a Series of Letters*, London, Strahan, 1754.; Johann Jacob von Volkmann: *Neueste Reisen durch Frankreich*, Leipzig, Fritsch, 1787.; Hester Lynch Piozzi: *Observations and Reflections made in the course of a Journey through France, Italy, and Germany*, 2 vols., London, Strahan and Cadell, 1789. See also Götz Eckardt (ed.): *Das italienische Reisetagbuch des Prinzen August von Sachsen-Gotha-Altenburg, des Freundes von Herder, Wieland und Goethe*, Bad Langensalza, Stendal, 1985.; Karl Richter – et al. (eds.): *Johann Wolfgang Goethe: Sämtliche Werke in zeitlicher Folge, Münchner Ausgabe*, Vol. 15, München, Hanser, 1992, 147.; Juliane Brandsch (ed.): *„Es sind vortreffliche Italienische Sachen daselbst". Louise von Göchhausens Tagebuch ihrer Reise mit Herzogin Anna Amalia nach Italien vom 15. August 1788 bis 18. Juni 1790*, Göttingen, Wallstein, 2008. For further elaboration on this issue, see Edward Chaney, *The Evolution of the Grand Tour: Anglo-Italian Cultural Relations since the Renaissance*, London: Frank Cass, 1998.; Ingrid Kuczinsky: Zum Aufkommen der individualisierten Wirklichkeitssicht in der englischen Reiseliteratur des 18. Jahrhunderts, in H.-W. Jäger (ed.): *Europäisches Reisen im Zeitalter der Aufklärung*, Heidelberg, Carl Winter Univetsitätsverlag, 1992, 35–46.; As for the representation of the various aspects of journeying, see: Thomas Grosser: Die mediengeschichtliche Funktionswandel der Reiseliteratur in den Berichten deutscher Reisender aus dem Frankreich des 18. Jahrhunderts, in H.-W. Jäger (ed.): *Europäisches Reisen im Zeitalter der Aufklärung*, Heidelberg, Winter, 1992, 275–310.; Karin Hlavin-Schulze,: *»Man reist ja nicht, um anzukommen«. Reisen als kulturelle Praxis*, Frankfurt/Main, Campus, 1998, 47–50.; Thomas Grosser: Tour de France – Frankreich als Ziel deutscher Reisender, in H. Bausinger – K. Beyrer – G. Korf (eds.):

point that the European notion of the "Grand Tour" was not without its adherents in Hungary, as well: for confirmation one need look no further than the Western European travels of jurist and historian Count József Teleki de Szék, national library and museum founder Count Ferenc Széchényi, and even political economist Gergely Berzeviczy when they were young.[133]

For Gerics and Lehrmann, however, none of the above featured high on the list of targeted destinations, as theirs was not to be a "journey of sentiment" of the type described in Prussian state councillor Joachim Heinrich Campe's late-eighteenth-century report on the initial events of the French Revolution. To Campe, the act of recounting travels based on sentimentality was to be evaluated as nothing more than s,[134] whose participants could not be expected to provide in-depth descriptions of topography or systematised interpretations of cultural assets. Campe's phrasing was an obvious reference to *A Sentimental Journey through France and Italy by Mr. Yorick* by Englishman Laurence Sterne, an author who enjoyed considerable popularity across Europe during the final decades of the century. Not surprisingly, an English edition of Sterne's work was to be found in the private library of the young Count György Festetics, upon whom it appears to have had some impact. In fact, that the invented figure of Yorick served as a model of character and behaviour for the count as a young man may be surmised from a detail pertaining to Festetics's visit to Hungarian theologian András Károly Bél in Leipzig in 1777. In a later letter, the scholarly

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Reisekultur: Von der Pilgerfahrt zum modernen Tourismus, München, Beck, 1999, 229–236.; Brian Dolan: *Exploring European Frontiers. British Travellers in the Age of Enlightenement*, Basingstoke, Macmillan, 2000; Alain Bony: From A(ddison) to W(ordsworth) by way of S(terne): Variations on Continental Travel in the Eighteenth Century. Introducion, in J. Viviès (ed.): *English Travel Narratives in the Eighteenth Century. Exploring Genres*, London, Routledge, 2002, 3–4.; Reinhard M. Möller: *Situationen des Fremden. Ästhetik und Reiseliteratur im späten 18. Jahrhundert*, Paderborn, Fink, 2016.

133 Gábor Tolnai (ed.): *Egy erdélyi gróf a felvilágosult Európában. (Teleki József utazásai 1759–1761)* [A Transylvanian Count in Enlightened Europe. (The Travels of József Teleki 1759–1761)], Budapest, Akadémiai, 1987.; Éva H. Balázs: *Berzeviczy Gergely, a reformpolitikus 1763–1795* [Gergely Berzeviczy. The Reform Politician], Budapest, Akadémiai, 1967. MNL OL Széchényi Lt, Széchényi Ferenc hagyatéka [The Files of Ferenc Széchényi], P 623 1. k. 93. d. No. 12

134 Joachim Heinrich Campe: *Briefe aus Paris zur Zeit der Revolution geschrieben. Aus dem Braunschweigischen Journal abgedruckt*, Braunschweig, Schulbuchhandlung, 1790, VII.

teacher would refer to Yorick—that is, to Sterne—as the young Hungarian nobleman's "friend".[135]

Before the final decades of the century, the panorama of travel writings was dominated by six genres: the diary; the simple itinerary; the travel guide (in the spirit of the *ars apodemica*); the then-fashionable travel letter, eventually to develop into an entirely new breed of novel; and the *voyages pittoresques*, which included not only text, but also stand-alone images, themselves constituting a separate genre.[136] In addition, there are clear signs that, by around the mid-18 th century, a form of travel boasting a new set of objectives and experiences—the "technological grand tour"—had begun to emerge, bringing with it its own set of documentary publications. In German-speaking areas, for example, the practice of chronicling foreign experiences and describing advanced processes in technological terms—accompanied by a need for accuracy and proper terminology—was plainly coming to be seen as an essential vehicle for modernisation, i.e. as a means of disseminating knowledge and even popularising scientific learning.[137] It was this line of thinking that Berlin editor

[135] On 17 May 1777, Bél wrote in a letter from Leipzig: "Dass Yorik [sic], oder noch seinem eigenem Nahmen, Lorenz Sterne, Ihr Freund ist, bester Graf, daran habe ich keinen Augenblik gezweifelt". MNL OL Festetics Lt, Memorabilia, P 235 108. d. No. 190 fol. 413

[136] Constanze Baum: Bode in Paris. Das Journal einer Reise von Weimar nach Frankreich im Jahr 1787 im Kontext von Reiseliteratur und moderner Stadterfahrung, in C.-F. Berghagen,– G. Biegel – T. Kinzel (eds.): *Johann Joachim Christoph Bode. Studien zu Leben und Werk*, Heidelberg, Universitätsverlag Winter, 2017, 59–60.; Cf. Wolfgang Behringer: Reisen als Aspekt einer Kommunkationsgeschichte der Frühen Neuzeit, in M. Maurer (ed.): *Neue Impulse der Reiseforschung*, Berlin, Akademie Verlag, 1999, 65–96.

[137] Werner Kroker: Wege zur Verbreitung technologischer Kenntnisse zwischen England und Deutschland in der zweiten Hälfte des 18. Jahrhunderts, Berlin, Duncker und Humblot, 1971.; Wolfhard Weber: Probleme des Technologietransfers in Europa im 18. Jahrhundert. Reisen und technologischer Wandel, in U. Troitzsch (ed.): *Technologischer Wandel im 18. Jahrhundert*, Wolfenbüttel, Herzog August Bibliothek, 1981, 189–217.; Winfried Siebers: Darstellungsstrategien empirischen Wissens in der Apodemik und im Reisebericht des 18. Jahrhunderts, in C. Zimmermann (ed.): *Wissenschaftliches Reisen – reisende Wissenschaftler. Studien zur Professionalisierung der Reiseformen zwischen 1650 und 1800,* Heidelberg, Palatina, 2002, 29–49., especially 38–39. For an analysis of the travels of Arthur Young as an English example of a "technological Grand Tour", see: P. M. Jones: Arthur Young (1741–1820). For and Against, *The English Historical Review* 127 (2012),1102. For an overview of a specific type of study tours, including the patterns of available sources, see: Hubertus Fischer: Gärtnerreisen in Europe. Quellen, Typologie, Netzwerke, in H. Fischer – J. Wolschke-Bulmahn – J. Beardsley (eds.): *Reisen und Gärten. Reisen, Reiseberichte und Gärten vom Mittelalter bis in die Gegenwart,* München, Akademische Verlagsgemeinschaft München, 2019, 213–238. Bohorquez argues in his recently published book that travel accounts and voyage journals were framed within the "colloquy of their community"; therefore, they should also be deemed as "platforms of economic observations", as well as "technologies of power". J. Bohorquez: *Global Commerce in the Age of*

Friedrich Christoph Nicolai sought to develop when, in the introduction to his twelve-volume exposition of a tour of Germany and Switzerland he took in 1781, he laid out what he considered to be a number of important guidelines for this type of tour, including the criteria to be applied to itinerary compilation and the requirements for systematising information to maximise *Gemeinnützigkeit*, or public utility. Heinrich Sander's travel experiences were, also published in 1783, but his study tour of France, the Low Countries, Germany and Italy failed to attract significant attention unlike the Berlin intellectual.[138] In Nicolai's view, the recipe for success involved determining a route, complete with sites to be visited and time to be spent at each; compiling a list of persons to contact; and gathering information from available manuals and travel guides, all in advance of departure. Once on the road, the subject should keep a journal of his progress, procure any professional books and periodicals available on the topics studied, and report his findings in accordance with three fundamental principles: utility, immediacy, and factuality.[139] Similar approach and methodology is offered by another German author, Franz Ludwig Posselt, in his *Apodemik oder die Kunst zu Reisen*.[140]

As shown above with regard to literature and hiring practices, György Festetics viewed the *Georgia Augusta* in Göttingen as a hub of key significance in the dissemination of knowledge relevant to his aspirations for the

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Enlightenment. Theories, Practices, and Institutions in the Eighteenth Century, London–New York, Routledge, 2023, 49–53.

[138] Heinrich Sander: *Beschreibung seiner Reisen durch Frankreich, die Niederlande, Holland, Deutschland und Italien in Beziehung auf Menschenkenntniss, Industrie, Litteratur und Naturkunde insonderheit,* vols., 1–2., Leipzig, Jacobäer, 1783–1784.

[139] Friedrich Christoph Nicolai: *Beschreibung einer Reise durch Deutschland und die Schweiz im Jahre 1781. Nebst Bemerkungen, Gelehrsamkeit, Industrie, Religion und Sitten,* 12 vols., Berlin–Stettin, [n.p.] 1783–1796; Paul Raabe: Friedrich Nicolais unbeschriebene Reise von der Schweiz nach Norddutschland im Jahre 1781, in W. Griep (ed.): *Sehen und Beschreiben. Europäische Reisen im 18. und frühen 19. Jahrhundert*, Heide, Westholsteinische Verlag, 1991, 197–212.

[140] Franz Ludwig Posselt: *Apodemik oder die Kunst zu Reisen. Ein systematischer Versuch zum Gebrauch junger Reisenden aus den gebildeten Ständen überhaupt und angehender Gelehrten und Künstler insbesondere*, 2 vols., Leipzig, Breitkopf, 1795.

Georgicon.[141] It is therefore entirely reasonable to deduce that the university should have left its mark on his plans for the *Georgicon* professors' Western European study tour, as well. It is known, for example, that the count's library included several of the broadly influential statistical books by Göttingen professor Ludwig August Schlözer, who dedicated considerable energy to the issues of fact versus fiction, to comparing information gleaned from various books and other sources, and to the dilemma of how one might ascertain truth. As regards the acquisition of objective information and documentation of experiences collected in the course of an extended tour abroad, such viewpoints may have represented a crucial point of departure.[142] A point possibly equally central to the matter of tour preparations relates to an early plan on György Festetics's part to have Pethe translate a comprehensive agriculture book by Johann Beckmann—a volume that had already seen several editions—into Hungarian and adapt its content to local circumstances for use as a textbook at the *Georgicon*.[143] Specifically, the book's thematically arranged bibliography—i.e. the bulletins, periodicals, repertoria, etc. of scientific societies it lists—included not only topographical analyses, but also titles of several books on travel for the purposes of agricultural study. Under the heading of

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141 MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 21. d. fol. 346; As to why Festetics was committed to establish direct contacts with the outstanding professors of the *Georgia Augusta*, see Peter Aufgebauer: Kooperation oder Konkurrenz? Die Göttinger Königliche Gesellschaft der Wissenschaften und die *Royal Society* im 18. Jahrhundert, in A. Reitmeier (ed.): *Kommunikation und Kulturtransfer im Zeitalter der Personalunion zwischen Großbritannien und Hannover*, Göttingen, Universitätsverlag, 2014. 193–206.; For a list of teachers, see Johannes Tütken: *Privatdozenten im Schatten der Georgia Augusta. Zur älteren Privatdozentur (1734–1831)*, 2 vols., Göttingen, Universitätsverlag, 2005

142 Ludwig August Schlözer: *Theorie der Statistik. Nebst Ideen über das Studium der Politik überhaupt.* Göttingen, Vandenhoeck und Ruprecht, 1804, 69. See also the preface to Schlözer's *Briefwechsel meist statistischen Inhalts*, published in Göttingen in 1775 and found in the Festetics library, in which the author discusses the methodological approach developed as a result of extended stays in Sweden, Denmark, and Russia. For more on Schlözer's *oeuvre*, see: Heinz Durchhardt – Martin Espenhorst (eds.): *August Ludwig von Schlözer in Europa*, Göttingen, Vandenhoeck & Ruprecht, 2012, especially the following two studies in it: Annamária Bíró: Schlözer und Ungarn, Ibid., 69–84., and Merio Scattola: August Ludwig Schlözer und die Staatswissenschaften des 18. Jahrhunderts, Ibid., 87–110.

143 Johann Beckmann: *Grundsätze der teutschen Landwirtscahaft*, Göttingen–Gotha, Dieterich, 1769.; Kurucz: *Keszthely grófja* [The Count in Keszthely], 228–229. The later edition of Beckmann's work was procured for Festetics from Vienna by physician Joseph Offner in 1802. MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 30. d. fol. 286–287v

Oekonomische Reise, for example, Beckmann recommends a total of twelve books, including, unsurprisingly, six attributed to Arthur Young.[144]

A keystone requirement in developing the contacts essential to any eventual applicability of the project, as well as in documenting the tour itself (e.g. through journals and reports to the tour sponsor) was the elimination of all subjectivity. From the standpoints of scholarship in the natural sciences and other means to *Gemeinnützigkeit*, in the years immediately before the turn of the 19th century, travel undergone for scientific, agronomic, or even market research purposes was expected to produce more than mere stocktaking of the attributes of a single region or wool washing plant.[145] Thus, in recording their experiences, travellers were called upon to step outside the framework of individual perception, and—while continuing, where necessary, to provide a full account of the actors associated with select phenomena or the parameters associated with the occasional cultural region—to prioritise the characterisation of more complex practices, particularly in questions of agrotechnology. There can be little doubt that such an expectation would have presumed both the development and application of an appropriate informational framework—a set of instructions that offered a starting point from which to attack anything put to scrutiny—and the selection of tour participants who were simultaneously learned in matters of science, knowledgeable in foreign languages, personable, and—in no way trivially—physically fit.

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[144] Johann Beckmann: *Grundsätze der teutschen Landwirtschaft*, 6th ed., Göttingen, Dieterich, 1806, 54–55. Cf. Kurucz: Az „új mezőgazdaság" irodalma [The Literature of the 'New Agriculture'], 33–35.; Idem.: *Keszthely grófja* [The Count in Keszthely], 201–203.; Arthur Young: *A Tour in Ireland, with General Observations on the Present State of that Kingdom in 1776–78*, London, Cadell and Dodsley, 1780.; Idem.: *Travels during the Years 1787, 1788, and 1789, Undertaken More Particularly with a View of Ascertaining the Cultivation, Wealth, Resources, and National Prosperity of the Kingdom of France*, London, Richardson, 1792.; Jones: Arthur Young, 1100–1120.

[145] Hans Erich Bödeker: "Sehen, hören, sammeln und schreiben". Gelehrte Reisen im Kommunikationssystem der Gelehrtenrepublik, *Pedagogica Historica* 38 (2002), 505–507. For more on the necessity of maintaining a professional distance and the problematics of rejecting the simple descriptive approach, see: Matthias Buschmeier – Christian Fieseler: Ästhetische Zahlen: Goethes Schweizer Reisen, in L. Berisch (ed.): *Vermessen, Zählen, Berechnen. Die politische Ordnung des Raums im18. Jahrhundert*, Frankfurt/Main-New York, Campus, 2006, 151–177., in particular 154–155.

In its complete form, the documentation produced by such tours constitutes a highly complex source of information that is quasi "open source" in character.[146] For the purposes of this book, the Gerics and Lehrmann material will be examined in terms of three primary elements: objective, location, and period/duration—although the discussion can and/or must be further differentiated according to various other criteria, such as character, genre, and distance in time or space from the point of observation. No doubt, the praxeological perspectives of the written materials were considered as vital for the ultimate outcome and success of the two Hungarian travellers.[147] Even where tailored to suit the objectives and criteria of the *peregrinatio oeconomica*, in isolation from all instructions provided prior to departure, notes taken in the course of a journey can be understood as sources of personal and cultural memory. Playing a special role in this regard are such personal reflections as the author chooses to include when recording impressions and drawings on site, sending reports home, or editing the journals that make up the venture's "original" material. An example is Gerics's revised hand-written journal, "Európa miveltebb tartományiban tett utazási jegyzések" [Travel Notes on the More Cultured Provinces of Europe], which was intended specifically for the Hungarian reader and whose numerous footnotes colour the work's descriptions of the original situation by "intertextual" means, and by doing so, his approach can certainly be deemed as a unique alignment of cultural transfer as well.[148] In

[146] For a complex analysis, see: Charles L. Batten: *Pleasurable Instruction. Form and Convention in Eighteenth-Century Travel Literature,* Berkely, University of California Press, 1978. For the specific issue of interpreting the concept of "open source", see: Siebers: Ungleiche Lehrfahrten , 50., and Baum: Bode in Paris, 51.

[147] Marian Füssel: Praxeologische Perspektiven in der Frühneuzeitforschung, in A. Brendecke (ed.): *Praktiken der frühen Neuzeit. Akteure, Handlungen, Artefakte*, Köln – Weimar – Wien, Böhlau, 2015, 21–33.

[148] Cf. "Kulturtransfer, kulturwiss. Bez. für Prozesse, in denen Kulturgüter, kulturelle Muster und Strömungen sowie die zugehörigen Verhaltensmuster (Habitus) aus einem kulturellen Zusammenhang in einen anderen übernommen bzw. übertragen werden, wobei (ähnlich wie bei Tradition) nicht nur die Übernahme, sondern auch die produktive Aneignung, Um- und Neudefinition sowie die zugehörigen Rahmenbedingungen eine Rolle spielen". *Die Zeit – Das Lexikon in 20 Bänden*, Vol, 8, Hamburg, Zeitverlag, 2005, 366.

relation to a visit to a factory owner in Brünn [today: Brno, Czechia], for example, Gerics writes:

> "My travel companion chided me for not having taken advantage of my pocket writing utensils at the Offermans', as I had done when transcribing the words seen upon the obelisk at Ferentz Hill [in Franzensberg, present-day Františkov], yet he wondered at finding in my dense lines and concise notes a fuller description than he had provided in his own journal. This I remark only because I find such fastidious note-taking pedantic, and to tell the truth, have changed my habit; but I was even of the suspicion, and my recent experience confirms, that the traveller who makes a note of everything will be regarded with narrowed eyes, especially by some secretive mill owners, who deliberately furnish false information in response. I still recall a perpetual note-taking Englishman who in Geneva was led to believe in a large annual catch of herring from the lake, which he duly wrote up in his notes; and it could well be that the claim later appeared in print. I could cite multiple examples from my own realm of experience to illuminate how travellers are frequently played for fools (*man hat sie zum Besten, oder man hängt ihren Bären an*), which is why we must be cautious and not believe blindly. I do not wish to assert here that the traveller should not keep a diary. Indeed, it is all the more important as, no matter how true his memory is, it cannot hold everything forever faithfully, particularly if he has seen much of the same thing or many different things in the stretch of a day. I thus consider it necessary for us to take daily notes, if we are to count accurate results as a consequence of our travels".[149]

[149] The *Georgicon* professor's Hungarian-language reports constitute important source material from the standpoint of language, word usage, vowel harmony and orthography as well. OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/1 fols. 11v–12

The account raises the three very important issues of individuality, professional accuracy and originality as they pertain to the material currently under scrutiny: what Professors Gerics and Lehrmann were engaged in went beyond the impersonal registration of technological processes with measured prioritisation of the material's future utility; that is, in certain cases, the birth of a given description was determined in large part by the writer's attitude, his willingness to accommodate. Instruments of value in this regard included references to direct dialogue, to reactions to questions posed—both of which lent extraordinary weight in matters of originality and accuracy—and, with equal significance, to events leading up to meetings and other steps in the process of developing contacts.[150] In one example, Gerics met a young English student of veterinary medicine at the veterinary institute in Alfort whose continued studies were sponsored by the Duke of Arenberg and whose acquaintance he had first made three years prior at the university in Göttingen. As was his wont, Gerics omitted mention of the meeting in the edited version of his journal, noting it only in his original report of 6 January 1824 to the *Directio*.[151]

Enhancing the professional accuracy of materials generated from the *peregrinatio oeconomica* in addition to the above was a level of diction indicative of an encyclopaedic education, a certain descriptive objectivity, and perpetual reference to the professional literature, whether it be that available at the time, or materials published in the period leading up to later redactions. Equally significant was the documentation's use of comparison, of precise reconstruction of the physical and temporal domain of experience, and—not leastwise, although seemingly paradoxically—phrasing indicative of emotional identification, such as an expression of regret at certain obstacles to the

[150] For the importance of establishing networks among the various centres of knowledge, see René Sigrist: Scientific networks and Frontiers in the Golden Age of Academies (1700–1830). An essay with new data, in H. Eberhart – J. Barkhoff (eds.): *Networking across Borders and Frontiers. Demarcation and Connectedness in European Culture and Society*, Frankfurt/Main, Lang, 2009, 35–65.

[151] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 311–314v

distribution of Hungarian goods in the markets of other countries. Moreover, in contrast to the way travels had been conducted in previous times, the contemporary mindset reflected a re-valuation of the practice of recording and discussing matters of pure curiosity. Whereas before, such objects and phenomena may have acted as a primary motivator, travellers now omitted any mention of them at all, or did so in patently critical tones.

While a familiarity with both the characterology of early nineteenth-century travel as experienced by the two *Georgicon* professors, and the considerations by which their written documentation may be evaluated is certainly crucial to any grasp of this complex array of source material, the point of departure for all related discussion is nevertheless its germinal element: the travel instructions that established the framework within which the tour took place, from the route—including both the location and timing of individual stops—to the obligation of observing certain seasonal tasks within the appropriate time frame. Naturally, the document in question constructed its requirements *vis-à-vis* the observable and recordable, as communicated in the detailed section entitled "How to Proceed", based on theories abstracted from knowledge its author possessed at the time. For reasons of professional accuracy, however—or in some cases, to enable the determination as to whether these theories were correct or incorrect—it was equally necessary that the two Hungarian travellers' actual experiences be communicated using a medial system of respectively prescribed languages.

Beyond the documentation of practical and technological processes, however, the instructions compiled for Gerics and Lehrmann looked to still broader horizons: behind the requirement of seeking out Europe's great places of learning and building connections with the elite of the age lay the recognition that, if he wished to explore and understand phenomena and processes as fully and truly as possible, science was the "master key"; indeed, the emphasis laid on studying the widest possible variety of scientific findings and forging

connections with the widest possible range of scientists, from theoretical physicists to parasitologists, was evident everywhere. In the concept these instructions reflect, science was viewed as a means to a more modern world, and the information it provided, to use Gerics's own words, was seen as promoting both the "public welfare" and "the benefit of [Festetics's] Estate and Homeland" owing to the "excellence of the *Georgicon* and the esteem in which it is held".[152]

At the same time, it is important to remember that, at the time of the two men's preparations, the procedural and documentary practices stipulated for the purposes of the tour had already been in use by the Keszthely branch of the Festetics family for decades, including in relation to the activities of estate management and the aristocratic household. Their origins no doubt can be traced back to the early 1780s, when Count György Festetics, upon the death of his father, decided to preserve the integrity of his birthright by not only satisfying the material demands of his siblings, but also shouldering the full sum of the debt they inherited.[153]

To be able to track cultivation practices on individual estates—including factors such as planted acreage, crop size, etc.—Festetics, building on his experience as a chamber officer, strove to organise his financial administration according to a differentiated system. In György Festetics's time, annual end-of-year cash accounting was done in Hungarian, although as late as the 1780s, some annexes and tables may still have been produced in German. By 1790, however, the language of administration was consistently Hungarian, with the income (*perceptio*) and expenditures (*erogatio*) columns of the accounting system indicating various cash movements in an itemised breakdown. The clerks entered all loans received, the sums and terms of all associated interest and capital payments, and the interest and capital yields on all loans provided by Festetics in separate *Status Passivus* and *Status Activus* ledgers. The earliest

[152] Ibid., fol. 310v
[153] Kurucz: *Keszthely grófja* [The Count in Keszthely], 107–110.

surviving ledger in tabular form, entitled *Passive Schulden Stand*, is dated to 1788 and is interesting for its inclusion of remarks and calculations in German written in György Festetics's own hand.[154] During the period in question, therefore, both general, and one-off instructions—i.e. those issued to all estates uniformly, and those specifying procedures to be followed by a single officer, respectively—were written and/or signed by the count himself.

A turnaround in the matter of administration came with the hiring of János Nagyváthy, the author of a comprehensive book on agriculture in Hungarian, to mediate between the count and the companies of stewards responsible for the individual estates. The first comprehensive document to regulate the activities of the *Directio*, the central administrative body organised by Nagyváthy—that is, the first document to address matters of both function, and jurisdiction—is dated to 5 November 1793.[155] In accordance with Festetics's expectations, Nagyváthy demanded that all financial information be submitted according to a system that was precise and transparent, and all officers act according to their functions and positions within the hierarchy, that is, subject to proper authorisation. It may be rightfully surmised, therefore, that in compiling the "Common *Instructio*" that would eventually be applied universally to the routines of estate officers, including all production, sales, administration, etc., Nagyváthy was relying precisely on the deficiencies he experienced at the time of his hiring.[156]

From the sources available in the former family archives, it would appear that no detailed instruction on the activities of court officers or personnel existed

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[154] MNL OL Festetics Lt, Festetics Györgyhöz intézett levelek [Letters to György Festetics], P 246 5. d. 5–6. fols. 37-47; Kurucz: *Keszthely grófja* [The Count in Keszthely], 140–141. For certain aspects of contemporary administrative techniques see, Philipp von Hilgers – Sandrina Khaled: Formation in Zeilen und Spalten: Die Tabelle, in P. Schneider – M. Wedell (eds.): *Grenzfälle. Transformationen von Bild, Schrift und Zahl*, Weimar, Verlag und Datenbank für Geisteswissenschaften, 2004. 167-189.; Peter Becker: Formulare als 'Fließband' der Verwaltung? Zur Rationalisierung und Standardisierung von Kommunikationsbeziehungen, in P. Collin – K.-G. Lutterbeck (eds.): *Eine intelligente Maschine? Handlungsorientierungen moderner Verwaltung (19/20. Jh.)*, Baden-Baden, Nomos, 2009, 281–298.

[155] MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 3. d. I. fols. 530–533v

[156] Lukács: Nagyváthy János keszthelyi munkássága [The Work of János Nagyváthy in Keszthely], 55–70.

at the time of György Festetics's father or grandfather. In addition to the general instruction on the operations of estate management and administration, day-to-day life in the immediate and broader environments of the Festetics family, including their palatial country house, the court stables, and, naturally, the library, was governed within the framework laid out by the instructions and procedures compiled and approved by György Festetics. The first comprehensive directive, "Guide for the Internal Regulation and Financial Management of the House of the Honourable Count", was—not unsurprisingly—issued in 1800, at the time a project to remodel the Keszthely home was nearly completed.[157] The document comprised four key parts: "1. Care of the house and exterior and interior movables; 2. Household consumption; 3. Care of the kitchen and orchards; 4. Supervision and hiring of court labourers and related hierarchy". By comparison, the policy issued on 29 December 1803 entitled "Guide for the Internal Regulation of the Internal Court of the Home of the Honourable Count, and for the Management of His Estates and Related Accounts" was considerably more complex, while also diverging in its specifics from that issued three years prior.[158] For one thing, its introduction mentions more high-ranking officials, though at times in a capacity that seems somewhat quirky—the stable master's immediate responsibility for the labours of the domestic staff, for example. In this specific instance, the explanation is likely that the man who filled the position, György Kegel, had—with Festetics's support—studied abroad, spoke several languages, and possessed the necessary experience for the duties in question.[159]

The library was likewise run according to established rules, the arguments for which again confirm that the count developed the estate's literary holdings

[157] MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 19. d. fols. 547–577. For a broader analysis of the policy see: Réka Zsidai: Egy dunántúli főnemesi udvartartás a 18–19. század fordulóján: Festetics György belső rendtartása [The Household Order of a Transdanubian Aristocrat at the Turn of the 18th and 19th Centuries: The In-house Rules of György Festetics], *Orpheus Noster* 9 (2018), 22–34.
[158] MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 38. d. fols. 396–429v
[159] Kurucz: Adminisztráció, gazdálkodás, adósságkezelés [Administration, Farming, Debt Management], 560.

with his educational aspirations in mind, viewing them as providing indispensable institutional support for the theoretical side of the school's pedagogical activity. He directed, for example, that

> "Since most of the books tend to lie about not in the library, but in the possession of the *Georgicon* professors, and so that such books should not become damaged by remaining long in their hands, at the end of the year's prelections, i.e. at the beginning of the month of September, all books removed from the library in the course of the year in the manner described above shall be re-collected".[160]

With the commencement of teaching and launch of the school's experimental farm came hopes of adding both new methods in estate management, and new technological knowledge toward the teaching repertoire for farm and classroom alike. To this end, the scope of Festetics's instructions was expanded to include efforts at arranging study trips for both students, and teachers. Of decisive value in this chain of events was the charging of János Asbóth with the undertaking of such a tour, a decision that spawned the first, brief set of travel instructions laid out in enumerated points. Dated 7 September 1802, this document, holding to the typical concerns of an agronomic study tour, dealt equally with issues of objectives, persons to be contacted, and route. Accordingly, "*Georgicon* officer and professor Mr. János Asbóth was to depart "on 10th September with the purpose of conducting a *peregrinatio oeconomica*, that is, a tour".[161]

Thus, it was that, in the company of a *Georgicon* student, Teofil Feigl, Asbóth was to reach his first tour stop—a farm that belonged to Count Ferenc

[160] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 10. k. pp. 94–111. An example of book loans for Ferenc Pethe: MNL OL Festetics Lt, Georgicon alapításával kapcsolatos iratok [Documents Related to the Founding of the Georgicon], P 283 13. d. fol. 132. For the library instruction, see: István Kostyál: Festetics György könyvtárosi instrukciója [György Festetics's Instructions for Librarians], *Magyar Könyvszemle* 72 (1956), 299–303.

[161] MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 30. d. fol. 567–568

Nádasdy in Lepsény on the eastern shore of Lake Balaton—for the practical knowledge that stood to be gained there. At the time, the farm was under lease to Jan Nowotny, steward to Count Mihály Viczay, a collector of arts and antiquities.[162] Naturally, Asbóth was required to prepare written reports and kept travel records for the purpose. From these it is known that Nowotny employed a three-field system of cultivation but derived his primary source of income from sheep husbandry. Other details Asbóth thought important to record were that, given the limited availability of appropriate pastureland, the farm produced large quantities of alfalfa, a crop by this time considered indispensable in the keeping of sheep, and that Nowotny's court blacksmith manufactured a type of cultivator that resembled an English ridging plough.[163]

Following his departure from Lepsény, the Georgicon professor first proceeded north through Győr to the river island of Csallóköz (present-day Žitný Ostrov, Slovakia), and from there to Pozsony (present-day Bratislava, Slovakia). During this stop, as he would later recall, he had an encounter noteworthy both for its implications to the school's reputation, and for its relevance to the spread of English farming methods in Hungary. The party in question, Baron Miklós Vay, had been to England in the years prior and maintained an active curiosity about the agrotechnological methods employed there. In Asbóth's words:

> "One of the persons I visited was the Honourable Baron Miklós Vay, in the company of several other dignitaries who were then enjoying his hospitality, and he inquired vigorously as to the state of the *Georgicon*. The Baron spoke of the experience he had gained of agriculture in England, among other things, that alfalfa planted in rows is generally more profitable than that sown over the land's whole surface. He brought with him a ploughshare cast entirely from iron, of which he had several identical pieces made on his

[162] The Moravian-born tenant leased the estate in Lepsény from 1797 onward at a rate of 12,000 forints per annum. OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Fol. Hung. 3700. fol. 3
[163] Ibid., fol. 4

> own landholdings; of these, under his guidance, good use was made for a time, though afterward, in his absence, his stewards and labourers found excuses not to use them. – The seeds for a great variety of crops, feed plants, saplings, and trees, which, having gathered them up in England, he had taken with him to the homeland, sunk, together with the crates in which they were packed, into the water in Trieste with the smaller craft used to bring them from the larger one, and being wetted through, were wholly spoiled by the time they arrived home".[164]

From Pozsony (present-day Bratislava, Slovakia), according to his itinerary, Asbóth was to progress through Köpcsény (present-day Kittsee, Austria) to Vienna, where he was to seek the acquaintance of Professor Peter Jordan and, on instruction from Festetics, to visit the gardens at Schönbrunn. From Vienna he was to turn homeward, on the way gaining what experience he could of the sheep farm owned by Count Ernst Christoph von Harrach; studying the local wine treatment process in Ruszt (present-day Rust, Austria) and Rohonc (present-day Rechnitz, Austria); and learning a particular method for cleaning seeds at a local manor owned by Count Tivadar Batthyány.[165]

Four years later, in 1806, Asbóth was dispatched on a second fact-finding tour, this time with the initial objective of assessing an English garden kept by Festetics's brother-in-law Count Károly Eszterházy in the Komárom County municipality of Ács. This was followed by destinations at the major Hungarian estate administration hubs in Győr, Óvár, Féltorony (present-day Halbturn, Austria), Pozsony (present-day Bratislava, Slovakia), Ürmény (present-day Mojmírovce, Slovakia), and Nagyszombat (present-day Trnava, Slovakia). The route then proceeded to Brünn (present-day Brno, Czech Republic), where

[164] Ibid., fol. 25. For more on Vay's life, see: Orsolya Szakály: *Egy vállalkozó főnemes. Vay Miklós (1756–1824)* [An Enterprising Nobleman: Miklós Vay (1756–1824)], Budapest, Eötvös, 2003.

[165] MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 30. d. fols. 567–568. It is not known which member of the Harrach family the meeting involved.

Asbóth negotiated with local wool cloth manufacturers on a possible purchase of raw wool from the Festetics estates. The homeward leg included a stay in Vienna, where he met *Theresianum* gardener László Varga to discuss the procurement of seeds, as well as with Augarten head gardener Christian Fleischhacker. The *Georgicon* professor then returned to Keszthely by way of Sopron and Ság.[166] Several years later, it was Asbóth who, following a series of consultations with Festetics, would in turn compose the instructions for 'Oeconomiae Practicáns' [agronomy practicant or intern] Károly Fleckel, whose somewhat longer circuit was to take him through Bohemia and Saxony to Berlin and Göttingen, and then through the Rheinland to the institution run by Emanuel Fellenberg in Hofwyl, Switzerland.[167]

In comparing Fleckel's tour to Asbóth's, it is worth focusing on his reports home; as directed, they were written in Hungarian and gave account of phenomena that could not have been included in his original instructions. Fleckel, for example, tracked developments in Prussia, a point that bears conceptual significance in light of a report he sent from the school in Möglin dated 4 January 1810, in which he made mention of the upcoming urbarial reform, as well as indicating that Thaer himself, a Prussian state councillor, and others had been asked to develop certain of its provisions. The reason given was that "with the universal abolition of socage and serfdom, [there would] be introduced, in the whole of the kingdom and hence suddenly, a *rectificatio divisionis* [a division of dues and obligations] between lord and peasant".[168] Equally important to note was that communications between Fleckel and the *Directio* were continuous, a circumstance that allowed for new directives to be issued that were not included in the original plans. Asbóth's instruction of 20 July 1810, for instance, mandated that Fleckel make a detour to study the processes applied to the cultivation of grapes in the regions around

[166] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Fol. Hung. 2681
[167] MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 66. d. fols. 362–363
[168] MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 65. d. fols.119–120v

Aschaffenburg.[169] At the same time, Fleckel's reports on his visit to Fellenberg's school in Hofwyl, a stop on the route as originally planned, were of crucial significance for their expression of not only praise—e.g. for the equipment available at the institution's model farm, the work of its founding director, and the project's commitment to the common good—but also criticism, among other things. Specifically, Fleckel expressed disapproval of the school's educational endeavours, noting in plain terms that Fellenberg's lectures were too long, while his overly frequent interposals led him to digress repeatedly from his subject material.[170]

The same year witnessed a study tour by yet another *Georgicon* professor, bailiff Mihály Babusnik, whose visit to the experimental farm owned by Archduke John of Austria in Ternberg (Styria) yielded findings crucial to securing the seamless circulation of knowledge within the Empire, as well as to the adaptation of English agricultural improvements on the continent. It should be noted that, given the trip's limited duration, Babusnik did not draft intermittent reports. Instead, he shared his conclusions in a single comprehensive submission to the *Directio* upon his return to Keszthely. Among these summary remarks are a number regarding equipment used in horticultural production on arable land:

> "I inspected the ploughs appurtenant to the cultivation of land and saw some that were necessary for the tilling of fields located upon hills, and in addition, England [*sic*] ploughs, such as I. Cultivators—one made by Jobst,[171] but with wooden mouldboards, and another, invented by Zalbruckner,[172] cast from iron; II. An extirpator with three flat-iron tines. III. An extirpator with seven flat-iron teeth. IV. A large, heavy Tyrolese

[169] MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 66. d. fols. 363–363
[170] Ibid., fols. 491–494v
[171] Anton von Jobst (1718–1784), mediator of English agricultural improvements in the Electorate of Hanover and creator of one of the earliest English gardens in the Germanic lands.
[172] Johann Baptist Zahlbruckner (1782–1851), Austrian botanist and colleague of Archduke John of Austria.

combination plough/harrow. V. A toothed roller".[173]

Yet another set of instructions under the heading of *peregrinatio oeconomica*—written once again by *Georgicon* professor and prefect János Asbóth, this time in German—laid the groundwork for a study trip by József Lehrmann, the same Lehrmann whose tour of Western Europe forms a central topic of this book.[174] It is important to note that the latter man was younger than Fleckel, being described in the preamble to his instructions as an apprentice in the *Georgicon*'s school of horticulture ('Gärtner-Geselle'), among other things. According to his itinerary, Lehrmann was to depart on 2 January 1812, reaching his final destination, Vienna, by way of Ság and Sopron in Western Hungary. His instructions comprised eight sections and six subsections that discussed the sites to be visited—the gardens of Schönbrunn and the *Theresianum*—and people to contact, among them his predecessor, gardener Károly Fleckel. Other sections dealt specifically with the substance of the venture, such as the necessity of observing seasonal work, and matters of provisions and lodgings.

An interesting aspect of the instructions were its stipulations in Section 5. Lehrmann was to both keep a journal, and draft monthly "horticulture reports" to the *Directio* based on a set of pre-established questions.[175] The enumerated subsections of this directive specified what these accounts should include in particular: how much remained of the funds he had been provided for the journey; what he had observed of such things as seasonal vegetable garden work, greenhouse and seedling care, and fruit and flower gardening; how his

[173] Babusnik's report was dated 27 June 1810. MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 68. d. T. II. fols. 211–214

[174] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 6. Lehrmann József jelentései külföldi útjáról 1819–1825 [Reports by József Lehrmann on His Travels Abroad 1819–1825] fols. 42–42v

[175] Cf. Peter Becker – William Clark: Introduction, in P. Becker – W. Clark (eds): *Little tools of knowledge. Historical essays on academic and bureaucratic practices,* Ann Arbor, University of Michigan Press, 2001, 1–34.

clothing had weathered the trip; and anything else of note he had experienced.[176] The seventh and eighth sections dealt with accounting requirements, accurate reporting and the receipt of his 25-forint advance payment. What is most interesting about this document as compared to previous ones is that it was the first to define, in addition to the purposes, route, and contact persons and institutions, at what intervals, in what form, and with attention to what elements of content he should record his experiences for the *Directio*.

In summary, it can be said that, starting in the 19th century, the agendas, routes, scheduling, equipment requirements, etc. of both students sent from Keszthely on study tours, and officers and other employees charged with estate management and/or sales tasks were regulated by written instructions expressed in enumerated sections. It is important to remember, however, that while Asbóth was responsible for developing such instructions for others, when on tour himself, his actions fell under the guidance of a similar document, written in the hand of the count's secretary and signed by György Festetics himself. An example is the eleven-point missive dated 10 May 1810 received prior to his trip to Vienna, on the basis of which he selected breeding rams in Ság and brought Festetics from the imperial capital "any books there might be for [him]" there.[177] Not long after, Asbóth would note in one of his reports that he had been able to procure only the fifth and sixth volumes of Charles Pictet's specialist book on English agriculture.[178] Festetics's wish to procure this book is noteworthy because it provided information on how English methods might be adapted to needs on the continent and was therefore relevant to topics ranging from the possible application of models detailed previously in this work to the count's desire to build a specialist library and attention to the material aspects of the

[176] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 6. Lehrmann József jelentései külföldi útjáról 1819–1825 [Reports by József Lehrmann on His Travels Abroad 1819–1825] fol. 42

[177] MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 68. d. T. II. fols. 141–141v

[178] "Other books for His Lordship I did not find, except for Pictet's Cours d'Agriculture Anglois V and VI, which I have brought with me…". Ibid., fol. 145; Charles Pictet: *Cours d'Agriculture Anglois avec les developpmens utiles aux Agriculteurs du Continent*, 10 vols., Genève, Paschoud, 1808–1810.

circulation of knowledge.

Thus, by the 1810s, the contours of these tour instructions, inasmuch as they can be reconstructed—with especial reference to the forms in which experiences were recorded—had been largely drawn and would, with the addition of new elements, remain in place even after György Festetics's death. Immediately prior to the Western European venture that forms the subject matter of this book, Lehrmann conducted one last "test" tour, its objectives, route, and contact persons set forth in a pair of German-language documents dated 25 July 1819 and 18 January 1820,[179] both signed by the members of the Directio: inspector György Palleta, fiscal director Sándor Matkovics, chief accountant József Szentmihálfalvay and estate engineer Vilmos Kehrn, whose penmanship graces the final copies. As mandated by the ten sections and nine subsections of the one dated 25 July 1819, Lehrmann was to study the viticultural and oenological practices of the Western Hungarian regions around Sopron and Ruszt (present-day Rust, Austria) and to contact both Reverend Mihály Ugróczy in Fertőmeggyes, and a member of the prestigious Conrad family in Ruszt with the purpose of obtaining letters of introduction. This task accomplished, he was to turn to the observation and written description of the attributes, yields, and tastes of the specific varieties of grapes grown in the area, along with the natural parameters of the lands cultivated in their production, including such features as exposure, soil composition, and peculiarities of climate. A separate subsection dealt with how Lehrmann was to record the botanical characteristics of individual varieties, describe their vines and leaves, study how root stock and branches were treated, and observe different phases of labour. The same subsection additionally required Lehrmann to participate in the work and master the requisite skills personally.[180]

[179] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 6. Lehrmann József jelentései külföldi útjáról 1819–1825 [Reports by József Lehrmann on His Travels Abroad 1819–1825] fols. 1–4; 5–7

[180] Ibid., fols. 1–4

Perhaps the most striking feature of this set of instructions, however, was its section on Lehrmann's continued theoretical studies; specifically, the *Georgicon* agent was expected to dig through the works of Chaptal, Rozier, and Frege, in addition to submitting any specialist books he might purchase to the Keszthely library.[181] Also provided were detailed directions on documenting his experiences and continuous reporting, including monthly missives to the *Directio* to recount the processes he had observed, people he had met, letters of recommendation he had received, books he had read and any other experiences deemed worthy of mention. Depending on how much leisure time remained, he was to seek information on area fruit farming and, in winter, clearly with his future circuit of Western Europe in mind, to study French. The grammar books and dictionaries required for this were financed not out of pocket, but from a special fund set aside for study trips maintained by the Sopron office of the count's estate administration. Upon departure, he received a one-time disbursement of 100 forints, after which he was permitted to requisition further sums from the Sopron "credit coffers" in addition to his regularly remitted salary.[182] Thus, the entire set of instructions may be interpreted as representing a decision on the part of László Festetics—just months after his father's passing—to dispatch Lehrman on the tour originally planned by the elder aristocrat, provided the professor fulfilled his duties in the prescribed manner.

Supporting this conclusion is the introduction to the previously discussed letter of 18 January 1820, in which the officers of the *Directio*, having noted clear indication in Lehrmann's reports of the scholar's diligence in proceeding as instructed, express both appreciation of his industry, and a hope that he should not flag in his gathering of "scientific knowledge and experience", as he

[181] Christian August Frege: *Versuch einer Classification der Weinsorten nach ihren Beeren*, Meiβen, Webel, 1804. No book is specified for the French oenologist writers, Jean-Antoine Chaptal (1756-1832) and François Rozier (1734-1793).

[182] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 6. Lehrmann József jelentései külföldi útjáról 1819-1825 [Reports by József Lehrmann on His Travels Abroad 1819–1825] fol. 4

had not done to date.[183] In what followed, the *Directio* went on to affirm yet again the key observational points laid out in their instructions of six months prior—regarding the properties of different species, such as Austrian Lagler grapes, the types of soil in which vines were grown, various criteria applicable to the handling of wine, etc.[184] These having been reiterated, the officers then reflected on Lehrmann's previous request to continue his studies in chemistry in addition to French, having felt both subjects to be of pressing necessity. In this regard, the instructions charged him with finding an appropriate instructor in Sopron, thus confirming that the count was indeed prepared to cover all study-related costs. It is also worth noting that the *Directio* at this point confirmed their receipt in Keszthely of both the minerals Lehrmann had sent them, and the model winepress ordered through a member of the Conrad family in Sopron. This last item is important because it indicates that financial backing for all further orders came from the Festetics credit books in Sopron—that is, that no limit had been set on funding for acquisitions.[185]

The considerations of concept, content, and form presented here in relation to travel instructions issued for previous study tours backed by the administration at the *Georgicon* raise the question as to what criteria, concrete directives, and supplemental documentation the *Directio* might have supplied Pál Gerics and József Lehrmann prior to their departure in 1820. The fair copy of the original instructions compiled for Gerics in German was signed in Vienna on 17 March 1820 by Count László Festetics, who, the day after, personally received the Georgicon professor to discuss the details and provide him with letters of recommendation. Gerics, in turn, acknowledged by his signature that he had read and understood what was expected of him and received his route plan, while also declaring his readiness to act accordingly in the course of the

[183] "Es war uns angenehm in Ihren Berichten wahrnehmen zu können, daβ Sie die Hauptmomente der Ihnen gegebenen Instruktion, welche Ihr Studium betreffen, richtig aufgefasst, u[nd]: dieselben gehörig zur Richtschnur bei Ihren Forschungen genommen haben". Ibid., fol. 5
[184] Ibid., fol. 5v
[185] Ibid., fol. 7

tour.[186] It is important to remark that the handwriting of the document in question is not that of the count's secretary, Ferenc Schmidt, but of estate engineer Kehrn, the same officer that had worked on the compilation of the earlier set of instructions issued to Lehrmann. As to the circumstances under which the instructions were received, Gerics reminisced in one of his later reports to the *Directio* that preparations had been completed on 18 March 1820: "The H[onourable]. Count, despite his enfeebled state of health, exerted himself all day on my behalf. It was late evening when, all having been made ready in accordance with his wishes, I was at last dismissed".[187]

The instructions themselves consisted of twenty-nine sections and seventeen subsections arranged according to three different themes: specific tasks to be completed, how experiences were to be recorded and transmitted, including financial and technical considerations. In its preamble, the count charged Gerics with educating himself on the subjects of agronomy, agricultural technology, and medicine with a view to his future appointment as chief veterinarian of the Festetics estates; with developing relationships with wholesalers and captains of industry; and with gathering experience in the areas of stock breeding, the regional particulars of intensive crop production on arable lands, crop rotation practices, and the processes applied to meadow and pasture management.

Subsequent to this, the instructions—in part according to the pattern noted above—defined the methods by which the professor was to record his observations. Firstly, he was to keep a journal in which he was to document all acquaintances made, procedures witnessed or learned, and observations noted in relation to the foregoing that might further the venture's stated objectives. A subsection then mandated that a precise record be kept of all monies received and spent. Other written obligations included a list of titles, a brief abstract of

[186] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 552–564
[187] Ibid., fol. 210.

each letter and report, and an index of documents. All correspondence and consignments were to be numbered. Additionally, a concise report of all activity was to be sent to the *Directio* every eight days, including indication of his plans for the eight-to-fourteen-day period to follow. Monthly synopses, moreover, were to follow a prescribed set of questions: what farms he had visited; what experience he had had in relation to crops, meadow cultivation, and stock breeding; what books he had read in the course of the month; what scientific societies he had contacted; what condition he had found them in; whom he had met; and what letters of recommendation he had obtained.

In what can be interpreted as the second thematic section of the instructions, the matter of how this established agenda should be carried out was explained in excruciating detail, starting with a subsection on logging the organisation of farm labour and administrative and organisational support provided for the various jobs recorded. This was followed by instructions as to how Gerics, in relation to crop production on arable lands, was to describe various rotation plants, horticultural care and weed control processes, as well as storage and conservation practices. The *Georgicon* professor was also expected to note all pedological information, the amounts of organic and non-organic fertilisers used on a given unit of land during a given interval, and the quantities of seed used in planting. The units of measure viewed as standard in different countries were to be converted to those used most frequently in Hungary—e.g. field sizes according to the Hungarian *hold* (1 acre – 0,7 hold). In describing meadow and pastureland, the requirements were that Gerics identify 'artificial' and 'natural' fodder plants using the proper botanical terminology; describe all mowing, tedding, and storage processes with due precision; make note of any irrigation use; and record both tilling frequencies, and types of grass seed sown. Naturally, precise information was also to be relayed on how many animals of each type were pastured per unit of land, over what intervals these were released, what types of pasture were available, and where each tract of land was

situated (e.g. forest, lowland, or hillside). A self-evident part of this section was its requirement of a full equipment survey, including the specifics of anything that might be deemed particularly novel. To facilitate the adaptation of such implements to the purposes of the Festetics estates and school, inquiry was to be made as to how adequate models might be acquired and with this information being passed on to the *Directio*. Tellingly, if his visit to Albrecht Thaer's institute were to turn up any models that the *Georgicon* did not already possess, he was to notify the estate officers in Keszthely immediately.

The section went on to set forth requirements related to stock breeding and animal husbandry, whereby Gerics was first obliged to record the particulars of pasturing systems and, where animals were kept in stables, the manner in which feeds were mixed and dispensed. As usual, there were highly detailed instructions as to how experience with sheep farming should be recorded, with emphasis on the traits of all breeds observed. Also to be noted were the circumstances under which ewes were kept, fed and protected and the quantities of hay and grass fodder animals held by each farmer received per head. The provisions then moved to matters of wool production, including pre-shear pond washing and wool sorting, classification, bailing, and storage. The document laid out strict instructions on the procurement of adequate wool samples and, in its concluding passages, on the documentation of the terms under which labourers on sheep farms were contracted, including the very important matters of the stockman-animal ratio deemed sufficient by individual farm owners and any use of veterinary medical services.

The expectation was similar when it came to horses. There, too, Gerics was to document both the traits of individual breeds, and the circumstances under which each was kept, including variations according to season. Equally important were the situation in which young animals were kept, how livestock was fed, and, of course, the supply and demand that characterised the equine market. Here Gerics was expected to discuss the positions, according to the

duties involved, of various hired stockmen, and indicate the presence or absence of a veterinarian on each farm. The circumstances of cattle husbandry were to be recorded under a similar system, whose key elements included fattening and husbandry practices, broken down by season, and the quantities of feed calculable per animal kept. For dairy farms, recording the characteristics of various breeds was to receive especial attention,[188] as were various figures associated with milk production, such as the quantity of butter that could be produced from each unit volume of milk. Also to be logged were the technological processes in the manufacture of cheese, the characteristics of each type of cheese produced, the layouts of processing areas, and the range of equipment used.

On points Gerics was asked to observe in relation to swine, it is immediately striking that several breeds—Hanoverian, Westphalian and Lotharingian—were named explicitly, in advance. The instructions in this regard were to pay close attention to considerations of feed, including any possible use of potatoes, beans, or legumes. As with the other stock animals, here too husbandry practices were to be broken down by season. Also, applicable to the provisions on stock care and breeding, as a whole, was an injunction to visit the institutions of veterinary medicine at every major centre of knowledge and in each case to furnish a description of its operations and, of course, make the acquaintance of all better-known practitioners and university professors.

In addition, Gerics's instructions included several sections aimed at probing market conditions, the first of which mandated visits to various key processing hubs. There, naturally, he was to observe and describe each phase in the process by which wool was made ready for market, with special reference to the critical step of sorting and classifying bales. Equally important, however, was the issue of how suitable various wool types were to the manufacture of

[188] For the *Georgicon*'s own dairy farm, László Festetics had imported numerous breeds from Bavaria and Switzerland. MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 124. d. T. II. fol. 81

fabrics of set grades of fineness or quality. This task was not an easy one. For one thing, it required that he discover how merchants evaluated the wool that originated from different producers, including such worthies as Prince Eduard von Lichnowsky, Prince Pál Esterházy Ambassador of the Austrian Empire to London, Count Károly Eszterházy (László Festetics's uncle) and other large-scale landowners of the Habsburg realm. For another, he was to determine whether the mills in question could identify which raw materials came from whom. At the same time, Gerics was instructed in a separate section to develop "friendly relations" with the textile millers and merchants of the Rhineland, the Netherlands and England, and to record their contact information in a specially reserved "Adressbuch", so that either the *Directio,* or even the count himself might correspond with them directly upon his return home.

Thus, the production methods favoured by the experimental farms at major aristocratic administrative hubs represented a key focal point of Gerics's instructions. Beyond these, however, the *Georgicon* professor was also tasked with characterising the parks and pleasure grounds of aristocratic families and, in addition, the botanical gardens in big cities and at universities. In addition to mere observation and description, this job involved contacting both court gardeners, and various experts—businessmen and merchants—who dealt in decorative plants and, based on feedback from his employer, procuring whatever special seeds and root stock might be required.

The third concluding section of Gerics's instructions covered discretionary and technical matters, beginning with a strict injunction to deliver letters of introduction to their addressee personally and never to an employee. Moreover, wherever possible, the professor was to procure additional letters toward the tour's aims, the preferred targets being scientific societies, veterinarians, and the proprietors of experimental farms, in addition to mill owners, and bankers. Another provision stipulated that, as he would be travelling on foot, he hire a guide, sending his baggage ahead to the next stop on

the itinerary, and that he never deviate from his course without good reason or before prior permission had been secured, and in any case return to his route afterward. The *Directio* or his employer was to be notified of all side trips in the manner prescribed previously with their successful conclusion confirmed in a detailed report.

This last section furthermore called for Gerics to attend to his ongoing education, including hiring an English language instructor in Brussels. Although, not inconsequentially, his reports home were to be written exclusively in Hungarian, they were to be furnished with foreign language annotations—a matter deemed to be of particular importance. It was also considered essential that Gerics avoid all political statements when conversing with scientists and even avoid meeting politically compromised persons. In discussing matters pertaining to Hungary, the document required he describe his countrymen as both generally satisfied, and uninterested in bringing about any particular changes in domestic conditions.[189] In the matter of travel expenses, Gerics received, in addition to a monthly stipend of 100 silver forints, 150 forints for lodging and other expenses, and a further 100 forints for other material expenditures, such as books and advance commissions for models of agricultural implements and machinery. (The instructions permitted a maximum of 15 forints per model, with leeway for more expensive items at the discretion of the *Directio*.) It should be noted that the directive also stipulated which banks he was to use when arranging financial matters or redeeming letters of credit abroad—in Berlin, for example, the bank operated by Wilhelm Christian Benecke (an institution of European repute), and in Dresden, that of Michael Kaskel.[190]

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[189] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on his Travels Abroad 1819–1825] fol. 557

[190] Ibid., fol. 557v. The Gröditzberg estate, manor and English garden owned by the Berlin banker, who would be accorded Prussian nobility in 1829, was regarded as remarkable at the time. L. v. Zedlitz-Neukirch (ed.): *Neues Preussisches Adels-Lexicon oder genealogische und diplomatische Nachrichten*, Vol. 1, Leipzig, Reichenbach, 1836, 202.

According to the established schedule, Gerics was to board a ship for England, leaving from either Ostend or Dunkirk, in April of 1821—one year from his date of departure—by which time, in accordance with the attached list, he should already have passed through 183 different locations. The final section of his instructions—the 29th by number—was considerably longer than any previous one, as it offered supplementary information on the route the *Georgicon* professor was to follow and audiences he was to seek, mandating what his specific focus in each location was to be. Thus, Gerics was to depart in the company of inspector György Palleta and proceed through places found in the present-day Czech Republic Brünn (Brno), Olmütz (Olomouc), Sternberg (Šternberk) and Troppau (Opava) to his first important stop, the experimental farm of Count Eugen Dominik von Vrbna in Groβherlitz (Velké Heraltice).

At this point, the *Georgicon* professor was to part company with his companion and, proceeding through Silesia, stop off in Krischanowitz (present-day Krzanowice, Poland) and Lichtenberg (present-day Kolnica, Poland), the administrative hubs of the estates of Eduard von Lichnowsky, famed for their sheep breeding enterprises. There, he was to collect wool samples, studying in particular the manner in which they were graded. Afterwards, he was to direct his energies to an examination of the Fellenberg methods used by the Prussian Count Heinrich von Larisch-Moennich on his farms in Silesia, and a study of regional dairy farms, with particular attention to be paid to the unusual drainage system used in their stables. He was then to proceed through places found in present-day Poland such as Pless (Pszczyna), whose local horses and equine husbandry practices were deemed worthy of scrutiny, travelling afterwards via Ratibor (Racibórz), Leobschütz (Głubczyce), Neustädtl (Nowe Miasteczko), then Neisse (Nysa) and Glatz (Kłodzko) in order to inspect and document the sheep keeping, crop farming, and feed production operations under Count Anton von Magnis. The itinerary then took him through Fürstenstein (Książ), Rohnstock (Roztoka), and Puschkau (Pastuchów), to the doorstep of Count

Hans von Hochberg, where he was to make inquiries on the topic of crop rotation, then on to the neighbouring estate and experimental farm owned by Baron Karl Andreas von Richthofen. Further stop-offs included Jauer (Jawor), and Liegnitz (Legnica), where certain peculiarities in the keeping of stabled animals were to be observed and recorded. The same area was home to the Prussian king's own model sheep farm, notable for its fairly recent acquisition of specimens of the Rambouillet, Malmaison, and other French breeds. From there, he was to head through Haynau (Chojnów), Bunzlau (Boleslawiec), Görlitz, and on reaching Saxony via Bautzen to Dresden, again with the aim of studying the royal flock of the said kingdom. Of the region's much-praised sheep farms, particular energy was to be dedicated to those belonging to Prince Reuss zu Köstritz in Rochsburg and Klipphausen, with an additional side trip made to Pirna. Dresden, via contacts at its bank noted above, held out the promise of additional letters of introduction, which Gerics would need to build ties with local wool merchants. From the Saxon capital, the route took him to Leipzig, then through Halle to Köthen, with additional stops in Nienburg, Hoym and Dessau.

One not unimportant aspect of this section of the instructions was their mention of a total of eighteen letters of introduction, written by a high-ranking officer of the prince's government and provided for Gerics by László Festetics. These obtained, the *Georgicon* professor was to proceed to Zerbst and Potsdam, of interest for their use of a trellised vine-training system, from there to Paretz in Brandenburg, home to an outstanding flock of ovine breeding stock, and finally, to the Prussian capital of Berlin. Once there, he was to inquire as to the whereabouts of Albrecht Thaer, as well as to seek the acquaintance of chemistry professor Sigismund Friedrich, and, introductory letters in hand, to visit every other important institution and point of interest in the vicinity. This accomplished, he was to visit Thaer's school in Möglin, where he was to develop as broad an understanding of systems of cultivation, animal breeding,

and the theoretical side of professional training as possible, all the while striving to cultivate satisfactory relationships with the institution's instructors. Here too the acquisition of models represented a matter of great importance. Upon leaving the institution, he was to return to Berlin in order to study the administrative and agronomic strategies of the Royal Chamber estates at Königshorst and then travel north through Mecklenburg to assess horse breeding activity. It is worth mentioning that at this point, according to his instructions, he was to seek contacts based on letters of introduction supplied by another *Georgicon* professor, János Roykó. Additional major destinations on his route included Friedland, Anklam, Greifswald, and, naturally, the famed studfarm owned by Baron Albrecht Joachim von Maltzahn in Ivenack. While in Mecklenburg, he was expected to pay due attention to the intensive use of organic fertilisers characteristic of provincial cultivation systems, then laying a course for Hamburg, the Kingdom of Hanover, Hoya, and the thriving peasant farms along the banks of the Weser, with particular reference to those known for horse breeding. The instructions concluded with injunctions to visit the royal stables in Neuhaus and the brewery in Calenberg. These were, in fact, the last of a succession of detailed itinerary points with specific place names attached, likely because the letters of introduction provided for him at the outset of the venture extended no further than this region, and the count or *Directio* could be expected to send further route items once additional letters had been obtained.

The appended notes, however, cite numerous additional locations—estate seats and towns with universities or special industries—identifiable as having been located in the Low Countries or German principalities. These show the professor's route taking him through Nordheim, Göttingen, Kassel, Münden, Giessen, Frankfurt am Main, Limburg, Schaumburg, Nassau, Koblenz, Cologne, Eschweiler, Lüttich (Liége), Brussels, Antwerp, Breda, Dordrecht, Rotterdam, Delft, Haarlem, Amsterdam, Utrecht, Hertogenbusch, and back to Brussels, to give just a partial list. From Brussels, he was to have made a side trip to Ghent,

afterward heading in the direction of Ostend or Calais for the ultimate destination of Ypres. Thus, it can be seen that the instructions offered no precise guidance as to how travels were to be conducted upon reaching the other side of the Channel, his route there evidently having been decided at a later date based on information obtained in the interim and, naturally, contacts established and letters received along the way. The same applied to the period following his return from the British Isles, when he fulfilled the portion of his mission—discussed previously—that included stops in both Paris, and the Royal Veterinary Institute in Alfort, before turning toward Switzerland.

By comparison, Lehrmann's instructions and attached itinerary were signed by Count László Festetics several months later, on 25 July 1820. The introduction to the latter document offered a similar mission statement to that which Gerics received, with the difference that Lehrmann's travels were to be conducted with a view to taking up, upon his return home, the positions of estate gardener and head vine dresser.[191] They differed, however, in that, despite consisting of twenty-six sections and ten subsections, they did not offer any introductory discussion of conceptual or theoretical topics as Gerics's had, but turned immediately to practical concerns related to particular items on the agenda. Lehrmann's route was to parallel Gerics's in part, crossing Silesia, Saxony, and the Prussian territories, while touring parks, show gardens, orchards, nurseries, and—upon leaving the territories around Hanover—a number of famed wineries. Lehrmann's reports, like Gerics's, were to be written and submitted according to fixed rules. He was also to specifically leverage his experience with the sale of Hungarian wines, in particular in assessing any opportunity of export to Silesia, a task comparable to the market survey element of the instructions provided to Gerics.[192]

[191] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 6. Lehrmann József jelentései külföldi útjáról 1819–1825 [Reports by József Lehrmann on His Travels Abroad] fols. 8–13

[192] Ibid. fol. 8v.

An additional difference, however, was that his first summary report to Keszthely was to be drafted from a specific location, Haarlem. Furthermore, it is important to note that his reports, journal, etc. were to be written not in Hungarian, but in German,[193] although like Gerics, he was obliged to hone his skills in foreign languages and, upon reaching Haarlem, to hire instructors in English and French. There were also differences in remuneration and funding: his stipend was to be 60 silver forints per month, and he was given one-time payments of 40 silver forints for expenses, and 100 *váltó* forints (Austrian bank notes with a variable exchange rate against silver forint) for models, books, maps, etc.[194] It can in no way be said, however, that Lehrmann was underfunded for the venture, as he was entitled to receive larger sums for prolonged stays in larger cities: 200 silver forints for his stops in Berlin and Frankfurt am Main and 300 silver forints for his sojourn in Amsterdam. Importantly, while the two *Georgicon* professors' paths were, understandably, not plotted so as to coincide, at the points where they did intersect, i.e. in Berlin, the Low Countries, and England, Lehrmann was at least required to consult with Gerics[195]

Another aspect of Lehrmann's instructions that differed from those of his colleague related to the region-specific nature of the viticultural and oenological practices to be studied. Thus, Section 4 expressly sent the young Hungarian to the regions of the Rhine, Main, Mosel, and Neckar Rivers to study the processes involved in the making, storage, and treatment of Bodenheimer, Laubenheimer, Niernsteiner, Markebrunner, Hochheimer, Rüderheimer, Johannisberger, and Steinwein wines, along with any seasonal care, pruning, or propagation

[193] Lehrmann wrote flawlessly in Hungarian as well. See his letter to the *Directio*, dated 22 April 1826. MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 149. d. T. II. (no folio or enumeration)
[194] For more on matters of finance in contemporary Hungary, see: Gyula Vargha: *Magyarország pénzintézetei. Visszapillantás hitelviszonyaink fejlődésére és a hazai pénzintézetek négy évtized alatti működésére* [Financial Institutions in Hungary: A Look Back at Developments in Credit Relations and Four Decades of Operation of Domestic Financial Institutions.], Budapest, Pesti Könyvnyomda, 1885. For additional details, see Kurucz: Adminisztráció, gazdálkodás, adósságkezelés [Administration, Farming, Debt Management], 563–564.
[195] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 6. Lehrmann József jelentései külföldi útjáról 1819–1825 [Reports byJózsef Lehrmann on his Travels Abroad 1819–1825] fol. 11v

techniques he might encounter. Naturally, he was to pay heightened attention to the matter of soil conditions and to observe the orientations of the vineyards and equipment used in maintaining them. In his reports to the *Directio*, he was to respond in each instance to five specific questions: what seasonal work he had studied during a given month; what grape varieties he had seen; what viticultural cultures he had encountered; what specialist literature he had read; and, finally, any other information he deemed worthy of mention. He was also to maintain continuous contact with the *Directio* concerning the acquisition of associated equipment models, propagants, seeds, and books. Here, too, the expectations regarding discretionary spending and injunction to procure as many letters of introduction as possible are both present in Lehrmann's version of the document, as is the instruction to contact only a specific bank. It bears mention that the institution in question, Bethmann's Bank in Frankfurt, is only named in a section added after Lehrmann's instructions had been finalised.

If not in the excruciating detail seen with Gerics, the second *Georgicon* professor's instructions did, however, include brief directives as to what in particular merited closer scrutiny upon reaching certain places. At his first major stop, for example, he was to study the castle gardens of Prince Johann von Liechtenstein in Eisgrub (present-day Lednice, Czech Republic)[196] After this, he was to visit the princely gardens at Potsdam, Wörlitz, Pilnitz and Dessau. In Berlin, he was to direct his sincerest attention to the distinctive nature of Charlottenburg Park and then do the same at the princely parks of Weimar and Kassel, additionally cataloguing all special or unusual plants. Beyond touring the wine-producing regions mentioned above, he was expected to come into social contact with certain individuals, e.g. members of the Manskopf Sarasin trade and banking dynasty in Frankfurt. He was then to visit Darmstadt and Aschaffenburg, to study the botanical garden at Schwetzingen, and to inspect

[196] For a comprehensive survey of the Liechtenstein legacy using contemporary engravings as illustrations, see Dieter Friedl – Daniel Lyčka: *Unbekannte Bauwerke im Eisgrub-Feldsberg Areal,* Feldsberg, [n. p.] 2013.

certain well-known vegetable gardens in Karlsruhe.[197] In Neuss, he was to make the acquaintance of the acclaimed nobleman-botanist of the age, Prince Joseph von Salm-Reifferscheidt-Dyck and leverage his authority toward the acquisition of additional letters of recommendation. From there, he was to turn to the Low Countries, focusing his attentions upon the region's gardeners and the manner in which its very profitable alcoholic spirits were made. While wintering in Haarlem, he was to take an intensive course in English, then, passing through Leiden, Brussels, and Aachen, return to the vicinity of Frankfurt am Main for an examination of springtime viticultural labours. As with Gerics's instructions, this portion of the document ended without any discussion of further destinations or points of interest. The attached itinerary—sans locations visited twice—includes 61 items, exactly one-third the number laid out for Gerics.

The breadth and depth of the two sets of instructions raises the question: given their education and experience upon their departure, were Gerics and Lehrmann, in fact, sufficiently prepared to execute the tasks that had been set for them? According to the *Testimonium Scholasticum* issued by Keszthely's Premonstratensian Lyceum, Gerics was born in Kéthely, son of a non-noble farmer Jakab Gerics and his wife, Borbála Nagy, on 18 January 1792.[198] He had originally been prepared for the priesthood and, in fact, was a "freshman deacon" when he offered his services to György Festetics in 1811.[199] Although his name does not feature on the count's list of scholarship recipients, he did study at the University of Pest, Faculty of Medicine, between 1813 and 1818, prior to his engagement as a professor of physics and veterinary medicine at the *Georgicon*.[200] In an account written after his return, he noted that the count had

[197] For an analysis of drawings Lehrmann made in Karlsruhe, see Alföldy: *A keszthelyi Festetics-kastély parkja* [The Gardens of the Festetics Palace in Keszthely], Vol. 3, Illustration A155b

[198] MNL OL Festetics Lt, Georgicon alapításával kapcsolatos iratok [Documents Relating to the Founding of the Georgicon], P 283 10. d. (no folio or enumeration)

[199] Süle*: A keszthelyi Georgikon* [The Georgicon in Keszthely], 44.

[200] Semmelweis Egyetem Levéltára [Archive of Semmelweis University], Liber Classificationes 20/1/d Vols. 3-4. I would like to extend my thanks to archivist László Molnár for the information he has provided. MNL OL Festetics Lt, Georgicon alapításával kapcsolatos iratok [Documents Relating to the Founding of the Georgicon], P 283. 4. d. B2 No. 7

"deigned to place me in the seat of *Georgicon* Professor of Veterinary Medicine, given that in my career as a physician, I had paid particular attention to that subject, though I am greatly wanting in my ability to properly discharge the office"[201] However, beyond the medical training upon which he would build a working knowledge of veterinary practice while on tour, Gerics also possessed qualifications relevant to his instructions in other respects. In 1820, his name was entered into the registry of the Vienna Polytechnisches Institut—later the Technical University of Vienna—as one who had already completed his studies in medicine. The date given indicates the calendar year following that in which his studies commenced, as his report from 5 December 1819 already provides the *Directio* with an account of his experiences there.[202] The institute, which first opened its doors in 1818, offered studies in trade, engineering, crop farming, water management, and technology.[203] Further, in addition to his mother tongue of Hungarian, Gerics was proficient in Latin, German and French. (It will of course be remembered that he would further be required to study English during his tour in Germany and the Netherlands.)

Lehrmann was born in Keszthely on 3 May 1791.[204] In 1807, following his studies at the Premonstratensian Lyceum, he entered the *Georgicon*, which had recently added a horticulture school based on designs by János Asbóth. In January of 1812, he was sent by György Festetics to Vienna, where he remained until the end of the year with the aim of expanding his knowledge at various Viennese nurseries under the supervision of former *Georgicon* student Károly

[201] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/1 fol. 4

[202] László Szögi: *Magyarországi diákok a Habsburg Birodalom egyetemein. I. köt. 1790-1850* [Hungarian Students at the Universities of the Habsburg Empire. Vol. I. 1790-1850], Budapest–Szeged, ELTE Levéltár és Könyvtár, 1994, 152. MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 15

[203] ÖStA AVA Studien-Hofkommission Kart. 318 6/1

[204] Keszthelyi r. k. plébánia anyakönyve [Registry of Births, Deaths, and Marriages in the Roman Catholic Parish of Keszthely]. I would like to express my gratitude to Géza Cséby for his kind assistance in providing this information.

Fleckel.[205] A series of 1816 holiday reports on the Helicon literary celebrations make mention of him as the individual who had entertained guests with flute playing.[206] During the Dutch segment of his Western European tour, Lehrmann was required to improve his proficiency in French, while also taking lessons in English.

As regards their education, language skills, as well as contemporary social expectations, it may be ventured that both men would have seemed appropriate choices for the tasks set forth in László Festetics's travel instructions. The elements these instructions comprised—the itineraries, the individuals to be contacted, the set regimen of observation, the obligation to record everything in a systematic, scheduled fashion, the attention to considerations of adaptation, the view to later communication of information by developing a personal network and, not insignificantly, the injunction to procure appropriate books, equipment models, samples, seeds and propagants using the funds provided for the purpose and skills they are known to have possessed—all suggest that Count László Festetics sent these *Georgicon* professors on their way in a manner reflecting great conceptual forethought, attention to technical detail, and a keen view to future utility. In and of themselves, the pair of documents in question mark the count and his *Directio* proceeding as coherently as possible in the spirit of the intellectual legacy of György Festetics, which venture they supported through the deliberate collection of professional literature and the establishment of a network between the *Georgicon* and Western European centres of knowledge.

Chapter 4

[205] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 6. Lehrmann József jelentései 1819–1825 [Reports by József Lehrmann on His Travels Abroad 1819–1825] fols. 42–42v
[206] Süle: *A keszthelyi Georgikon* [The Georgicon in Keszthely], 211.

Networking in Germany and the Netherlands

Dated 20 March 1820, the first report written by Gerics following his departure from Vienna was sent to the *Directio* from Brünn (present-day Brno, Czech Republic), a city in Moravia known both for its textile industry, and its scientific societies. Nine days later, he posted another to László Festetics from the city of Troppau (present-day Opava, Czech Republic).[207] Lehrmann, who departed in July, sent his reports—both major summaries to the *Directio* and briefer missives to the count—in a similar fashion. In some cases, their exhaustive travel instructions may have proved somewhat restrictive, as when Gerics reported to Festetics in conjunction with his experiences in Silesia that he would have liked "to pursue an outing to the iron foundry in Gleiwitz (present-day Gliwica, Poland)" but did not "dare to depart so radically from the set course," given that he was to arrive in Saxony in time to study the seasonal sheep-shearing and wool sale processes.[208]

The account above is important in that it demonstrates how closely—in terms of production, engineering, technological, and veterinary information—the detail represented by the letters the two men sent directly to their patron corresponded to that of their formal reports to the *Directio*. In other words, it did not occur to either man that Festetics might not have the specialist judgment necessary to correctly evaluate the information gathered in each location they visited. Moreover, a linear reconstruction of the entire study trip based on their letters to the count, whether via names mentioned or letters of introduction procured, allows a perfect understanding of how the resulting network was developed.

[207] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administratioin], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 37, 384–385

[208] Ibid., fol. 386v

As already noted, the first major stop on both men's routes was Brünn. In rewriting his journal years later, Gerics would record his arrival there as follows:

> "In Brünn, we first sought out Mr. André, editor of the periodical *Oeconomische Neuigkeiten und Verhandlungen*.[209] The venerable gentleman received us warmly, displaying for us his collections of minerals and wools, and, following an instructive discussion of agronomics, furnished us with recommendations as to which local points of interest we might inspect, with a promise of later providing similar consultations relevant to the remainder of my journey".[210]

The meeting is of interest, for one thing, because György Festetics, father to László and founder of the Georgicon, had ordered André's Moravian periodical for his Keszthely library at its inception, and because his heir also considered it important that the *Georgicon* professor both meet André personally, and solicit from him letters of introduction pertinent to later destinations. Moreover, the younger Festetics's uncle—that is, György Festetics's younger brother, Count Imre Festetics—had first published his writings on genetics in the periodical under André's editorship.[211]

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[209] Christian Karl André (1763–1831), German specialist writer, periodical editor, and secretary of the Moravian Agricultural Society.

[210] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/1 fol. 8v

[211] Attila Szabó T.: Valók gráditsonkénti lépegetése (1818) és a Természet genetikai törvényei (1819) [Realities Progressing Step by Step (1818) and Laws of Natural Genetics (1819)], *Kaleidoscope* 1 (2010) 227–259. (www.kaleidoscopehistory.hu/index.php last downloaded on 18 April 2018) P. Poczai, – N. Bell, – J. Hyvönen: Imre Festetics and the Sheep Breeders' Society of Moravia: Mendel's Forgotten "Research Network". *PLoS Biol* 12 (2014) (1): e1001772. https://doi.org/10.1371/journal.pbio.1001772 (last downloaded 10 September 2023) For a comprehensive analysis of Brünn's role as a regional centre of knowledge within the Habsburg Monarchy as well as of André's ties to contemporary Hungarian intellectuals, see: Gábor Alföldy: Egy elfelejtett nemzedék? Magyarországi értelmiségiek a közép-európai tudáshálózatokban a 19. század első harmadában: külföldi egyesületek és folyóiratok mint a tudományos diskurzus médiuma i [A Forgotten Generation? Hungarian Intellectuals in Central-European Networks of Knowledge in the First Three Decades of the 19 th Century: Foreign Societies and Journal sas Media of Scientific Discourse], in J. Forrai – L. Krász (eds.): *Élet – Tudomány – Történelem. Tanulmányok az MTA Élettudományok-története Munkabizottság tevékenységéből, 2016–2023* [Life – Science – History. Studies from the Activities of the History of Life Sciences Working Group, 2016–2023], Budapest, Létra alapítvány és Kaleidoscope Kiadó, 2023, 17–53., see especially 30–35.

Still, in his letter sent directly to the count on the basis of his promptly recorded first impressions, Gerics voiced a touch of disappointment. Although—a pair of introductory letters in hand—he was welcomed without further ado by the owners of the local wool mills, when he returned to André the next day and found him "busily writing introductions to 14 persons", it became apparent that they were all "out of obligation, such as might just as easily have been sent by post, and furthermore—with one exception—they were to individuals located at some distance from my planned route".[212]

Of the letters Gerics deemed usable, one was addressed to a man of no lesser stature than Friedrich Benedict Weber, professor at the university in Breslau (present-day Wroclaw, Poland) and author of numerous comprehensive books on agronomics.[213] Among other things, Weber was recognised for having brought English crop farming methods to Germany and, in doing so, adapting them to better suit local circumstances.[214] Another letter sought to gain him audience with Baroness Friederike von Riedesel, daughter of a famed military dynasty and wife of Prussian minister Count Friedrich Wilhelm von Reden, whom Gerics was eventually to call upon at her estate in Buchwald (present-day Bukowiec, Poland). Years later, in his redacted journal, he would recall that the Countess had been

> "in correspondence with Mr. André regarding farming affairs, who even in the letter of presentation I bore offered a response regarding polyarthritis in lambs, to which end she interrogated me, as well. But my experience at the time was yet insufficient to provide her with an adequate account. Now,

[212] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819-1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 384

[213] Friedrich Benedict Weber: *Systematisches Handbuch der deutschen Landwirthschaft zum Unterricht für wissenschaftlich gebildete Leser,* 2 vols., Züllichau-Freystadt-Leipzig, Darnmann, 1804; Idem: *Bemerkungen und Notizen über die verschiedenen Gegenstände der Landwirtschaft*, Leipzig, Barth, 1815.

[214] Idem: *Theoretisch-praktisches Handbuch der Feldwirthschaft, mit besonderer Hinsicht auf die Anwendung der englischen Wirthschaftsarten auf die deutschen,* 2 vols., Leipzig, Fleischer und Weygand, 1807.

perhaps, even Mr. André could answer satisfactorily were he still alive, as could I, were I asked".[215]

Leaving Brünn, Gerics proceeded through Sternberg (present-day Šternberk) to Troppau (present-day Opava), where he was to visit his first estate model farm, meeting both with officers and, if possible, the landowner himself. Upon arrival, he was received by Johann Franz Hilvety, whose acquaintance he had made previously in Vienna. As inspector for Prince Eduard von Lichnowsky, Hilvety proved an important source of references, as he was prepared to "provide many letters of introduction" and, for the most part, was "personally known and liked everywhere".[216] This included both Möglin, where he was to meet Albrecht Thaer, and Panten, where Thaer's son Georg headed a royal sheep breeding farm. It is important to mention at this point that over the course of his travels in Bohemia, Gerics was received everywhere in the warmest possible manner, as exemplified by his visit to the estate of Count Eugen Dominik Vrbna in Groβherlitz (present-day Velké Heraltice, Czech Republic), where he was immediately impressed upon to take dinner with his host's other prestigious guests.[217]

Continuing as instructed, Gerics next visited the animal farms of Prince Lichnowsky in Krischanowitz (present-day Krzanowice, Poland), Leobschütz (present-day Głubczyce, Poland), and Lichtenberg (present-day Kolnica, Poland), followed by two smaller municipalities—Pruskau (present-day Pastuchów, Poland) and Ruderswald (present-day Rudiszwald, Poland)—where he sought to acquaint himself with regional crop production methods. From

[215] OSZK Kézirattár Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/1 fol. 57; As seen above, André's periodical published several articles written by Hungarian authors, or by landowners who settled in Hungary, among others, the writings of Bernard Petri, a prominent sheep farmer of the age. Alföldy: Egy elfelejtett nemzedék? [A Forgotten Generation?], 34–35.

[216] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 384v

[217] Ibid., fol. 387; OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/1 fol. 18v

there, his route took him to the Silesian estates of Count Heinrich von Larisch-Moennich, specifically the farms at Pless (present-day Pszczyna, Poland) and Deutschleuthen (present-day Lutynia, Poland). With regard to the latter municipality, though a missive addressed to Festetics indicated that the letter of introduction furnished by inspector György Palleta had been of use to him, it speaks for itself that, on his courtesy call to the Silesian Prussian nobleman's mother in Freystadt (present-day Kożuchów, Poland), the countess, without hesitation, had his luggage brought from the inn, then, having arranged for him to lodge at the castle, "compelled [him] to take supper with her."[218] It is also noteworthy here that Carl Friedrich Pusch, the inspector at Pless (present-day Pszczyna, Poland), supplied Gerics with additional introductory letters, one of them in reference to the village of Rohnstock (present-day Roztoka, Poland). In his report of 16 April 1820, the *Georgicon* professor, in emphasis of the usefulness of study tours, made certain to describe Pusch to his patron as "a man of appreciable experience who has spent five years abroad and—as Your Excellency has deigned to have me pass time at Fellenberg—was also a student at Hofwyl". Pless, as it turns out, proved memorable to Gerics because, as his letter to the count reveals, the gardener there, hearing he had come from Hungary, promptly addressed the traveller in Hungarian.[219] The next station on his journey was Eckersdorf (present-day Bożków, Poland), where the *Georgicon* professor gained admittance to Count Anton von Magnis's estate via a "letter brought from home", supplied by one of the landowning family's friends in Vienna. In his post-tour redacted journal, Gerics would remark: the "old count, who had pursued farming his fields both with great passion, and, in the most certain of terms, with all the success he desired, was by then but a memory", while "the young people [his sons] were [at that moment] spending time in the capital". Still, ultimately, he was not disappointed, as the widow countess

[218] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 386v
[219] Ibid., fol. 387

received him warmly, directing an inspector by the name of Studer to show her Hungarian guest anything he might find of interest. Significantly, Gerics deduced, based on his guide's Swiss German dialect, that he, too, had studied at Fellenberg, a circumstance that again points to the salient role played by personal contacts in the circulation of knowledge and occupational skills at this juncture in history. "I did not have to ask him where he had been born. His entire bearing, language, and manner of speech instantly proclaimed him a man of Helvetia, and just like the blessed count, so he too had been a student at Fellenberg's school".[220] It was immediately after this that Gerics visited Buchwald (present-day Bukowiec), where the Countess von Reden mentioned above received him, as previously noted, with distinction and attentiveness to his mission.

Although it may seem at this point that the itinerary and appended list of contact persons gave Gerics everything he needed for the tour to progress seamlessly, and although his reports to neither the *Directio*, nor Festetics reveal anything more calamitous than the fact that his reception at the Hochbergs' estate was "cold", years later, in his revised, annotated journal, the professor would reveal that his referral from the Prince of Anhalt-Köthen had done little to help him in this case. Further, in the person of Director Ernst Opitz in Fürstenstein (present-day Książ, Poland), he had found in fact

> "not a host, but a gamesome lad (...). The first thing he offered me was cards, but, as I was loathe to accept, he suggested billiards and punch at the inn; the gesture notwithstanding, it soon became apparent that his

[220] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/1 fol. 49. For information on enhancements to the Hofwyl crop planting system and Studer's improvements, see: Friedrich Benedict Weber: *Bemerkungen und Notizen über die verschiedenen Gegenstände der Landwirtschaft*, Leipzig, Barth, 1815, 63.

purpose was merely to win and thus provision himself out of my pocket".[221]

His meeting with Countess von Reden, however, was more successful, and resulted in referrals pertinent to additional Prussian noble families, including to Prince Heinrich von Reuss zu Köstritz in Kliphausen; the model farm owned by Count Peter Friedrich von Itzenplitz in Kunersdorf (present-day Kunowice, Poland); and—yet again—to Albrecht Thaer, this time in Neuhof, near Eisenach. In his May report to Festetics, Gerics offered further clarification on the itinerary generally outlined in his patron's formal instruction. At this point, his plan was to proceed through Kupferberg (present-day Miedianka, Poland), Rohnstock (present-day Roztoka, Poland), and Barzdorf (present-day Bartoscóvek, Poland) to Jauer (present-day Jawor) and the farm held by Baron von Richthofen. There, as he would recall later, the Prussian nobleman—who had also made a name for himself as a specialist writer—was greatly accommodating, discussing at length topics that included the crop rotation systems on his various farms, comparative soil conditions, and diseases of the feet in sheep.[222]

It was at this point that Gerics proceeded to further locations in present-day Poland, visiting Panten (present-day Pątnów Legnicki), where he met Georg Thaer, son of Albrecht Thaer and director of the Prussian king's own core flock of sheep. Thaer was "stiff at first, although later turned affable enough". As regards his visit, the *Georgicon* professor found it worth remarking that the sheep bred there, originally brought from France, suffered from contagious ovine foot rot,[223] and that while the disease had, over time, been successfully

[221] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/1 fol. 52. Frederick Ferdinand (1769–1830), Duke of Anhalt-Köthen, a soldier in the Prussian army, inherited the principality following the death of his minor cousin in 1818.

[222] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics from his Travels Abroad 1819–1825] fol. 387v; OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/1 fol. 59

[223] *Dichelobacter nodosus* – its most striking clinical symptom is limping.

eradicated, other breeders still hesitated to purchase the farm's ewes. Leaving Panten (present-day Pątnów Legnicki), Gerics then headed for Schierau (present-day Strupice) hoping to meet a renowned breeder, Albrecht Block, known for having cured Thaer's sheep of the foot rot noted above. It bears mentioning that though the instructions offered no guidance on this point, Gerics nevertheless added Liegnitz (present-day Legnica) to his list of destinations, specifically for the purpose of probing the foot rot issue in greater depth. His efforts resulted in a meeting with the epidemiologist Johann Joseph Kausch, a graduate of the university in Halle, who maintained an expansive network of correspondence and had published numerous theses on the matter.[224]

Interestingly, it was at this point on the itinerary that Gerics should have met József Lehrmann in Gröditzberg (present-day Grodziec, Poland), but when he arrived at the agreed upon location, he found his compatriot's trail "already cold".[225] Like Gerics, Lehrmann had also travelled through Brünn (present-day Brno, Czech Republic) and Troppau (present-day Opava, Czech Republic) toward Breslau (present-day Wroclaw, Poland), where he had made the acquaintance of Prof. Ludolf Christian Treviranus and was granted permission to collect seeds from the university's botanical garden. Treviranus had even acceded to Lehrmann's request to contact Festetics by mail and to send a copy of the catalogue for the botanical garden to Keszthely, among other things. An important detail in this regard is that Lehrman had also been aided from the outset by letters received from André and, as a result, had been able to leverage a side trip to consult with a pomologist by the name of Schrack from Littau (present-day Litovel, Czech Republic), thus enriching his knowledge of fruit

[224] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/1 fols. 60v–61

[225] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 388v

production.[226] Letters from Hilvety in hand, he then moved on through Prussian locations that now lie in Poland, of which the area around Breslau (Wroclaw,) proved most memorable, among other things, for its tobacco production and bumper crops of industrial *Linum rigaense*. Passing afterward through Polkwitz (Polkowice), Neustädtl (Nowe Miasteczko), Neusalz (Nowa Sol,) and Wartenberg (Syców), Lehrmann then headed in the direction of Grünberg (Zielona Góra), gathering on the way what knowledge he could of sandy soil viticulture and making note of the details of production of red and white Traminer and Zierfandler grapes, two of the region's dominant varieties.[227]

Gerics, for his part, moved on to Saxon territory, procuring from former Leipzig law student Christian August von Stölzer, now farming near Görlitz in Niederholtendorf, letters of introduction addressed to the inspector under Count Heinrich von Einsiedel in Reibersdorf. The destination proved interesting as it gave him the opportunity to study the pre-shearing event by which sheep were made to swim through a pond as a means of removing impurities from their wool.[228] The next two stops of significance on the itinerary were Leipzig and Dresden, where, unfortunately, the institutions of veterinary medicine he visited proved a disappointment: in Leipzig "I gained even less by way of veterinary experience than I did in Dresden". Only one individual, Prof. Johann Christian Ribbe, earned a nod of respect in the professor's estimation—"holding lessons there was a truly worthy practising agriculturist and veterinarian known for his valuable work"—although his journal did make reference to philosopher Wilhelm Traugott, physicist Ludwig Gilbert, physician Johann Christian Clarus, obstetrician Johann Christian Jörg, veterinarian Johann Josef Lux, and historian/statistician Karl Heinrich Pölitz, all of whose lectures he attended, as

[226] See the region's survey in the Moravian press: [Anon.]: Zustand und Fortschritte der Obstbaumzucht in Mähren und Schlesien, *Mittheilungen der k. k. Mährisch–Schlesischen Gesellschaft zur Beförderung des Ackerbaues, der Natur- und Landeskunde in Brünn*, 17 (1821), 129–134.

[227] MNL OL P 279 Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], 130. d. T. III. fols. 83–84

[228] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 389

men laudable for their "value to humanity". By contrast, his encounter with the physician Samuel Hahnemann, the famed father of homeopathy, was a clear disappointment. "His scholarly speech bored me", and he spoke of all other doctors of the age in condescending terms.[229] There can be no doubt, however, that, in accordance with the objective of the tour, such useful knowledge and experience as Gerics gained in the two Saxon cities had primarily to do with the wool trade. In discussing his contacts in Leipzig, he noted having conversed on multiple occasions not only with central Italian merchant/banker Franz Joseph Grassi, but also with Maximilan Speck, whose trade network extended from Vienna to London, as well as with wool merchant Heinrich Wilhelm Campe. Other important experiences included a visit to the Freiberg mining academy (Königlich-Sächsische Bergakademie zu Freiberg), the study of various technological processes with Prof. Wilhelm August Lampadius, and the opportunity to converse with mining superintendent Alexander Wilhelm Köhler, member of the Leipzig Economic Society and keeper of its minerology collection.[230]

In a letter to his patron dated 5 July 1820, Gerics reported having participated in an Economic Society meeting and met unnamed book dealers and then communicated his intention of proceeding in the direction of Halle. According to a report to Festetics written from the university town, he was received there by professor of medicine Ludwig Hermann Friedländer, physician and botanist Kurt Sprengel, mineralogist and entomologist Ernst Friedrich Germar, and physician and natural scientist Christian Ludwig Nitsch.[231]

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[229] At this time, Gerics acquired the following of Ribbe's book: Johann Christian Ribbe: *Über die Aufblähungskrankheiten der wiederkäuenden Haus- und Nutzthiere und deren Heilung*, Leipzig, Baumgärtner, 1819. MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on his Travels Abroad 1819–1825] fols. 93, 391; OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/1 fols. 140–142

[230] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/1 fol. 84v

[231] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 392–392v; OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/2 fols. 4–5

Naturally, Halle also proved of interest as home to a foundation by August Hermann Francke, which was an institution dedicated to the education of the poor. In particular, he noted that operation of the local secondary school, the "Lateinschule", was integrally related to that of the university, as "the youths attending the university—some 150 of them—are employed at various institutions as instructors, that they might practice teaching under supervision".[232] In his report to the *Directio*, he further remarked on having procured books with information on Holstein, Hamburg, Hanover, Kassel, and Wilhelmshöhe, cities and places of interest relevant to later stretches of his journey.[233]

Gerics found the visit to Köthen somewhat less profitable, establishing with some ire that the sheep breeding facilities on the cameral estate, at the time leased out for a period of six years, were "not the best", as nothing was done there to prevent the spread of infectious diseases. Upon departure, he made for Dessau and the "noted garden and farm" at Wörlitz, of which he would later opine: "it is perhaps no transgression to say that, while as a Landschaftsgarten, it is, in its own right, without parallel, its flora is poor. Of its farm, only the buildings were memorable". Next the Hungarian made his way through Zerbst to Potsdam, where he collected little in terms of agronomic knowledge, though he did record with some satisfaction a visit to Paretz, the summer residence of the Prussian king, where, bearing a letter of introduction from Count Siegmund von Zedtwitz, he was warmly welcomed. What struck him in this instance were the quality of the flock, which produced the very finest of wool, and the use of crop rotation, in contrast to the three-field system that dominated elsewhere in the area.[234] Gerics also conducted a foray to Pillnitz, where he found the garden and greenhouses noteworthy but did not list the varieties of plants he saw there

[232] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/2 fol. 8
[233] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 102v
[234] Ibid., fol. 393.

in any great detail. After this, he passed through Lohmen, where, despite letters of presentation, Count Carl Wilhelm von Hohenthal did not prove a particularly hospitable host. In Pirna, on the other hand, he was compensated well enough in the form of profitable visits to both a sheep farm, and a lime-burning facility. From Potsdam, his route then took him directly to Berlin, where he was awaited by Lehrmann, who had reached the Prussian capital ahead of him by way of Thuringia and Frankfurt an der Oder.[235]

For both men, Berlin was in every way a positive experience. According to the report submitted by Lehrmann, the letter they had brought from Prof. Treviranus of Breslau elicited warm welcomes from both Johann Heinrich Friedrich Link—chemist, botanist, professor, and director of the city's botanical gardens—and Christoph Friedrich Otto, editor and publisher of the *Allgemeine Gartenzeitung*. The latter man, as Lehrmann was not remiss in noting, was at the time the subject of preparations on the part of the Prussian government for a circuit of London and Paris, the hope being to procure further botanical specimens for the gardens, whose grounds were based on a Linnaean system.[236] While in the city, the two Hungarians had the opportunity to participate in a joint tour of Charlottenburg Park under the personal guidance of Royal Chief Gardener Georg Steiner. In his redacted journal, Gerics would later remark on the rather inauspicious natural circumstances under which the gardens had been constructed:

> "The park is quite lovely, everything within it growing in abundance—especially the rhododendrons, which one finds in prodigious quantities in the damper areas. Its ornaments, however, are all taken from the gardens established according to English taste, as the entire region, with the

[235] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 228v–229; MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 130. d. T. III. fol. 86v

[236] MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 130. d. T. III. fol. 83

exception of the banks of the Spree, is barren sand, upon which things grow only sparsely. Found in rather more places than vegetation is an array of sand dunes, blown hither and thither by the wind".[237]

The opportunity of touring the city's scientific institutions and meeting its eminent scholars did much to expand both the men's intellectual horizons and, indirectly, the personal network that had been one of their sponsor's chief objectives. As regards the university in Berlin, Gerics would recall the school of medicine as the best-equipped, offering "not only a staff composed of illustrious individuals whose names are spoken with the utmost respect throughout the cultured world, but also rich and varied collections". The first among those mentioned in relation to the latter observation was the anatomist Johann Gottlieb Walter, member of both the Prussian Academy of Sciences, and the Royal Society, whose 3000-piece collection dating to as early as 1803 had been purchased by the Prussian government to serve as the core material for its Anatomisch-Zootomisches Museum. The Hungarian discussed several popular instructors in other fields, as well: "enjoying the greatest reputation among those concerned with the liberal arts was Hegel, whose lectures are most eagerly attended by the German youth. Böck also enjoys considerable fame as both an Orientalist, and instructor in the art of rhetoric". [238]

As a trained physician, however, he was not surprisingly "more keenly interested in Walter's museum and its preparations having to do with the nerves, blood vessels, and other conditions of health and infirmity". Here, Gerics additionally profited from a letter of introduction provided by Viennese physician, botanist, and university professor Joseph Franz Jacquin, by which he made the acquaintance of noted parasitologist Karl Asmund Rudolphi. At the

[237] Ibid., OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/2 fol. 46v

[238] The section cited pertains to the philologist August Boeckh (1785–1867). OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/2 fols. 3–4

same time, a letter penned by Prussian state councillor Count Peter Friedrich von Itzenplitz facilitated a personal meeting with Martin Lichtenstein, the physician and naturalist who had systematised and written about the natural science specimens brought back to the country from field trips to South America.[239]

Making a particularly deep impression on the Hungarian professor was the Charité, the city's "largest and most luxurious hospital", the treatment of whose more than 6000 patients fell under the supervision of three men: chief physician and surgeon Karl Georg Neumann, formerly in the employ of the Allgemeines Krankenhaus of Vienna; surgeon Johann Nepomuk Rust; and Karl Alexander Kluge who was responsible for "those with child and those without faculties of mind". Of Kluge, Gerics remarked that he had "become mixed up in a spate of foolishness" with Swiss-born Karl Christian Wolfart for the latter's use of methods of hypnosis developed by Swiss doctor Franz Anton Mesmer, "for which reason, given that Wolfart saw himself as an apostle of Mesmer, he refrained from the practice of mesmerism altogether".[240]

In his report to Festetics, Gerics recounted how he had been 'guided most accommodatingly through the entirety of the Berlin "Thierarzneischule" by one of its professors, Johann Dietrich Reckleben. Others mentioned in the same missive included the institute's director, Johann Georg Naumann, advocate for its "veterinärischen Reisen", a system of veterinary study tours linked to its courses; some of its better-known private tutors; Silesian-born pharmacist and pathologist Ernst Friedrich Gurlt; and veterinarian Georg Peter Halbach. The Hungarian was received equally courteously by pharmacist, chemist, and university professor Siegmund Friedrich Hermbstädt, whom his instructions

[239] Ibid.

[240] Ibid. For more on the significance to the age of the Charité see: Volker Hess: Formalisierte Beobachtung. Die Genese der modernen Krankenakte am Beispiel der Berliner und Pariser Medizin (1725–1830), *Medizinhistorisches Journal* 45 (2010), 293–340.; Idem: Die alte Charité, die moderne Irrenabteilung und die Klinik, 1790-1820, in J. Bleker – V. Hess (eds.): *Die Charité. Geschichte(n) eines Krankenhauses*, Berlin, Akademie Verlag, 2010, 41–66.

mentioned by name, and whose extraordinarily prolific career as a specialist writer encompassed topics and processes in inorganic chemistry, agrochemistry, and food science. In his journal, Gerics wrote of the man:

> "The cabinet of the renowned chemist Mr. Hermbstädt holds a highly varied collection of both natural specimens, and instruments of physics and chemistry. The lead from his electrical device is thicker than my waist and it is here that I first encountered selenium, which he himself regards as a great rarity".[241]

The *Georgicon* professor later found himself invited to a dinner at the home of wealthy Berlin banker Wilhelm Benecke (mentioned previously) on the occasion of the sovereign's birthday, a circumstance that suggests both a cultured manner, and a particular ease with German, French and Latin on Gerics's part. Counted among the guests were numerous government officials and state councillors, although Gerics indicated only one new acquaintance by name in his journal: Ernst Ludwig Heim, the doctor, naturalist, and practitioner of inoculation for smallpox who had once taught botany to an eight-year-old Alexander von Humboldt. At the end of the event, his host did not permit him to "depart in the company of the star-and-cross-bearing gentlemen, but showed me round his home and garden, which he had constructed only three years prior from the purchase and unification of 21 tenant's plots".[242] Although he found both the garden, arranged according to English tastes, and Gothic farm buildings pleasing, it was the illuminated city that made the deepest impression.

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[241] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/2 fol. 53v. Later too, Gerics would rely on many of the German scholar's published and republished writings. Sigismund Friedrich Hermbstädt: *Grundriß der Technologie, oder Anleitung zur rationellen Kenntniß und Beutheilung derjenigen Künste, Fabriken, Manufakturen und Handwerke, welche mit der Landwirtschaft, so wie der Kameral- und Policeywissenschaft in nächster Verbindung stehen*, Berlin, Maurer, 1814.

[242] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/2 fol. 55

It seems clear that Gerics was well-received by even the uppermost echelons of Berlin scientific society. In Pankow, for instance, he was an official guest at a luncheon hosted by Hermbstädt, where he made the acquaintances of invitees Major-General Karl Alexander von Treskow; Johann Elert Bode, astronomer and diviner of the orbit of Uranus; and a certain chemist/physician by the name of Rosenfeld.[243] By comparison, Lehrmann's "Reisejournal" reveals no such in-depth professional activity or expansion of personal scientific networks. Beyond his joint visit to Charlottenburg with Gerics and the people he met on that particular occasion, the latter man notes only his consultation with Johann Siegmund Kecht as yielding a contact fitting the description of an expert known for practical work or publication in gardening or viticulture. Of Berlin social life, moreover, his writings give no account whatsoever.[244]

Between 12 and 19 August 1820, Gerics finally found occasion to undertake his long-planned journey to the institute run by Albrecht Thaer in Möglin, where he would also visit several other model farms. The Hungarian detailed his meeting with Thaer in his report to Festetics, going so far as to copy the text of the letter of presentation he had received—signed not only by Thaer, but also by Profs. Heinrich Friedrich Körte and Johann Erich Störig—into the body of the report. Although his summary offered descriptions of the experimental farm practices observed, including cultivation and crop rotation systems, Gerics did not refrain from remarking negatively on the unfavourable natural environment, noting the difficulty in farming marshy areas in need of drainage, and even pointing out that "the reputation of the institution in the area of Berlin is substantial and favourable; further away, it is less consistent".[245] Later, in his annotated journal, he would speak in depth regarding the collections

[243] Ibid., fol. 59.

[244] MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 130. d. T. III. fol. 87–87v; Johann Siegmund Kecht: *Versuch einer durch Erfahrung erprobten Methode den Weinbau in Gärten und Weinbergen zu verbessern mit einer Anweisung den Wein ohne Presse zu keltern*, Berlin, Nauck, 1818.

[245] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on his Travels Abroad 1819–1825] fols. 395–395v

of the "Königliche Academie des Landbaues zu Mögelin", whose material on pedology he found most impressive.

> "The cabinet contains a collection consisting partly of herbaria pertinent to the natural history of domestic animals and to the science of flora, and partly of models of implements and structures related to chemistry, physics, and agronomy. Its assortment of model ploughs is the most numerous. In addition to the items named above, I would mention in particular the collection of analysed soils and its manner of systematisation: by the primary component of the soil and the colour thereof. Because the main constituent of the soil on the parcel here is sand, sandy soils occupy the foremost position, as is communicated from afar by the yellow of the paper on the bottle cover. The next grouping being soils containing carbonate of lime as their primary component, the bottles for these have a white slip of paper at the edges of their lids. Clay is then marked with red or blue labels, clay being itself reddish or bluish in colour".[246]

This system, Gerics additionally reported, had been designed by one Georg Ernst Crome, former student of the faculty of medicine at the University of Göttingen, later professor at the institute in Möglin and first husband of Thaer's daughter Karoline.

When comparing the professional training systems to those in place at Keszthely, the Hungarian found fundamental differences, primarily in the areas of time to course completion, tuition and scholarship availability.

> "Judging by the number of rooms, the number of students is not as high as ours, a conclusion that is also easily ascertained from the circumstance

[246] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/2 fol. 61

> that each is obliged to pay 400 thalers for lunch, dinner, and lodgings, and to furnish himself with breakfast and bed linens. Each student has his own room and sits at the table of the master of the house when eating. I am quite sorry that only one room was occupied during my stay here, that being my very own, as there are now the holidays and no lessons are to be held until September. As for teaching staff, there are only three, including old man Thaer, and as the students for the most part spend but a year here—the magnitude of the expense is reasonable, as there is no stipend or, as they say, *conditio*—teachers and students alike must be quite burdened".[247]

While in Brandenburg, Gerics visited both the cameral estate in Frankenfeld and, making use of a letter of introduction provided by Countess von Reden, the estate of Count Peter Friedrich von Itzenplitz in Kunersdorf (present-day Kunowice, Poland). State Councillor von Itzenplitz enjoyed general recognition for having spent considerable time in England, a fact duly noted by his visitor from Keszthely with a view to Festetics's interest in developing his collection of specialist literature.

> "The Count is an educated, experienced, stalwart person. He and his family spent seven years in England, where his son Heinrich was born. I have very much to thank him for regarding not only the experiences I gained here, but also the advice and letters of presentation he gave me for the remainder of my journey. Like Thaer and his relations, shall be ever before me in my recollections!—As the table was being laid for breakfast, we viewed the library together. The collection consists of books—selected, not numerous—from every branch of the sciences, most of them German, French, and English. (....) Breakfast was of the English variety.

[247] Ibid., fol. 61v

> By the time we were finished, he awaited me with two stallions in hand. With these, we conducted an excursion into the gorges of the River Oder. I must express some wonder at the bounty of crops produced in this region, much the opposite of my experience with the sandy lands I have seen thus far, which to me, despite all the diligence and labour applied to them, have seemed more barren than fertile. I would except from this certain patches with the aspect of oases, outside which even the best-cultivated plot looks like desert in this oppressively hot and arid period, especially now that the grain has been harvested".[248]

Von Itzenplitz, for his part, earned Gerics's appreciation when, without hesitation, he ordered two of the sheep in his flock slaughtered so that his Hungarian guest might examine the parasistes in their intestines.

> "The sheep also suffer from ailments that are entirely new to me. (…) the parcels at both Cunnersdorf, and Mögelin are quite sandy in most parts. Stomach worms proliferate in the stomachs of sheep that graze upon such lands. Rudolphi saw an ailment of this kind here and, describing it in his highly regarded work on worms, called it *strongylus contortus*.[249] The sheep will die of this disease unless driven to the riverbank area of the Oder before completely consumed by it. A sheep which experiences diarrhoea will usually recover. The count, glad enough to help me expand my understanding, had two animals butchered for my sake, one in which the disease had only just taken hold, and another in which it had already become fully developed. I was truly horrified at the multitude of stomach worms we found".[250]

[248] Ibid., fol. 65–66
[249] Roundworms, which spread via water contaminated with animal urine.
[250] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/2 fols. 67v–68

Before bidding his guest farewell, von Itzenplitz provided him with additional letters of presentation pertinent to London, Amsterdam, and Berlin. On his return to the Prussian capital, Gerics decided—in part for Lehrmann's benefit—to prolong his stay, using the time gained there to study a distillery apparatus used by Magdeburg-area landowner and trader Johann Heinrich Pistorius in the production of potato spirits. In a letter to his patron dated 6 September, the Hungarian even requested permission to spend 100 Prussian thalers to purchase a model of the machine.[251]

More than a month and a half later, on 22 October 1820, he penned a somewhat lengthy report to Festetics indicating that he had finally left Berlin, making his first significant stop at the famed royal cattle and model farm at Königshorst. There, he detailed not only the layout of the stables and manner in which stock was fed, milked, etc., but also the various phases in the farm's milk-processing and cheese-making enterprises. From there, Gerics headed north, making his way on foot across frequently barren, sandy lands on a course laid through Fehrbellin and Neubrandenburg. Finally, in Ihlenfeld, it appeared he had reached the promised land, all the more so, as he was received warmly by the estate officer there, made acquaintance of others, gained considerable information in the course of his stay, and met with a youth who had passed a fruitful interval in England.

> "On the recommendation of Count von Zedtwitz, Amtmann Michaelis received me quite amiably. One of his sons had even been with the young Thaer—now chief steward to Prince Radziwill's [252] stock—in Keszthely. The young man is not long returned from travels in England, having

[251] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [The Reports of Pál Gerics on His Travels Abroad 1819–1825] fol. 397

[252] Antoni Henryk Radziwiłł (1775–1833), prince, Polish-Lithuanian nobleman, and large estate holder who worked to improve the situation of partitioned Poland first under Czar Alexander I and then in the service of Prussia.

> brought with him a youth of some distinction from Lübeck, son of the postmaster there, who, having been raised in Hofwyl, wished himself sent to Mr. Michaelis, the latter being a farmer of great repute".[253]

From Ihlenfeld, Gerics crossed Pomerania toward Greifswald, the "most memorable thing" he encountered on the way being "the region's goose breeding farms". Upon reaching the northern town, the only individual to extend him a warm welcome was Prof. Gustave Salomon Tillberg, a noted mathematician and physicist who taught at the city's university and the addressee of a letter of presentation Gerics had received from Berlin banker Wilhelm Christian Benecke. "At his table, he gathered the entire school of philosophy and several others, all for my sake, spending nearly the entire day with me, showing me the university library, museum, and botanical gardens".[254] Tillberg additionally had an electrical experiment demonstrated for Gerics's benefit, though more important to the Hungarian from the standpoint of his itinerary was his provision of a letter of introduction to the Losentitz estate farm, a holding of the von Dyke family on the Island of Rügen. At this next destination, he was personally received by eighty-three-year-old General Ulrich Moritz von Dyke. Later, having visited other farms and asked certain pertinent questions, he would come to understand why the crop rotation system used at Losentitz had earned the farm a measure of fame. At the same time, it was with no little irritation that he wrote Festetics about his stay in Mecklenburg: "...here, the more they flatter you, the less honesty and warm-heartedness I find in them, especially among the lowborn". The situation was much the same in Mecklenburg-Schwerin, where, having passed through Stralsund to visit the owner of the reputed stables in Ivenack, Gerics remarked: "After lunch, Count von Pless deigned to send word of my letter of introduction from Count von

[253] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/2 fol. 74
[254] Ibid., fol. 79v

Zedtwitz that tomorrow morning at nine he would send the stable master out to me so that we might view the horses and farm together".[255] His guide's lower status notwithstanding, the stable master did, in fact, show Gerics everything, and he found the stable itself particularly impressive, although he regarded it as objectionable that the horses frequently dropped apples under their feeding troughs, which, he believed, could be the cause of various diseases of the eyes. The next station on his agenda was Neustadt an der Dosse, home to a stud farm held by the King of Prussia, whose stables the sovereign had had constructed at the urging of Count Karl Heinrich von Lindenau. This estate also counted as an important stop for Gerics, who—bearing letters from Hilvety and Michaelis—was received with all due courtesy. The majority of the horses on the farm were English thoroughbreds and Arabian mares, with studs primarily of the Arabian breed and a single specimen of Central Asian lineage.[256]

During this same period, naturally, the network being developed by Lehrmann consisted largely of court nurseries and the professional caretakers of botanical gardens. Using letters of presentation supplied to him in Berlin, the second *Georgicon* professor was received in Potsdam by a person of no lesser stature than Peter Joseph Lenné, director of the royal gardens and definitive Prussian expert on the subject of the English garden. Indeed, with Lenné's aid, Lehrmann would also succeed in making the acquaintance of two eminent gardeners: Friedrich Dietrich Krutisch, whose skills lay in the cultivation of peaches and strawberries, and Johann Carl Jacobi, specialist in the growing of pineapple plants. Similarly added to Lehrmann's list of new acquaintances were the botanist Friedrich Sello, recognised scholar on Brazilian flora, and his father, Johann Wilhelm Sello, founder of a well-known nursery in the vicinity of Sanssouci, which was known, among other things, for furnishing saplings to

[255] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [The Reports of Pál Gerics on his Travels Abroad 1819–1825] fol. 402; OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/2 fol. 81

[256] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [The Reports of Pál Gerics on his Travels Abroad 1819–1825] fol. 402v

church run primary schools for use in education. Carl Friedrich Nietner, gardener in charge of the *orangerie* and vegetable plots at the Potsdam Neues Palais, constituted yet another important new contact for the Hungarian. Like Potsdam, his trip to Wörlitz also proved extraordinarily beneficial, as it enabled him to come to know landscape architect Johann Georg Schoch, who had undertaken lengthy study tours in England and France under the sponsorship of Prince Leopold III of Anhalt-Dessau.[257] On Schoch's recommendation, Lehrmann then turned toward Dessau, where he found himself emphatically impressed with the Luisium—the English-style garden and orchard named for the prince's wife.[258]

Like Gerics, Lehrmann sought an audience with Heinrich Wilhelm Campe in Leipzig, soliciting from him letters that would gain him contacts in both Frankfurt am Main, and London. While in the city, he also studied a gardening enterprise run by Eduard Breiter and met the botanist Johann Friedrich Pohl, who taught technology at the university there. Not unimportantly, when he visited the English garden in the possession of banker Christian Gottlob Frege in the vicinity of Neudorf, it was the professor himself who acted as guide. The Hungarian also took the time to visit Weimar, stressing in his subsequent summary report that Charles Augustus, the princely patron of the arts there, was himself an expert botanist. As a next step, he toured the botanical gardens in Erfurt, then turned toward Gotha, where his primary conclusion, consistent with his observations to date, was that the courts there paid very close attention to the development of orange groves and the procurement of exotic plants, while in terms of visual elements, compositions typical of the English landscape garden had increasingly come to dominate over the previously popular French style.

[257] Gerics had already read the German landscape architect's seminal book: Johann Georg Schoch: *Versuch einer Anleitung zur Anlegung eines Gartens im Englischen Geschmack*, Leipzig, Göschen, 1794.
[258] MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 130. d. T. III. fols. 88v-89v; For the origin of Louise's inspiration, see: Johanna Geyer (ed.): *Die Englandreise der Fürstin Louise von Anhalt-Dessau im Jahr 1775*, Berlin, Nicolaische Verlagsbuchhandlung, 2007.

Also during this interval, he obtained detailed information and references relative to his upcoming trip to England from head court gardener Johann Rudolf Eyserbeck.[259]

Upon reaching Frankfurt am Main, Lehrmann submitted letters of introduction to three leading bankers: Friedrich Metzler, who at the time was occupied with the provision of state loans; Simon Moritz von Bethmann, whose name appeared in his instructions; and one of the members of the Manskopf Sarasin banking dynasty, although whether this was Jacob Philipp or Jacob Wilhelm cannot be established for certain from Lehrmann's writings. Whatever the case, the welcome he received was one of distinction: it was the wealthy businessman himself, for example, who took the time to guide the (properly recommended) Hungarian youth to his cellars to taste a range of Rhine wines of different vintages. Frankfurt's opportunities having been exhausted, he headed for Aschaffenburg, where he was careful to pay due attention not only to seasonal viticultural work, but also local gardening and landscaping customs. There, he was guided round the botanical gardens of the local lyceum by Karl Ludwig Seitz, who was then supervisor of the Bavarian royal gardens; in the special nursery in Busch, this role was filled by court gardener Christian Bode. The occasion served in particular to expand Lehrmann's knowledge of the theory behind the region's terraced viticultural practices, a benefit that was all the more true in Würzburg, as it was there he had the opportunity to consult with doctor, chemist, and university professor Johann Georg Pickel, who was known for having developed the technique of using smoke to prevent spring frost damage to grape vines—a revolutionary innovation for Würzburg area vineyards—as well as for a body of professional literature on the practice that had already made a decisive impact on regional productivity at the time of Lehrmann's travels.[260]

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[259] Ibid., fols. 89v–91

[260] Ibid., fols. 93–94. For more on the Frankfurt banker's activities, see Wilfried Forstmann: *Simon Moritz von Bethmann 1768–1826. Bankier, Diplomat und politischer Beobachter*, Frankfurt/Main, Kramer, 1973. Pickel's

With the coming of autumn, both Gerics, and Lehrmann found themselves put to extreme tests of endurance, yet at the same time, they were disappointed to experience that stops deemed important along their routes yielded less relevant information than expected. In Hamburg, for example, Gerics spent only a scant week, as—despite previous hopes of making contacts pertinent to the "direct sale of wool"—he found, rather, that the city offered "nought but a transport location".[261] While awed by the traffic at the city's docks, he was forced to acknowledge, with some disappointment, that from the standpoint of references, the local Austrian consul, Franz Matthias von Mutzenbecher gave him no help whatsoever. By contrast, the Bavarian royal diplomatic consul "not only received me most courteously at his residence, but even returned my visit the same day and invited me to lunch with him the day after".[262] At this point, Gerics turned southward, paying visits to numerous cities and scientists in the Kingdom of Hanover. Of these, Hoya proved a stop of significant value, as he found himself guided by stablemaster Ernst Daniel Wilhelm Havemann, nephew to the late famed veterinarian Conrad August Havemann, through a stable that bred and trained coach horses for the English royal family.[263] He followed up this experience with a look at various tenant farms but was treated extraordinary rudeness by one of the wealthy farmers he had chosen to visit (there had been seven of the same surname), who was loathe even to let him set foot through the gate.

> "He received my very cordial request as if I had turned up, like God knows what sort of bad penny, begging for a slice of bread. He asked for

renowned book: Johann Georg Pickel: *Die dießjährigen Wetterbeobachtungen im Früh– und Spätjahre in Bezug auf die allenfalls nöthige Räucherung und Schützung der Weinberge*, Würzburg, Göbhardt, 1804.

[261] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 403

[262] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/2 fol. 89

[263] For an analysis of Conrad August Havemann's activities, see Julia Ziemann,: „*Hufbeschlag der Pferde". Transkription und Bespreschung einer Handschrift nach August Conrad Havemann, Hannover 1816*, Gießen, Deutsche Veterinärmedizinische Gesellschaft Service, 2012.

> my travel document and would not permit me through the door until I had produced it! Once I had identified myself by means of a wretched scrap of paper (so I must say, as he trusted neither my word, nor the manner in which I conducted myself), he became quite anxious and, indeed, could not do enough to correct his previous coarseness".[264]

By contrast, in Hannover—owing to letters supplied by Berlin banker Wilhelm Benecke and the Bavarian consul in Hamburg—the waters proved considerably warmer. The first institution the Hungarian contacted was one dedicated to veterinary medicine, although to Gerics's great disappointment, the director, Ulrich Friedrich Hausmann, was away on travel when he arrived. Fortunately, he was not forced to forgo the learning experience and was given a complete tour by Friedrich Günther, a veterinarian and professor of anatomy, botany, and chemistry.[265] Of various novelties he witnessed, the one he considered as most useful was the manner in which medicines were administered into the recta of horses. He also judged the city being pleasant and took advantage of the occasion to attend a performance at a local theatre.[266] Naturally, the magnificent royal palace and gardens featured high on the list of must-see sights, and indeed, he found Herrenhausen tasteful. However, he regretted the season of his visit, as the fountains in the palace's French gardens were not in operation in October. Upon leaving the city, the Hungarian turned his attention to the inspection of two farms, each approximately one hundred acres in size. The first, Goldringen, came under consideration primarily for its inclusion of a major sheep breeding facility. The other, Kalenberg, he found impressive neither for its peripheral land

[264] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 403v

[265] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/2 fol. 98; For a contemporary survey of Hanover's intellectuals, see Heinrich Wilhelm Rotermund: *Das Gelehrte Hannover oder Lexikon von Schriftstellern und Schriftstellerinnen, gelehrten Geschäftsmännern und Künstlern,* 2 vols., Bremen, Schünemann, 1823.

[266] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 230v

use, i.e. its three-field crop rotation system, which he regarded as obsolete, nor for its local wheat and barley ale.[267] From Calenberg, he proceeded through Einbeck to Neuhaus, where saddle-horses were bred for the English sovereign, and where his eyes were drawn in particular to a Persian stallion that strongly reminded him of Jaffa, an Arabian stud that had been looted from Napoleon and later used to serve the Arabian mares kept at the Festetics stud farm in Fenék (a peripheral district of Keszthely).[268]

In a letter to Festetics dated 22 October 1820, the Hungarian wrote with some finality, "At last I have reached Göttingen". Many years later, when revising his journal, he would refer to the university town as a special place:

> "It is perhaps unique in its kind. Not, as it were, for the greatness, beauty, or exterior polish of its edifices, as in such respects it cannot compare to Berlin, but for the nature of that certain institution; gazing upon so many worthy men, so many eminences as Göttingen University displayed from the start, remains for me an unforgettable experience".[269]

Although he bore no letter of presentation to any of the university's professors, he did, as indicated in a letter to his sponsor, 'take advantage of that right of which any man may avail himself with scientists'. His first excursion into the city took him to the doorstep of Johann Friedrich Blumenbach, a doctor and naturalist of European stature, who paid him special courtesy—much appreciated by Gerics—as a traveller of Hungarian origin.

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[267] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 404; OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/2 fol. 99v

[268] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/2 fol. 100v

[269] Ibid., fols. 103v–104; MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 406

> "A few minutes and it was as if we were old acquaintances. The frail yet most knowledgeable old man opened his museum wide for me, and I must wonder at the great kindness and eagerness with which he explained it all. He who sacrificed his precious time on numerous occasions, not only for my compatriots, but also for foreigners; he who while I was with him was interrupted in what he had begun to say to me many times indeed by the perpetual comings and goings of others; he who, when taking a pen into his quaking right hand, was compelled to hold it steady with his left in order to write legibly. His collection extends to every branch of the natural sciences and is fairly well known in the scientific world, both for his numerous works and the information given in them. The good man was not satisfied with my immediately spending several hours with him on this first occasion, but invited me to return another time, saying that if I did not find him at home, I should go to look for him in the library!"[270]

Shortly thereafter, the two actually did meet in the university library, where Blumenbach permitted him to handle several spectacular books on research done in Egypt and elsewhere what we would call the Middle East today and to view a number of intriguing ethnographic objects and costumes, including some that had been brought back by James Cook from the Pacific islands.[271]

Of course, it was only natural that Gerics, as a former student of the Polytechnisches Institut in Vienna and one who had "begun [his] inquiries with the natural sciences", should also call on the experimental physics professor, Johann Tobias Mayer. The renowned textbook author not only showed him mathematician, natural scientist, and former professor Georg Christoph

[270] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/2 fol. 104
[271] Ibid., fols. 107–108v. Gerics's remark on the travels of Cook can be viewed as an expression of Hungarian interest in the world outside Europe. For more on the scientific historical backdrop, see Ildikó Sz. Kristóf,: Alexander von Humboldt és Magyarország. Egy romantikus természettudós jelentősége a magyarországi egyetemes néprajzi érdeklődés kibontakozásában. [Alexander von Humboldt and Hungary: The Significance of a Romantic Natural Scientist in the Development of Hungarian Interest in Ethnography], *Századok* 151 (2017), 987-1006.

Lichtenberg's collection, but also arranged for him to witness an experiment in electromagnetism.[272] The real surprise, however, was that the professor—who had no actual ties to Hungary—spoke Hungarian with him, having learned the language as a gesture to Gerics's countrymen. Upon parting, Mayer requested that his guest to describe the experiment he had shown him to Dutch Natural Science Society president Martin van Marum upon reaching the Netherlands. However, according to the notes on the topic Gerics would pen later, when he finally did encounter van Marum, the Dutch scholar was in poor health. Moreover, Gerics's journal indicates that others—such as French and Swiss physicists Ampère, Biot, Rive, Gay-Lussac, and Pouillet—had already made further discoveries in that regard by the time of his arrival.[273]

Showing Gerics the botanical gardens, an institution founded by Albrecht von Haller and developed by Johann Andreas Murray and Georg Franz Hoffmann, was doctor and botanist Heinrich Adolf Schrader, editor of the *Journal für die Botanik* and, later, the *Neues Journal für die Botanik*. Once this was concluded, he was given another tour of the experimental laboratory headed by chemistry professor Friedrich Stromeyer, who had just received a shipment of new distilling vessels and test tubes from Paris. Of members of the university's school of medicine, Gerics first contacted Friedrich Benjamin Osiander, renowned figure in clinical obstetrics education, who gave him a thorough introduction to his collections of unusual skulls and embryos preserved in alcohol. Given his expertise in veterinary medicine, Gerics found it important to note that "not one collector would have thought to append a gelded horse's skull to those of a stud and mare, or an ox's to those of a bull and cow", also

[272] H. A. M. Snelders: Oersted's Discovery of Electromagnetism, in A. Cunningham – N. Jardine (eds.): *Romanticism and the Sciences*, Cambridge – New York, Cambridge University Press, 1990, 228-240.
[273] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/2 fols. 106–107

observing among the unusual skeletons one of "an equestrian woman's hip and exceedingly dilated pelvic bone".[274]

In viewing the collection of animal skeletons owned by Prof. Karl Himly, he was accompanied by a man by the name of Carl Friedrich Heusinger, who had just returned from a study trip to France. In his notes, having observed "the backbone of a horse, the joints of which had grown together and ossified", the Hungarian compared the collection to several pieces kept at the institution in Keszthely:

> "The collection at the *Georgicon* also includes such a specimen, though different from this one in that the completely ossified spine is broken in one place, which fracture caused the horse to collapse all at once. Mr. Himly claims that such ossification of the spine is quite common in England among horses that pull great loads"."[275]

He provided the *Directio* with a description of the Göttingen university's impressive equine stables in a document titled "Notes on My Experiences" compiled while he was still abroad. The stables were headed by one Ernst Ferdinand Ayrer, who had inherited the position from his father and who "knew Hungary well". Gerics's redacted journal, however, reveals that every institution of higher education in the German territories had its own stables, whose horses were at times used in holding demonstrations for the department of veterinary medicine. "A true expert in his own circles, Mr. Ayrer gives some brief instruction in horse medicine, conformation, and riding. He keeps thirty-four steeds of all breeds: a motley bunch, mostly, but good enough for the purpose"."[276]

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[274] Ibid., fols. 110-110v; MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 251

[275] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/2 fol. 111

[276] Ibid., fol. 112

In contrast when he called on the veterinarian Karl Friedrich Lappe, he found in bed having broken a leg in an accident. The misfortune notwithstanding, he was able to consult at length with the doctor, who had been in the employ of the university since 1813, most recently as director of the institute for veterinary medicine. In discussing the matter of quality sheep husbandry, Lappe revealed a disinclination to cross-breeding, an opinion with which Gerics, for his part, disagreed:

> "if one were to speak of core flocks, then I would indeed shake hands with him, being happily of the same mind. But if the topic is instead that of the improvement of a breed, and on a grand scale, then I must find what he said of German cross-breeding correct, although even this must be accomplished properly. After all, how could our abundantly landed gentlemen achieve success without it? What breeding stock would be required? And Prince Eszterházy, who counts his sheep at many more than 200,000; how would he produce so many through inbreeding, and how much breeding stock would be necessary?!"[277]

Afterwards, the Hungarian also met astronomer Karl Ludwig Harding, originally a student of theology at Göttingen, who had made a name for himself with his discovery of the asteroid Juno. In light of later experience he would come to describe the observatory itself as more advanced and better equipped than the one in Paris. It also bears mentioning that, in addition to the natural scientists one would expect him to have visited at Göttingen, he also called on the university's historians, all of whom received him with distinction. Prof. Friedrich Jakob Saalfeld, however, whose work centred on events of the recent past and who, in Gerics's estimation, critiqued Napoleon with a "pen dipped in

[277] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 251; OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/2 fols. 111–111v

bile", at first mistook him for a student applying to one of his courses. Although the misunderstanding was eventually clarified, the Hungarian nevertheless soon came to the realisation that the reputed professor was, in fact, a tedious individual and hastened to bid him farewell.[278]

It was on 25 October that Gerics parted ways with the 'unforgettable' Göttingen and, dividing his luggage, sent one part ahead to Aachen and the other to Frankfurt am Main. His path, which took him south-west through Münden, was made more arduous by rain. Later, he would dedicate a lengthy passage to explaining how the Elector of Hanover had founded the *Georgia Augusta* in a superior location, since Münden, although in his opinion better situated than Göttingen, suffered the danger of flooding by the Fulda and Weser Rivers. Meanwhile "professors advanced in age are not terribly pleased to crawl about crags as high as those that surround Münden". Having reached the neighbouring Electorate of Hesse, he found his first benefactor there in the person of Kassel banker Karl Jonas Pfeiffer. On the recommendation in the letter Gerics bore from Berlin banker Wilhelm Benecke, Pfeiffer promptly supplied him with additional letters of introduction, including one that gained him entrance to Schloss Wilhelmshöhe. There, he was guided through the garden by an employee, although he would only offer a detailed description of the spectacular grounds and waterfall in his annotated journal.[279]

Next, as per the objectives and principles set forth in his instructions, Gerics set his sights, on the town of Gießen, taking a route that passed through Marburg. The Hungarian would describe his meeting with the local university's economics professor, Friedrich Ludwig Walther, in one of his periodic letters to Festetics: "he received me gladly" upon reading the letter of introduction

[278] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/2 fols. 112v–113. The book by Saalfeld in question is Friedrich Jakob Saalfeld: *Geschichte Napoleon Buonaparte s oder Grundriß der Geschichte des neuesten Europäischen Staaten-Systems von 1796-1815*, 2 vols., Leipzig-Altenburg, Brockhaus, 1817.

[279] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/2 fols. 118v–120

furnished previously by "Mr. Angyalffy", i.e. fellow *Georgicon* professor Mátyás András Angyalffy.[280] In Gießen, Gerics would have the opportunity of studying an experiment in the cultivation of the Peruvian variety of potato received from Alexander von Humboldt known as the "Arakatschka", of which he hoped in the future a sample might be sent to Keszthely.[281] At the university, he was shown obstetrician-gynaecologist Ferdinand August Ritgen's collection by the professor himself, who also briefed him on his research, including his work on a pair of forceps he had developed as well as their use. He also consulted in depth with Ludwig Nebel, dean of the school of medicine, who had—not unimportantly—spent time in both Vienna, and Pest, and who was "a great friend of the science of veterinary medicine". Not surprisingly, Nebel showed his Hungarian guest the university's anatomical and natural science collections personally, just as Johann Bernhard Wilbrand gave him a personal tour of the botanical gardens. Gerics's encyclopaedic knowledge of the natural sciences and impressive general education must have won him his hosts' favour, as he was then honoured with an invitation to a banquet of the estates of the Grand Duchy of Hesse. There, he was mentioned in the address by Johann Christian Gottlieb Schaumann, professor of philosophy and pedagogy, who "offered his heartfelt gratitude to the estates for permitting a stranger to partake in their joyous celebration". Later, he and the professors together emptied their glasses "to the health and prosperity of the Festetics family and the good of all Hungarians".[282]

In his report to László Festetics, Gerics, perhaps counting on his patron's understanding, spoke briefly of his intent to visit the castle in Wartburg for the

[280] For more on Angyalffy's career, see: Éva Mária Fülöp: „Kedves Hazámfiai, mozdulni kell…" Egy elfeledett georgikoni: Angyalffy Mátyás András (1776-1839) ["Fellow Countrymen, We Must Move...". A Forgotten Professor of the Georgicon: Mátyás András Angyalffy (1776–1839)], in Á. Szotyori–Nagy (ed.): *A Magyar Mezőgazdasági Múzeum Közleményei 2013–2015*, [Transactions of the Museum of Hungarian Agriculture 2013–2015]Budapest, Magyar Mezőgazdasági Múzeum, 2015, 67–104.

[281] MNL OL Festetics Lt Központi Birtokigazgatás [Central Estate Administration] P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 405v

[282] Ibid., fols. 253., 405v

simple reason of its proximity, without the hope of gaining any particular agronomic or scientific knowledge there. Although it was chiefly to Luther that the place owed its name, in justifying the decision, Gerics noted that, "recalling the times of our András of Jerusalem", he felt it important "with regard to Hungarians, as well".[283] This objective having been accomplished, he directed his route to Lauterbach "in order to call on Landmarschall [Georg Karl von] Riedesel", and having taken a room at an inn, proceeded with the letters received from Countess von Reden to the Baron's residence. In his revised journal, he recalls having found the two sibling gentlemen "exceedingly well occupied". Indeed:

> "Such was the mound of gold before them on the table as I have never seen before. The two brothers had divided it between them. The elder and head of household, having browsed through the Countess von Reden's letter, left the shining pile there and, taking me by the arm, introduced me to the lady of the house [Baronness Caroline Friederike von Riedesel, member of the family's Eisenach branch– G. K.]. We cannot have exchanged more than a few words before there dashed up the Landmarschall's horses, fully harnessed and hitched. With these, we drove out onto the farm in Sassen". [284]

Accompanying him on this excursion was Heinrich Wilhelm Pabst, future agricultural expert and writer, who would later both reorganise the Magyaróvár school of agriculture in Western Hungary based on the Hohenheim model, and serve as its director. At the time of Gerics's visit, however, the young Pabst was an officer in the employ of Baron Riedesel. Upon reaching the farm, the Hungarian found a flock of nearly one thousand sheep, whose wool was sold in

[283] Ibid., fol. 406; Gerics is referring here to King Andrew II (1205-1235) of Hungary, whose now canonised daughter, Elizabeth (1207–1231), had been married to the Landgrave of Thuringia.
[284] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/2 fol. 138

bulk to Johann Klotz, a Frankfurt merchant who marketed wool purchased from places that included Hungary. At the end of his visit, Baroness Riedesel supplied Gerics with a letter of introduction addressed to the physician and reputed pomologist Adrian Diel, while his host provided the same with reference to court physician François-Joseph Harbauer, then professor at the university in Leuven. Interestingly, a measure of coincidence also played a part in expanding the Hungarian's circle of acquaintances: when a sudden fever forced him to take to his bed for a brief time, he was treated by the Riedesel family doctor, Gottlieb Ludwig Rau, who would later see his fame spread throughout Europe.[285]

From Gerics's report to Festetics of 16 November 1820, it may be surmised that the traveller's arrival in Frankfurt am Main occurred almost two months later than the itinerary that had been laid out in his instructions. The reasons given involve not only the sheer number of sights he had to cover, but also the time required to obtain redeemable letters of credit for specific banks. Curiously, in Frankfurt he primarily encountered banking executives whose interests additionally extended to the wool trade, men such as Italian-born banker and wool merchant Aloysius Maggi Minoprio.[286] Although Johann Klotz, mentioned previously in relation to the Riedesel flock, was out of town at the time of Gerics's stay, the merchant's deputy welcomed the Hungarian gladly and "was prepared to provide not only bills of exchange, but also cash, even above and beyond the permitted sum". Furthermore, Klotz's deputy took Gerics to view the natural science collection founded by Johann Christian Senckenberg, where he judged the collection of animal intestinal worms to be of particular interest. He was also invited by August Anton Wöhler to witness an

[285] Ibid., fol. 140

[286] For the activities of bankers and merchants of Italian descent, see Johannes Augel: *Italienische Einwanderung und Wirtschaftstätigkeit in rheinischen Städten des 17. und 18. Jahrhunderts*, Bonn, Röhrscheid, 1971.

"anglicisation", that is, the veterinary doctor arranged for an equine tail docking procedure to be performed for his benefit.[287]

At the same time, it should be noted that, as was the case in Berlin, Simon Moritz Bethmann, the Bethmann Banking House director who had furnished loans to Emperor Francis I and Russian Czar Alexander I during the French wars[288] and remained—along with the Rothschild family—one of the most important creditors to the houses of European heads of state, also invited Gerics to pay him a visit. The connection was facilitated by Count Karl von Grünne, formerly in the service of the Austrian emperor and now Dutch ambassador. Once the Hungarian had completed his tour of Bethmann's model farm in Reidhof, the banker invited him to lunch, as well, seating him next to Samuel Thomas von Soemmering, the doctor who had first identified the macula in the human retina. Naturally, the two physicians struck up a conversation in Latin, Gerics speaking with such rigour and fluency as to win the admiration of the entire company—although he did not consider it as a special praise for his language skills and would later remark that it would have pleased him more if "his fellow countrymen had been worse students of Latin rhetoric and better Hungarians, deeming it to their glory that they not only perfectly understand the fine language of our sweet homeland, but also speak it clearly". The Bethmann visit was followed by tours of multiple farms owned by the Schott brothers, Moses and Aron Solomon. At one, located in Grünhof, he saw fit to study the farm's effective use of pipes for drainage, while at the estate near Friedberg, his

[287] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 254v. For more on the city's significance to trade, see: Alexander Dietz: *Frankfurter Handelsgeschichte,* 2 vols., Frankfurt/M, Knauer, 1910–1921.

[288] Glenda Sluga: "Who Hold the Balance of the World?" Bankers at the Congress of Vienna, and in International History, *The American Historical Review* 122 (2017) 1403–1430. It should be noted that Bethmann's activity was of particular interest to other Hungarian travellers at the time, because Count István Széchenyi penned down the following lines in his journal in Paris on 2 April 1822: "…on lit dans le journal de commerce que Bethman venoit de contracter un nouvel emprunt pour l'Autriche". Viszota: *Gróf Széchenyi István naplói* [The Diaries of Count István Széchenyi], Vol. 2, 266.

focus fell on the protection of fruit trees from damage by birds and animals and the process by which apples were pressed to produce cider.[289]

Writing to Festetics at the time, Gerics did not forget to mention having met fellow traveller József Lehrmann—"I have once again crossed paths with Lehrmann, our second meeting"—and on 18 November, the two boarded a ship together for Mainz. From there, their idea was to proceed by water on a study of the region's viticulture, but their plans were thwarted and their departure rendered uncertain both by the cold, which put both to the test, and by the dismantling of the Main River bridge due to ice. In the end, they succeeded in procuring passage by way of Höchst to view the best of the region's Riesling-producing hillsides. According to Gerics's journal:

> "The very best Rhinewines grow here, the English generally calling the vintages of the Rhine by the name *hoc* after the town of Hochheim. Held most estimable on this hill are the grapes of the great provostry, which extends for 8 acres. Each acre is planted with 4100 vines, each of them valued at one piece of gold. In this, 12 casks of wine are produced per year. Each cask holds 7 ½ ohms[290] and is estimated to be worth at least 1500 fl[orens] each. The city protects this hill, which falls southward, from the cold north wind, and it can, when possible, be warmed by the sun from dawn to dusk; a brook flows around it, which is quite beneficial in dry weather, but could be somewhat more damaging at other times if the many very costly channels did not cause it to flow elsewhere and prevent it from overflowing."[291]

[289] Ibid., fols. 255–255v; OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/2 fol. 142–142v. For more on the activities of Frankfurt's Jewish banking dynasties, see Cilli Kasper-Holtkotte: *Die jüdische Gemeinde von Frankfurt/Main in der Frühen Neuzeit. Familien, Netzwerke und Konflikte eines jüdischen Zentrums*, Berlin, De Gruyter, 2010.

[290] In Baden, 1 ohm = 150.1 litres.

[291] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/2 fol. 148v

The pair took a brief reprieve in Bingen before returning to Mainz, where Gerics inspected the city library, which, in his words, "united the scientific and antiquities collections" of the city. Its keepers were, not unimportantly, "the famous János Müller and Forster", i.e. Johannes von Müller, the former Göttingen theology student and, later diplomat and illustrious figure within the circle of acquaintances of the German writer, Goethe, and naturalist Johann Georg Forster, companion to British explorer James Cook and former member of the Directorium of the Republic of Mainz. No doubt, it speaks for Gerics' extraordinary erudition that he did not fail to mention Cook's German travel companion.[292] Leaving Mainz, they set off by way of Koblenz to Diez to meet the pomologist Diel, noted above, although the effort, spawned of a letter from Baron Riedesel, proved ineffective, as they saw nothing of interest and found every request made to the renowned fruit grower politely, but decisively refused. The experience caused Gerics to remark reproachfully, "he supplied nourishment for neither our hearts, nor our minds", while Lehrmann's journal also records the visit as an exercise in futility. The experience in Neuwied was similarly fruitless, as Prince Alexander Philipp Maximilian zu Wied-Neuwied, a renowned botanist, was away on a hunting trip when they called.[293]

Passing through Andernach, the two men then proceeded to Bonn, home of the university of the same name and its botanical gardens. Their guide there was Supervisor Wilhelm Sinning, while the university's natural science collections—rich in paleontological rarities—were shown to them personally by August Goldfuβ. Before parting ways, they promised their host that they would send specimens of birds and rodents from Hungary's Lake Balaton region for addition to his collection. They were then given a tour of the Poppelsdorf

[292] Hans Erich Bödeker: Aufklärerische ethnologische Praxis: Johann Reinhold Forster und Georg Forster, in H. E. Bödeker – P. H. Reill – J. Schlumbohm (eds.): *Wissenschaft als kulturelle Praxis, 1750–1900,* Göttingen, Vandenhoeck & Ruprecht, 1999, 227-254. For Forster's activities and the importance of his journals, see Johannes Görbert: *Die Vertextung der Welt. Forschungsreisen als Literatur bei Georg Forster, Alexander von Humboldt und Adalbert von Chamisso*, Berlin, De Gruyter, 2013.

[293] Ibid., fol. 153v; MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 130. d. T. III. fol. 101v

experimental and sheep farm, established near the former Elector's garden, under the personal guidance of Karl Christian Sturm.[294] At this point, the two men parted company for a time, as Lehrmann wished to reach Cologne as quickly as possible, although he would later comment with considerable disappointment that the botanical gardens at the former Jesuit church there had not been worth the trouble. He was considerably happier, however, with the remarkably warm reception given him by Prince Joseph zu Salm-Reifferscheidt-Dyck upon being presented with Festetics's letter. Indeed, Lehrman had the fortune of being escorted round the garden by the prince himself, of viewing the nobleman's famed collection of botanical engravings, and, later, of engaging the garden supervisor at length concerning ongoing plans to re-landscape the French grounds in the English style. Upon arriving at the same place, Gerics would note in his journal the prince's use of the French botanical system developed by Bernard de Jussieu, and the abundance of tropical plants he observed in the garden's greenhouses. He also recorded having exchanged words with one of the grounds labourers in Hungarian, having come to the Rhine from Tokaj and entered the prince's service upon arriving.[295]

On 3 December, the two *Georgicon* professors again departed together, this time for Düsseldorf, capital of the former Grand Duchy of Berg and Cleves. There, the botanist Maximilian Friedrich Weyhe led them through the target of their visit, a garden installed on the site of the ducal palace—destroyed in the course of the French wars—whose vegetation was classified according to the Linnaean system. Once this tour was concluded, they again parted ways, Lehrmann continuing on through Krefeld toward Geldern, and Gerics heading to Mückeln and a farm owned by General Ferdinand Ludwig von Hompesch, whose sheep breeding enterprise, it turned out, produced "rough wool", and

[294] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/2 fols. 156–156v
[295] Ibid., fols. 160–161v

which, in terms of cultivation, specialised in animal feed for sale in the nearby city.[296]

The Hungarian's notes, however, ostensibly taken with the aim of recording farming practices and potential professional connections, at the same time provide valuable information on the financial procedures described in his instructions. Specifically, in Aachen, his final stop in Germany, according to the expectations laid out in the foregoing, Gerics again dropped in at the local bank. In his letter to Festetics of 20 December, however, he reported that he had not redeemed any letter of credit prior to the Brussels leg of his journey, as he wished to avoid losses by exchanging cash too early.[297]

Gerics's first report home in the new year was dispatched from Brussels on 1 January. "I have surveyed all places of manufacture in this area", he said, 'by name: Eupen, Hodimont, Ensival, and Verviers". His most important contact in the city was mill owner Arnold Jacques de Thier, whose facility proved a profitable experience in that, with the mediation of merchants based in Vienna and Leipzig, "those here would gladly purchase wool from us, as well", even if "Hungarian wool is heartily scorned here" for its poorly washed condition.[298] The report also contained mention of his planned trip to Lüttich (Liége), with regard to which he happily noted that he had been given permission by Count Felix von Mier, the Austrian imperial ambassador, to have his mail sent to the embassy in order to ensure others could keep in touch and he would receive his letters promptly. In accordance with his instructions, he also reported that he would be taking a month's worth of English lessons for the total price of 40 francs and expressed his hope that he might render proper service to

[296] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on his Travels Abroad 1819-1825] fols. 257v–258
[297] Ibid., fol. 258
[298] Ibid., fols. 409–410; For the addresses of the Imperial Austrian merchants, see Anton Redl (ed.): *Handlungs Gremien und Fabricken Addressen Buch des Oesterreichischen Kaiserthums für das Jahr 1823*, Wien, Verfasser, 1823.

his patron "in that peculiar English nation".[299] In addition, it was in Lüttich that he ran across his first example of English manufacturing on the continent:

> "John Cockerill, an Englishman from Haslingden, has settled here in Seraing Street, erecting iron foundries that seem a small city unto themselves; it is from here that the vast quantity of manufacturing instruments seen in the provinces of the Lower Rhine, as well as here in the Netherlands, were produced".[300]

In a report sent scarcely a week and a half later, Gerics informed his home base in Hungary of his recent newfound acquaintance in the person of the wife of Baron Miklós Vay during the baroness's stay in Brussels and noted his further intention of contacting Count Sándor Wartensleben in Deventer. The baroness's assistance, he said, had earned him a visit to a lace-making factory, though it had been of little use, given that the manner in which thread was produced was a "trade secret". The Bavarian ambassador Baron Friedrich August von Gise, by contrast, provided him with a very valuable contact in Duke Prosper Ludwig von Arenberg, who not only consented to his touring the ducal estates, but also provided him with letters of introduction to further contacts along his route through the Low Countries and the United Provinces. The report also mentions that Lehrmann's life had "hung in the balance upon his arrival in Haarlem" due to a contracted illness.[301] Gerics's next stop after Brussels was Antwerp, where he toured the hospital and adjoining grass-covered grounds, the sights best suited to his interest in the natural sciences, guided by two distinguished doctors, Jan Bernaert van den Zande, known for his treatment of peritonitis with mercury

[299] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on his Travels Abroad 1819–1825] fol. 118v
[300] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/3 fols. 2v–3
[301] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 119–119v, 413

ointment, and Claude Louis Sommé, whom he regarded as not only an excellent apothecary, but also an "intelligent" gardener. As regards the latter vocation, Gerics remarked, "nowhere have I seen such enormous vanilla plants as here".[302] The meeting appears to have been beneficial for the *Georgicon* as well, as van den Zande expressed his unmitigated admiration for the Hungarian school's achievements, particularly for László Festetics's "patriotic zeal and many great sacrifices".[303]

To reach his next objective, the estates of the Duke of Arenberg, required that Gerics cross the northern stretches of Flanders and the waters of the River Schelde to the lands around Doel, an area that had been drained in the early 18th century and rented out by the duke to various tenants who specialised primarily in horticulture. In his report to the *Directio*, Gerics stressed the matter of cleanliness, noting that farm buildings and stables alike in both Flanders, and Holland were "exemplary" from that standpoint.[304] True to his tour instructions, he also gave account of the acquisition of two works of professional literature—specifically the book on equine medicine by Philippe Étienne Lafosse in French and a German translation of a treatise by famed Paris chemist Matthieu Joseph Orfila. That he furthermore reported having read both books speaks to his success at self-education.[305]

Gerics then set course for Rotterdam, on the way making note of the garden-like appearance of the parcels of land which he saw in several places. Although he would have liked to learn more, he was unfortunately unable to communicate with members of the lower strata of society, nor even, for that matter with innkeepers, who spoke neither German, French, nor English, while

[302] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/3 fols. 6-6v
[303] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on his Travels Abroad 1819–1825] fol. 414
[304] Ibid., fols. 120v–121
[305] Ibid., fol. 131. The books in question are Philippe Étienne Lafosse: *Guide du maréchal, ouvrage contenant une connaissance exacte du cheval, et la manière de distinguer et de guérir ses maladies*, Paris, Lacombe, 1818.; M. J. Orfila: *Handbuch der medizinischen Chemie, in Verbindung mit den allgemeinen und technischen Theilen der chemischen Wissenschaft*, Trans. Friedrich Trommsdorf, Erfurt, Keyser, 1820.

his own Flemish was not yet adequate to the task. In the city itself, hub of continental trade with England, the Caribbean, and the Far East, he made a meticulous study of the well-ordered, multi-storey houses, which—built on stilts—struck the inland-born traveller as decidedly peculiar. While there, he inspected a tobacco processing mill, yet did not make any appreciable contacts, and when asking questions, found his hosts protective of their "business secrets".[306]

The road from Rotterdam had Gerics passing through Delft and the Hague, his objective this time being: Leiden, the foremost of the Netherlands' great centres of knowledge. According to his journal, he was greeted there by university professor Johann Carl Kraus, who led him "through the university hospital with relish", although he saw "nothing special beyond [a] highly varied collection of surgical instruments". He visited the institution's botanical gardens which were deemed as a legacy of the "father of clinical medicine", Herman Boerhaave, and he described it as possessing 14,000 individual species at the time of his visit. Other points of interest included the university's *ménagerie*, where he procured a "muster of wools" from Berber, Algerian, Astrakhan, Surinamese, and Icelandic sheep for the *Georgicon*'s collection.[307] At the same time, the librarian at the university library treated him dismissively and, to his great disappointment, would not, accede to his viewing its collection. His luck improved when it came to the faculty: professor of agriculture Georg Johannes van der Boon Mesch and physician Jan Arnold Bennet, a "particular enthusiast of veterinary medicine" and lecturer on agricultural subjects since 1815, both accommodated him considerably more amicably, offering him not only an overview of local animal husbandry practices, but also their sincere friendship, complete with discussions that lasted far into the night. The erstwhile famous Leiden wool mills, however, eluded his inspection, as his letters of introduction,

[306] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/3 fols. 21v–23
[307] Ibid., fols. 28v–29

including one from the Duke of Arenberg, were rejected out of hand. According to his journal, one of the millers later sent word that he would be willing to receive him after all: “I thanked him for his courtesy but felt I should rather enjoy the company of the professors at the university, than to have accepted his invitation”.[308]

The following station on his journey was Haarlem, where he again met fellow countryman József Lehrmann. His colleague, for his part, had arrived by way of Nijmegen and Utrecht, taking notes on the beech and oak forests he had encountered along the road. Lehrmann had little to say about the university town but had continued his journey to Amsterdam by “treckscheit”, a variety of flat-bottomed barge in general use on the canal between the two cities. Once there, he was received by merchant-banker Johan Goll, who provided cash in exchange for his letter of credit, and then proceeded to Haarlem, where, a victim of poor nutrition, exhaustion, and an untimely winter chill, he fell ill and remained bedridden for a period of two weeks. Only when his illness had passed and his strength returned did he finally seek out the city’s commercial flower growers, among them the preeminent Georg Voorhelm Schneevogt, and, not unimportantly, Arie Cornelis and Jan Arie van Eden. His experiences in Haarlem naturally included the botanical gardens, as well as the opportunity to sample grapes and peaches harvested in February at the table of Johan Goll.[309]

Gerics, on the other hand, commenced his stay in Haarlem by calling upon Martin van Marum, the addressee of a letter of introduction received from Baron Jacquin in Vienna. Although the recent death of van Marum’s wife had left him unable to accommodate the traveller, he did—in deference to the letter Gerics carried—provide the Hungarian with an escort. It was by this guide, therefore, that he was led through the collection held by Pieter Teyler van der Hulst, a body of material rich in technological devices that had earned a strong

[308] Ibid., fols. 32v–33

[309] MNL OL P 279 Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], 130. d. T. III. fols. 105–107

reputation across Europe. The market viability of the city's nurseries also made a deep impact on the Hungarian, his detailed report to the *Directio* making special note of the quantities of fruit already making their way to tables in early spring: "the grapes early budding causes the traveller to marvel in spite of himself; on this I hope Lehrmann, who has spent more time here and is versed in this subject, has not failed to communicate his observations".[310] During his stay in the city Gerics also contacted Jan Arie van Eden who not only welcomed him, showed him his garden, and consulted with him at length, but also hosted him with refined elegance. From Haarlem, the Hungarian returned to Amsterdam, making use of a letter from Harbaur to gain an audience with the physician Gerardus Vrolik, as well as calling on Jacob Pompejus Hoeufft, state councillor for agricultural affairs. In his journal, he wrote of the latter: "I found him all good-heartedness and readiness to help, though my letter of introduction came from a person nowhere near as eminent as him who presented me to the former".[311]

The first order of business the following day was an inspection of the public agricultural collection, which featured pieces ranging from models of Far Eastern buildings to Dutch agricultural implements. Gerics, accompanied by Hoeufft, noted even a "dynamometrum such as is found at Keszthely" among its holdings. This was followed by the ornithology and zoology collections, and the *Academia Felix Meritis*, an institution serving the development of middle-class crafts and trades that sponsored evening readings and debate events. The experience left him in doubt, however, and he departed regarding it as more an entertainment spot for dilettantes than anything else, an opinion shared by his companion. He had similar reservations about Amsterdam's hospitals, which—though clean—reeked of tobacco smoke, while he found the Pesthuys to be "a hodgepodge of the incurable, the infectious, and the insane"'. He viewed the

[310] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on his Travels Abroad 1819–1825] fols.123–123v
[311] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/3 fol. 45v

orphanages as clean and adequately supplied, but noted that they were crowded, with four occupants to a bed. Garnering a degree of admiration were the city's "'penal houses", both for the manner in which men and women were separated, and for the sorts of labour to which prisoners were put, although no comparison to the practices in other countries was forthcoming. The city's stock exchange also earned a mention in the Hungarian's writings, having been revived in the wake of Amsterdam's independence from France.[312]

Although he would have liked to have travelled to destinations beyond Amsterdam, he was forced instead to turn back to Brussels, as the Austrian ambassador to whom he turned for assistance would provide him with neither a passport to England, nor an extension of his current travel document. It was this turn of events, therefore, that determined which destinations would make up the remainder of his journey,[313] and the first stop on the amended itinerary, it turned out, was Utrecht. Upon reaching the famed university town, Gerics reported to the *Directio* primarily with regard to the institute of veterinary medicine, which, he noted, was currently under construction and had furthermore been installed in a ruined mill building, now available due to the "cheaper nature" of the English textile industry. In Cornelis Honing, his contact there, he saw something of an exemplary figure. Originally a student of medicine, Honing—who seemed "scarcely sixteen years of age"—had studied how to "sculpt in wax" and created numerous props, including various skeletons, for the institution.[314] The university's natural science collection, on the other hand, he found somewhat lacking, with the '*museum physicum*' featuring too many older specimens, though he did spot two intriguing "mill models, used for drying out plots of land that have become inundated with water". Gerics clearly distinguishes between the two types of mills by pointing out that "one of them drives water from the

[312] Ibid., fol. 51v-54

[313] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 124

[314] Ibid., fols.125v, 415v; Babke Aarts: Een tal van doelmatige praeparaten. De onderwijscollecties van 's Rijsk Veeartsenijschool 1821–1840, *Argos* 47 (2012) No. 5, 220–223.

parcel using an Archimedes' screw, the other using blades affixed to a wheel. Such mills are brought into action by the wind and can be distinguished from grinding mills from afar, as the former are large, while the latter are small".[315] That the university offered lessons in physics in the vein of French physicist and mathematician Jean-Baptist Biot the Hungarian took as an indication of a certain receptiveness to the application of foreign models. To his considerable irritation, he was given no proper direction at the "*museum medicum*", known for its collection of syringes, nor would surgeon Hendrik Johannes van Houte do him the courtesy of accompanying him on the tour or providing him with an adequate guide; he did, however, attempt to persuade his guest to supply a written comparison between the local collection and that of Osiander at the University of Göttingen, a request Gerics sought understandably to sidestep, saying: "the objective of my journey is the broadening of knowledge, not its flaunting by scholars through their disputes".[316] This "broadening of knowledge" was not especially substantial at the "clinicum", either: in comparison to his reception in Amsterdam and other Dutch towns, the Hungarian noted bitterly that, with regard to his consultations in Utrecht, van Houte and his other escorts showed more interest in their parting than they did in welcoming a curious and scientifically competent foreigner. This notwithstanding, he found the botanical garden adequate, even if, in his opinion, its winding paths, employed for no better reason than the fact that "English tastes [were] in fashion", were no more practical for a botanical garden than for a vegetable patch.[317] As to the matter of literature, in his report to the *Directio*, Gerics primarily urged consideration of the natural history of the Netherlands by Franque van Berkhey, whose first volume had appeared in 1769, and requested confirmation as to the possible purchase of the entire series. The exceptionally

[315] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 263
[316] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/3 fols. 60v–61
[317] Ibid., fols. 65v–66

high price—some 52-66 Dutch guilders per volume—spoke to the quality of its engravings, colour tinting, and binding.[318]

At this point, taking a route that passed through Breda and Antwerp, Gerics returned to Brussels to await further instructions, though in the end, none were forthcoming—nor did Count Mier, the Austrian imperial ambassador, delude him into thinking he might yet be permitted to depart for England. In mid-July, he met Lehrmann and together the two men inspected the tree-lined lanes recently installed about the perimeter of the city, the botanical gardens, and the city's technological collection. For his part, Lehrmann took a side trip to Ghent, where he made the acquaintance of university gardener Jean-Henri Mussche.[319] In addition to the sights previously noted, both men revealed an affinity for the environs around Brussels, in particular Laeken, with its royal castle and grounds belonging to the pre-1790 governors of the provinces under Habsburg rule, Prince Albert Casimir of Saxony, Duke of Teschen, and his wife, the Archduchess Maria Christina of Austria.[320] Of course, the two also took the occasion to visit Leuven, where Harbauer, the physician to whom they had previously received a letter of introduction, supplied them with a letter addressed to natural scientist Joseph Franz Adelmann, who was able to show them the university's botanical garden and library. According to Lehrmann's notes, they were also fortunate enough to view the exquisitely landscaped English garden in nearby Wespelaar through the intercession of Henriette Marie d'Olmen, wife of Jean Charles Laurens, Viscount of Spoelberch. Another equally fortuitous connection came in the person of physician and agriculturist Jan Baptist van Mons, who maintained contact with virtually every worthy physicist and chemist of the age. It should be noted, however, that in his report

[318] The expanded original work published between 1805 and 1811: Johannes le Francq van Berkhey: *Natuurlyke historie van Holland*, 6 vols., Amsterdam, Trap, 1769–1778. MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 142

[319] MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 130. d. T. III. fol. 110–111

[320] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 265

to the *Directio*, Gerics remarked negatively on his impressions of van Mons: "of his garden I must admit that I have never seen one uglier or less orderly. His company and conversation, however, were both greatly constructive, and greatly instructive, or would have been if he had bragged less".[321]

Afterwards, the two departed in different directions, Lehrmann proceeding from Brussels toward Aachen to view the English garden and springs of Burtscheid in the city's immediate vicinity. This was followed by Mainz, where he posted to the *Directio* both a number of model wine presses, and the seeds he had collected in the Netherlands. Of the highland vineyards around Mühlheim in the region of the Mosel, the deservedly famous producers of Piesporter wines offered experience with vine life expectancies and planting techniques. Additional destinations included the gardens of Prussian trade advisor and landowner Christoph Philip von Nell in Trier and those of Luxembourg, regarded as the "key to Holland" ("Schlüssel von Holland"), which at the time was occupied by Prussia. The latter, it would seem, he found both small in size and largely uninteresting ("Auβer kleiner Hausgärten hat es nichts bedeutenes"). According to his journal, he should at that point have returned to Frankfurt am Main, as his instructions mandated, for the primary purpose of making arrangements to send 9000 vine stocks to Keszthely in October.[322] The journal also notes an important technological observation, namely, that the glucometer (referred to in his remarks as a "Gleuco-oenometer") was as absent in Champagne as it was in Hungary. In Haut-Rhin, he visited the vineyards of Joseph Bernard and August Baumann on the left bank of the Rhine, then he called at Toul and Reims. After meeting Jean-Rémy Moët, Lehrmann took a route that led through Laon, St. Quentin, Cambrai and Mons, and on to Brussels where he again met up with Gerics.[323]

[321] Ibid., fol. 140; MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 130. d. T. III. fol. 123v
[322] MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 130. d. T. III. fols. 111–114
[323] Ibid., fol. 114–118

When Lehrmann left Brussels, Gerics took to the road again as well, returning to Amsterdam on a course that partly coincided with his previous route through Antwerp and Utrecht. This time, in Utrecht he managed both to gain admittance to the university library, and to introduce himself to anatomist Jan Bleuland. In Amsterdam, he attended social events held by Bavarian consul Johann Christian Wächter, learned how to salt and store Dutch herring, and, according to his journal, came to the decision—based partly on a conversation with his former teacher, Piarist monk Károly Deáky—that a visit to the northern provinces might prove instructive, if not for their unique lifestyle, then for the dairy processing techniques used in the town of Edam. As it turned out, there was also considerable knowledge to be gained on the distillation of spirits.[324] The route led through Delft, Schiedam, and Rotterdam. General observations associated with this leg of his journey focused in particular on matters of cleanliness. The troughs in the dairy barns, for example, were washed out daily, and the animals' skin was "scratched every day, as is a horse's at home". Naturally, such practical experiences were paired with extensive reading and the information gleaned from books he had acquired, all of which he reported home, especially in reference to the forthcoming journey to England. In total, the *Georgicon* professor procured 25 different books during this part of the tour.[325]

In a letter dated 4 July 1821, Gerics offered his sponsor some detailed reflections on the specifics of the count's instructions, essentially that—given the letters of introduction at his disposal—he might discuss his plans for proceeding to England with Prof. van Marum in Leiden. Ultimately, however,

[324] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 269–271; OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/3 fol. 82–83

[325] Gerics's English language books are Johann Christian Fick: *Praktische Englische Sprachlehre für Deutsche beiderlei Geschlechts*, 13th ed., Erlangen, Palm und Enke, 1820.; Idem: *Elegant Extracts: or Useful Entertaining Poetry, Selected for the Improvement of Young People*, Erlangen, Palm und Enke,1804. Specialist books relating to Gerics's later travels include Karl Knobelsdorf: *Ueber die Pferdezucht in England*, Berlin, Rücker, 1820; Huzard, Jean-Baptist: *Médicine vétérinaire*. Bruxelles, Remy, 1820.; Graf von Röttger: *Bemerkungen über die englische Pferdezucht mit Beziehung ihrer Grundsätze auf die Veredlung des Pferdegeschlechts in übrigen Europa*, Braunschweig, Vieweg, 1820. MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819-1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 121–121v

he proposed a second course of action, originally suggested by Harbauer, whereby he would head first for Europe's famed institute of veterinary medicine in Alfort, France, and then cross the Channel to England from there. This suggestion notwithstanding, Gerics ended up pursuing a different course: upon procuring his passport, he joined Lehrmann, who had just returned to Brussels, and the two departed for England together. In Ghent, their first destination on the way to the Channel, they viewed the university's botanical garden and the "*Museum Physicochemicum*", whose collection focused heavily on optical devices. Of those teaching at the university, they conversed with the German-born chemist Johann Karl Hauff and theologian and councillor Vinzenz Joseph Delbecque. Passing next through Lille, where they inspected the first operating semaphore telegraph machine, their observations had less to say about regional farming than about the ubiquity of the windmill, which the locals used not only for grinding, but also, indeed, most frequently, for pressing oil.[326] Taking a coach through Dunkerque to Calais, they boarded a steam packet boat, and crossed the Channel to England on 16 August 1821.

[326] MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 130. d. T. III. fols. 126–126v; OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/4 fol. 6

Chapter 5

A Tour of England and Scotland: Encounters with Scientists, Farmers and Industrialists

During the passage to England, Gerics became acquainted with an elderly gentleman, who was so surprised to meet a foreigner—let alone a Hungarian—who could quote James Thomson's patriotic poem that called Britain the "Island of Bliss" that he invited the two *Georgicon* professors to join him at a hotel in Dover and paid for their room and board. The unexpected gesture is described in Gerics's journal with a certain degree of wonder: "Let it be said that, here, in Britain, rather than a cold shoulder, I was given the benefit of the doubt—even by he who should otherwise have had nothing to do with me".[327]

The trip to London also made such an impression on him that on 31 August he reported to Festetics: "this environment so captivated me that from the first moment, I found I could hardly wonder at the Anglomania exhibited by others who have passed through here."[328] Upon reaching London, they first registered themselves with the "Alien Office", then immediately reported to the Austrian Imperial Embassy, where the Chief Consul, Baron Karl Ferdinand von Moser, furnished them with a letter of introduction to the merchant Henry Oswald Weatherley, a contact known to Festetics via his cousin Count István Széchenyi. A year prior, on 4 August 1820, Weatherly had sent a catalogue of equine grooming and farrier's equipment through Trieste to Keszthely, while according to Gerics's annotated diary, the British tradesman would also turn up

[327] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/4 fol. 10v; Count György Festetics's library also conatined James Thomson: *The Four Seasons, and Other Poems*, London, Millan and Millar, 1735; Kurucz: *Keszthely grófja* [Count in Keszthely], 271.

[328] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 426

at the Festetics estate some time later, accompanied by the son of London solicitor and member of parliament Richard Wilson.[329]

The procedure in London mirrored that described previously, beginning with a visit to the banking establishment of Nathan Mayer Rothschild to redeem a letter of credit in accordance with instructions received in the interim. In the manner of a good anecdote, he was guided on the way by a young German native who, after blithely correcting the Hungarian's literary German to reflect the English pronunciation, pointed him to the building in question:

> "When I remarked that—even if the number over the gate corresponded to that indicated in my letter—the grimy black wall could hardly be what I sought, he replied that inside it would be a different matter entirely. And so it was. Within the courtyard it was all light and opulence, tho' the brick wall outside had been blackened by coal smoke".[330]

Having verified his status as an employee of Count László Festetics in need of cash, he was promptly led by one of the bank's officers to a cashier and, in a matter of mere minutes, was presented with the sum of two hundred pounds without having to wait at length for his turn to come in the company of the bank's numerous other clients.

In his report, Gerics recounts having met Festetics's old friend Richard Bright within days of his arrival: "the doctor, being in London, promised to aid me in everything". At the same time, the Hungarians, guided by Weatherley, were taken on a tour of the stables of Imperial Ambassador Prince Pál

[329] MNL OL Festetics Lt, Növénytermesztés, vetésforgó, műtrágyázás, talajvizsgálati jegyzőkönyvek 1799–1940 [Crop Husbandry, Rotation of Crops, Articial Fertilization, Records of Soil Probes 1799–1940], P 275 139. d. VII. 113. fol. 23; OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/4 fol. 21; Unfortunately, the relevant class of papers (FO 83) that includes the registry of "Alien Arrivals" at the National Archives (Public Record Office) in Kew has survived in incomplete form, with the section containing the entries for Gerics and Lehrmann missing.

[330] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/4 fols. 21v–22

Esterházy, as well as a carriage house and a slaughterhouse. Taking advantage of a letter provided by Van Mons, the two also made the acquaintance of natural scientist Joseph Sabine, Secretary of the Horticultural Society, from whom Gerics hoped to solicit letters that would gain them audiences with Lords Bedford, Egremont and Guilford. If things went as planned, he would remain with Lehrmann in the vicinity of the capital until 10 September, then cross into Ireland, followed by Glasgow, Edinburgh, and York, before finally returning to London. His report of 25 September, therefore, described parks and "botanical and commercial gardens" surveyed during the period ending in mid-September, the primary observation being that "English parks commend themselves with their natural puerility [simplicity—G. K.], the greatest care therein being taken of their lawns, with particular reference to the more conspicuous locations". To orientate himself, he of course made use of a travel guide, indicating in his 11 September report to the *Directio* a reliance in this regard on the popular work of Samuel Leigh.[331]

Showing them round the royal botanic garden was gardener Franz Andreas Bauer, a German from Feldsberg, (present-day Valtice, Czech Republic). Later, in Kew, a district in the London Borough of Richmond upon Thames, the two also had the opportunity to converse with the director, Scottish botanist William Townsend Aiton. Gerics's revised journal indicates that some of the names of the plants seen there were to change in years subsequent: "it was here that I saw my first hortensia, which was first called *hydrangea*, but which has taken its more recent name from the Princess of Devonshire [Georgiana Spencer—G. K.]".[332] In the botanical garden of Chelsea, they were guided by William Anderson, the garden curator, and it was here that they met

[331] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 145–147v, 426v–427. The volume, still to be found in the former family library is Samuel Leigh: *New Picture of England and Wales*, London, Clowes, 1820.

[332] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/5 fol. 84; Latin name: *Hydrangea arborescens*, or "smooth hydrangea".

with Austrian botanist Heinrich Wilhelm Schott, a gardener of the Imperial Palace of Schönbrunn, who had participated in a collecting expedition to Brazil at a younger age. Indeed, Gerics's growing circle of acquaintances was much advanced by visits to other elegant private gardens and buildings during his stay in London, resulting in an eventual tour through Fulham's Craven Cottage at the side of one Richard Wilson, an affluent London solicitor under the wing of one no less prestigious person than the Duke of Northumberland. The banquets held there were regarded as elite events in London social life.[333] Similarly important, however, was his visit with Lehrmann to the nursery and seed company of Whitley, Brames & Milne Co., founded by one Reginald Whitley, who had moved to Fulham in 1810.

After the seed company, the two Hungarians proceeded to another district of London known as Hammersmith to view gardens oened by Scotsman James Lee, operated as an independent property since 1818 and known for its marketing of three hundred different varieties of heather (*ericaceae*). Similar destinations were gardens owned by Archibald Thomson at Mile End, which cultivated different varieties of magnolia, and of the German-born Joachim Conrad Loddiges in Hackney, known for having transported numerous Mediterranean and subtropical plant species to British shores. [334]

In terms of London's larger parks, the pair deemed Hampton Court, Cumberland Lodge in Windsor, St. James's Park and Regent's Park as all equally important subjects of study. At Hampton Court, their guide was Royal Gardener William Padley, while at Windsor they strolled from beginning to end in the company of Aiton, their letter of introduction to whom had come from Sabine. The tour included the famous Long Walk located below the castle, and even Frogmore House, "a veritable field of Flora, where hardly a rare or

[333] MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 130. d. T. III. fols. 130v–132; OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/5 fols. 8–9
[334] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 152–153v; MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 130. d. T. III. fols. 132v–134

beautiful flower that graces the open country under England's docile skies can be said to be absent".[335] Following Lehrmann's departure on 14 September 1821, Gerics, during one of his walks along the banks of the Thames, made the natural decision to visit the park at Chiswick House as well. The manor was the favoured summer residence of William George Cavendish, Sixth Duke of Devonshire, and featured a tree-lined avenue of Lebanese cedars Gerics regarded as unique. The neighbouring village of Brentford he found intriguing for its methods of distilling brandy and fattening cattle, while the smart little village of Smallbury Green, near Isleworth, he added to his itinerary:

> "To the west, very nearly along the great western road, lies Springgrove, which was the summer residence of the renowned Sir Joseph Banks, great favourite and patron of scholars, whom, it should be said, I, with my letter, was greatly pained not to find among the living. The building is of unplastered brick, though inside it is both luxurious and comfortable. The gardens belonging to the house are complete with foreign—particularly Dutch—trees and shrubs".[336]

Making his way west, Gerics naturally found himself impressed with the grounds of both Osterley Park, then the property of Lord Jersey, and Syon House, the imposing manor house of the Duke of Northumberland: "both parks are large and splendid, with water, trees, decorative bushes, and magnificent lawns, accentuated by an elegant mansion".[337] In Twickenham, he sought out the former residence of the English poet Alexander Pope, a well-known figure among educated Hungarians at the time, although he noted admirers "will only find a remnant of Pope's residence. Lady Howe, the present proprietor of Pope's house, has razed it to the ground in order to halt the unending flow of

[335] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/5 fol. 27v
[336] Ibid., fols.13–14
[337] Ibid., fol. 14v

bothersome pilgrims and had a new one constructed in its place at distance of one hundred ells". Neighbouring Teddington represented another important destination for the Hungarian traveller, Strawberry Hill being the original place of residence of "the eccentric Lord Orford", a reference to the late Horace Walpole, whose home had been "constructed wholly according to the Gothic taste and furnished similarly inside, the park, too, being embellished by a Gothic chapel". Curiously, the writer's heir, Anne Seymour Damer, was required by her deceased friend's will to maintain the park and all the furnishings in their original form.[338]

Other places surveyed included Richmond Park on the southern bank of the Thames and Epsom, memorable for its "annually held running of the horses". In Battersea on the right bank of the river, he made the acquaintance of engineer Henry Willey Reveley, designer of the village windmill, whose "horizontal wheel [drove] four stones". As the Hungarian found the idea useful "in lands where water mills are absent for a lack of rivers" until such time as "steam mills come into fashion", a "model and sketch" of the mill was commissioned for the *Georgicon*. The man charged with its construction, an engineer by the name of Olithus Gilbert Gregory, was introduced to Gerics by Arthur Aikin, a chemist and minerologist who served as Secretary of the Society for the Encouragement of Arts, Manufacture, and Commerce.[339]

During the month of September, Gerics only made one prolonged excursion from London: a proper letter of introduction in his possession, he called upon Petworth House in Sussex, residence of the third Earl of Egremont, which not only boasted an impressive park, but was also "held to be the best

[338] Ibid., fol. 15v

[339] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819-1825 [Reports by Pál Gerics on his Travels Abroad 1819–1825] fol. 465v; Ray Desmond: *Dictionary of British and Irish Botanists and Horticulturists*, Rev. ed., London, Taylor & Francis, 1994, 6. For a molinological analysis of the documentation, see: György Balázs: Henry Willey Reveley szélmalom tervei a Festetics család levéltárában [Henry Willey Reveley's Windmill Designs in the Festetics Family Archive], in K. Szende – J. Kücsán (eds.): *„Isten áldja a tisztes ipart". Tanulmányok Domonkos Ottó tiszteletére* ["God Bless Our Great Industry": Studies in Honour of Ottó Domonkos], Sopron, Soproni Múzeum, 1998, 303–322.

farm in the area", in the main for the effective horticultural endeavours of the earl's tenants and the fine herd of horses found there. In his journal, Gerics offered a copious account of his encounter with Lord Egremont, whose hospitality he enjoyed in the company of the Duke of Richmond and his younger sister. Indeed, from Petworth, he then headed for the duke's own Goodwood House, following up his visit there with Brighton before returning at last to London. At the same time, reporting to Festetics on 25 September 1821, he indicated a change of plans with respect to the notions he had entertain previously: "leaning toward the better advice of others, I will be reversing my route and, in consequence, proceeding first to the estate of Lord Bedford in Woburn, from there to Cambridge, and so onward".[340]

Among scientific associations based in London, those Gerics deemed worthy of a visit were the Horticultural Society, the Society for the Encouragement of Arts, Manufactures, and Commerce, the London Institution, the Royal Institution, the London Veterinary Medical Society, the Medical and Chirurgical Society, the Royal Society, the Society of Antiquaries, the Royal Academy, and the Linnean Society. Of the many eminent scientists appearing in his journal, the first to be mentioned was Karl Ludwig Giesecke, a minerologist Gerics met in the embassy office of Prince Pál Esterházy who had spent seven years in Greenland during the time of Napoleon's Continental Blockade. The journal also notes that when Esterházy "was in Ireland [with King George IV], there was also with him a 'Mr. Giseke', whose grandfather was born in Hungary and bore the name Kőszegi".[341]

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[340] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration] P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 428v–429v; OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/5 fols. 91v–94

[341] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/5 fols. 19v-21; Patrick N. Wyse Jackson: Sir Charles Giesecke (1761–1833) and Greenland: A Recently Discovered Mineral Collection in Trinity College, Dublin, *Irish Journal of Earth Sciences* 15 (1996), 161–168.

For the duration of his London experience, Gerics strove primarily to expand his knowledge of veterinary medicine. According to a report dispatched to Festetics: "in the field of hippiatrics, I saw much that was new, as the nature of the climate and the unsparing treatment of horses give rise to many infirmities". One example was a neurosurgical technique used by William Sewell—whom Gerics met personally—for the treatment of lameness, though the Hungarian, like many other critics, opined that the procedure might, in fact, "only be used where no organic problem [had] yet developed". Another remedy to capture his attention was that employed by James White against tetanus,[342] although as regards the proportions of opium, camphor and turpentine used and necessary period of application, he was unconvinced as to "whether any horse [would be] worth the price of such a cure". In his journal, the *Georgicon* professor invested similar energy into an account of the circumstances surrounding the founding of the London Veterinary Medical Society, located in the district of Camden Town, including a report on the activities of William Moorcroft, Edward Coleman, and Lyon-trained Charles Vial de Saint Bel.[343]

Some experiences were less straightforward: upon participation in the meetings of the Society for the Encouragement of Arts, Manufactures, and Commerce, for example, his thought was that "it is not a good idea to approach the viewing of any object of interest with an internal bias". The feeling was similar when visiting famed Eton College, described in his journal in the following terms:

> "The buildings of the college and church form two rectangles, such that the members of the college live in one and the teachers and provosts in the other; the library is also situated in the latter of these. The side connecting

[342] Gerics subsequently purchased White's comprehensive book for his employer's library: James White: *A Treatise on Veterinary Medicine*, 4 vols., London, Longman, Hurst, Rees, Orme and Brown, 1820.
[343] Ibid., fol. 42; MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 425v-426

> these rectangles is the provost's lodge. It evokes quite an unpleasant feeling in the visiting stranger to glimpse all the broken windows and decrepit desks, together with the ugliness to be seen in the school's rooms and on its filthy, scratched and defaced walls; such austerity—in contrast to its appearance from afar and to other spaces that are decidedly pretty—I did not in the least expect to see, but I must regard my wonder at that as minute in comparison to that experienced at spying four podiums in one of its auditoriums, and three in the other. Although the school's students be divided into seven classes, they teach in just two rooms. They tell me that the classes used to be separated one from the other by great curtains, but that it has not been so for a long time, so that now there are multiple classes and instructors in the same room, each paying no attention to the others. The school's laws are set out in the church, school, corridors, homes, and city in the form of stone plaques that govern how students are to behave at all times and in all places, the violation of which rules is harshly punished, frequently by means of a birch switch, but in any case administered by the head master, whether the perpetrator be a youngster in the first form or an adolescent in the seventh. In token of this severity, the rules conclude with the following words: *extra collegium absque venia exeuntes, tertia vice expellimus*".[344]

After Eton, Gerics made the trip on foot to Slough to meet with William Herschel, the astronomer responsible for the discovery of Uranus, and his sister Caroline, the first woman to receive a gold medal from the Royal Astronomical Society. From there, his route took him through Cranford, home of the first of the veterinary and farrier's workshops founded by Bracy Clark. The equine veterinary specialist was an important contact, not only because his work was

[344] "He who leaves the college without permission shall be expelled upon the third offence". OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/5 fol. 28v

already known to Gerics through various specialist books, but also because, as the Hungarian stated in his first report home from London, he had sent to Keszthely a "steel tablet expounding shoe" of the Englishman's own invention, along with two other specialty shoes: "from New Market (*sic*), used on the hooves of running horses and called a 'racing plate'".[345] Another important contact was John Field, a royal veterinarian who "spent every day in the equine hospitals of highest repute in the city" and whose farm in Kingsbury Green Gerics also visited.

Further natural destination for Gerics's purposes was Greenwich Hospital in south-east London, though his revised journal indicates that what he found there was not so much a hospital in the original sense of the word, i.e. a medical facility providing services or therapies; rather, the impressive building with multiple wings served merely as an orphanage and a home for elderly and disabled seamen. Other destinations in south-east London included both the observatory, and the district of Woolwich, "famed for its naval academy", although as his writings note, "I was only able to inspect [the school's] expansive buildings from the outside".[346] As a trained physician, it was only natural that he should make inquiries as to the institutional character of local medical education, and although his reports to the *Directio* do not describe his experiences in this regard in any great detail, his diary was full of remarks on what he considered the peculiar state of affairs surrounding the Royal College of Physicians. Given that there was no medical university yet in operation in London during that period, the authority of the British professional body was deemed definitive in all matters of health care in the city:

[345] Ibid., fols. 30v–31; MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 424.
[346] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/5 fols. 76–77

> "none may lawfully practise healing in London or within a radius of seven miles thereof, nor bear the title of doctor before the body public, be he not either a fellow of the Royal College, or have obtained a licence from there. To become a fellow, one must complete a course of study at a British university to become a doctor or bachelor of medicine. To obtain a licence, it is required that one produce a certificate of two years' advancement at Edinburgh, Glasgow or Dublin, and then demonstrate one's competence by sitting an examination before the London College".[347]

While the practice and training of surgeons, Gerics found, proceeded within the organisational framework of—or in subordination to—the Royal College of Surgeons, a young doctor or surgeon could, "in the great hospitals of London, not only acquire knowledge of every sort of infirmity, but also participate in the practical side of healing, being guided in this difficult vocation by great physicians and surgeons". Although professional training could cost as much as fifteen to twenty pounds a semester, in Gerics's own experience and opinion—"at least according to such lessons as I was able to attend personally"—in comparison to the situation on the continent, a British medical education was both effective, and more efficient, as it did not rely on what he termed "reading or dictation".[348] Of course, Gerics also visited the Royal College building in Lincoln's Inn Fields and made an in-depth study of the rich and varied collections at the Hunterian Museum.[349]

For reasons that require no explanation, Gerics's agenda included a tour of all major hospitals in the British capital—St. Bartholomew's, St. Thomas's, Guy's Hospital, Middlesex Hospital, London Hospital, and St. George's—giving detailed account in his journal of both the manner in which each was

[347] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/4 fol. 125v
[348] Ibid., fol. 126v
[349] Ibid., fols. 127–128

operated, and any practical training offered. Although he was particularly impressed with the remarkable building of St. Bartholomew's with frescoes by artist William Hogarth, the detail he felt most compelled to elaborate upon pertained to the arrangement of its rooms:

> "The rooms are quite large, clean, bright, and free from all unpleasant odour—even if there is a conspicuously large number of patients in each one. Only the portion in the attic where the hapless slaves of Venus reside represents an exception to this observation. In terms of treatment, there are three physicians, three surgeons, and again as many assistants to attend patients here, the latter being guides to the junior doctors who walk the hospitals. For the benefit of these, there is also an amphitheatre in the newest of the buildings"."[350]

Giving lectures at St. Bartholomew's were John Abernethy in dissection, physiology and surgery; Clement Hue in chemistry and "*materia medica*"; and Robert Gooch in obstetrics. Regarding the various symptoms of patients at St. Thomas's Hospital suffering from sexually transmitted diseases, he wrote, "also horrifying to see was that there were multiple pre-adolescent children here with palates absent and nasal bones eaten away". Guiding the *Georgicon* professor and two Italian guests through the hospital and associated collection was theatre surgeon Astley Cooper. Of the collection at Guy's Hospital, which he also had the opportunity to view, his journal notes some of the more interesting illnesses represented, such as psoriasis ("scaly tetter"), along with some of the subjects taught and names of physicians. Lecturers at Guy's included William Allen for medical chemistry, John Millington for physics ("Physica, or as they say here, experimental Philosophy"), John Haighton for physiology, Charles Bell for "the constitution and illnesses of teeth", James Cholmeley for pathology and

[350] Anatomical theatre. Ibid., fols. 130–130v

pharmacology, and James Blundell for obstetrics. Gerics's tour of medical training facilities in London extended, too, to the city's famed anatomical theatres ("teathrum [*sic*] anatomicum") in Windmill and Blenheim Streets, the former of which commended itself in that Sir Everard Home, although a doctor at St. George's Hospital, held lectures for the hospital's interns there for free.[351] The Hungarian's estimation of specialist medical training in London in general was extremely positive, as in his observation, "novice physicians [enjoyed] a comparatively broad range of opportunities for refining both their scientific knowledge, and practical skills". Hospitals he visited in addition to the above naturally included St. Luke's and Bedlam (originally *Bethlehem* and then abbreviated to *Bethlem*,) Asylums, as well, for which tours he was accompanied by medical professor Karl Heinrich Dzondi from Halle under the guidance of William Lawrence.[352]

As regards London's various associations and societies, Gerics recalled Joseph Sabine, secretary of the Horticultural Society—mentioned earlier as one of the objectives of Gerics's initial instructions—with the utmost gratitude, both for his various interventions, and "for his personal and written recommendations with reference not only to my time in London, but to the whole of my journey through England and Scotland". Not to be left out in this regard, of course, was the Board of Agriculture, whose founding circumstances and various activities received extensive treatment in Gerics's redacted journal. There, he cites board chairman Sir John Sinclair as having pronounced the ploughshare—somewhat colourfully—as "the cornerstone and principal pillar of all human social life [i.e. of society]".[353] Further sites he visited in relation to local agriculture included the city's larger markets and places involved in the domestic trade of livestock

[351] Ibid., fols. 134v–135
[352] Ibid., fols. 135v–138
[353] Ibid., fols. 143–145v.

and fodder, the Smithfield market being an example described in particular detail.[354]

On 15 October, 1821, Gerics dispatched a report to Festetics, addressed not from London, but from Liverpool. The journey northward from London had taken him through St. Albans to his first major stop, Woburn Abbey and the model farm of the Duke of Bedford, where he found himself personally received by the duke himself. In the course of his discussions with his host, the *Georgicon* professor described the purpose of his visit in terms filled with flattery: "I wished to pay my respects to Your Lordship first, as Your Lordship's name is widely known in my homeland and an object of general esteem". Although his host deflected the praise by saying, "It is my friend Coke who is held in the highest regard throughout the country", he nevertheless gave the immediate order that his estate officers should lend his Hungarian guest their fullest assistance. The journal passages relating to this visit include a reference to George Sinclair, the duke's gardener, whom Gerics claimed had requested an analysis of various feed grasses from Humphry Davy.[355] The Cornish chemist had released the results of the endeavour in a well-known specialist book on agrochemistry, published several years prior, which had been made available in Hungarian through the efforts of former *Georgicon* professor Ferenc Pethe.[356] As regards novelties at the duke's model farm, Gerics also wrote of the water mill adjacent the mansion, the water for which was channelled through underground pipes from an artificial lake lying at a higher elevation: "inside the mill, the water spurts from a vertical pipe, plunging down from there to drive the wheel", or, in times of water shortage, "can be brought into motion by cattle,

[354] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [The Reports of Pál Gerics on His Travels Abroad 1819–1825] fols. 170–176v

[355] The Duke of Bedford's employee, soon after he met the *Georgicon* professor, published his book: George Sinclair: *Hortus gramineus Woburnensis, or, An Account of the Results of Experiments on the Produce and Nutritive Qualities of Different Grasses and Plants*, London, Ridgway,1824.

[356] Pethe: A földmívelési kímia gyökerei [Elements of Agricultural Chemistry].

transforming it from a water to a tread mill".[357] Moving on from Woburn, Gerics made his way to the New Market area and the estate leased by William Crockford, a gentlemen whose considerable wealth came from horse racing and the organisation of games of chance. His remarks on Crockford's character, however, were not particularly flattering: "I saw nary a book in the entire house, nor did his speech permit me to deduce any scientific education". As for the estate itself, he had occasion to observe the use of an abundance of child labour, applied to the "setting of wheat" into holes prepared in the ground using a planting stick, or "dibble".[358]

The next item on his itinerary was to be a model farm owned by Sir Thomas William Coke in northern Norfolk, an enterprise that was well-known throughout Europe; on the way, however, he naturally stopped off in Cambridge. As he crossed the county border into Norfolk, his immediate impression was of a place of conspicuous order, with parcels partitioned by hedges, artificially arranged groves of trees, and the use of a quadruple cropping system. The further north he proceeded, however, the worse soil conditions grew and the more prodigious the number of hares that covered the countryside. Nevertheless, his principal destination in England's easternmost county, Holkham Hall, proved an imposing sight, the manor and surrounding park both leaving a deep impression. Having produced the letter he carried, he was immediately received and served refreshments by Coke's wife. Several minutes later, they were joined by Coke himself. Once they had exchanged pleasantries, Coke ordered horses saddled, by which means he gave Gerics a personal tour of his estate. On both the lands farmed by tenants under the usual twenty-one year lease, and those under Coke's own management, crop farming dominated as the

[357] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 433-433v; OSZK Kézirattár Quart. Hung. 3727/5 fols. 111–116

[358] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 157–157v; OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/5 fols. 142v–143

primary mode of land use, in general subject to a crop rotation scheme of six or four courses. Gerics's report sent home made especial reference to the equipment employed: "It was at Holkham Hall that I saw the largest number of different types of agricultural implements, though in the matter of acquiring them in reduced size—in models—I shall first have to consult with Weatherly".[359] Another important contact made on the Coke estate was that of agronomist Francis Blaikie, then in Coke's service, who viewed the ground-feeding of turnips in relevant sections of the crop rotation system as particularly useful. In another remark, Gerics noted that while Woburn Abbey had previously been considered the most fashionable place in all of England for summer sheep shearing, that honour now went to Holkham Hall.[360]

Having completed his tour of the Coke estate, Gerics forayed further northward toward Leicestershire to seek out a farm that had been owned by Robert Bakewell, where he studied the breeding of the widespread Dishley and Lincolnshire sheep for which the late, great expert in animal husbandry was famous. Subsequent destinations included Langley Priory and two country houses in neighbouring Derbyshire: Chatham House and Hardwick Hall, where the primary purpose was more to enrich his aesthetic vocabulary than to gain experience applicable to agricultural pursuits.[361] After Derbyshire, the Hungarian set his sights on Lancashire, stopping on the way in the textile industry town of Manchester and port city of Liverpool. Although the former came off as something of a sombre affair, he could not help but make a comparison in his journal between its regulated network of streets, its buildings, and—above all—its dynamically developing factory life and the backward state of Hungarian industry. His interest in Liverpool, on the other hand, centred

[359] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/5 fols. 151–152; MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 431v

[360] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/5 fols. 152v–152v

[361] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 162–162v

primarily on its role as the terminal for a well-developed network of docks, warehouses, and navigable inland canals that facilitated commercial activity in the area, although he also visited the town's botanical garden, the second most important one in England after that of London. John Shepherd, the garden's director, had been the man responsible for the publication of the institution's first catalogue. Liverpool's other claim to his attention stemmed from his opportunity try out, for the first time, a coach which employed "a steam mechanism instead of horses".[362]

Further northward on the road to Scotland, Gerics called on William Liddell, governor of the Lancashire county prison in Preston, who guided him through the building and provided information on the system used for keeping inmates occupied.[363] Still closer to Lanark in the north, he visited the New Lanark property of Welsh industrialist and philanthropist Robert Owen. In Willowbank, near Glasgow, he inspected a dairy farm owned by William Harley, the well-known mineral water merchant and public bath founder, whose stabling methods and processing technology he would describe in detail in a report to Festetics.[364] Glasgow, an industrial city that had experienced a surge in industrial activity following the unification of Scotland and England, proved an important part of his overall experience in that it boasted a university with roots reaching back to the Middle Ages. The day after his arrival, Gerics called on William Hooker, a botanist and university professor who had written a book on the flora of Scotland. Although Hooker's official duties did not permit him to spend any great length of time with his Hungarian guest, he nevertheless

[362] Ibid., fol. 431; OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/5 fols. 182–182v; John Shepherd: *A Catalogue of Plants in the Botanic Garden at Liverpool*, Liverpool, Smith, 1808.

[363] For further details, see: Margaret DeLacy: *Prison Reform in Lancashire, 1700–1850. A Study in Local Administration*, Manchester, Manchester University Press, 1986.

[364] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 433; OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/5 fols. 183v–184; Quart. Hung. 3727/6 fols. 4–11; See also Harley's publication which was subsequently purchased by Festetics: William Harley: *The Harleian Dairy System*, London, Ridgway, 1829.

introduced Gerics to his family, sending him off to tour the city with his father-in-law, a gentleman of Icelandic origin by the name of Millar.[365]

At the city's university, his first order of business was to view the natural science collection formerly held by William Hunter, brother of London surgical collection founder John Hunter. His guide for the occasion was minister and university professor James Couper, who was also the collection's curator. In presenting the material—an assemblage rich in mineral and taxidermy specimens—Couper proved remarkably attentive, as demonstrated by a scene described in Gerics's journal:

> "[Couper] showed me an *opalus lignens*, saying: 'this a very fine specimen [*sic*]; it is out of your country; it belongs to our most remarkable show pieces'; and these were the only words he addressed to me in English; indeed, once Mr. Millar had introduced me as a Hungarian, he then spoke in such terms as: 'Salve mi Domine! Tecum mihi latine loquendum erit: novi enim vos latine optime loqui.' With this, he extended his right arm and, having squeezed both of our hands warmly, saw to his office".[366]

Of course, the university hospital was also a point of interest. Large enough to accommodate 1300 patients, the facility included a separate mental ward run by one William Drury, whose activities earned an especial measure of attention in Gerics's writings. Also garnering a remark in his notes was the warm draught heating system invented by Paul Traugott Meißner, professor at the Polytechnisches Institut in Vienna, which supplied the building with its

[365] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/6 fols. 13–14v; The book in question is William Hooker: *Flora Scotica, or, A Description of Scottish Plants Arranged both According to the Artificial and Natural Methods*, Edinburgh, Constable, 1821.

[366] "Greetings, Sir! I am exchanging words with you in Latin, as it is better I speak with foreigners in this language." OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/6 fol. 17

pleasantly temperate climate. Such positive experiences notwithstanding, he found the city's prison shocking compared to others he had seen, in particular for its placement of women, men, and ten-to-twelve-year-old children in the company of hardened criminals.[367]

After Glasgow, Gerics continued on toward Edinburgh, arriving in the Scottish capital not with letters of recommendation, but—surprisingly enough—with the personal escort of Hooker. Once the two had visited the city's key sights together, Gerics had the opportunity to get to know several of the university's doctors and teachers, including botanist Robert Graham and pathologist James Home. To the Hungarian traveller's great regret, he was unable to meet Andrew Coventry at the university's agricultural department, a body that had been in operation since 1790, as the professor was on a study trip at the time and was only expected back six weeks later. He was, of course, quick to pay visits to the natural history collection and the Highland Society's Veterinary School, where—according to his journal—he enjoyed his first look at several exotic animals, including a musk ox. Personal acquaintances made in the city included physician and botanist James Millar, a member of the Royal College of Physicians of Edinburgh; surgeons Thomas Bell and John James; anatomist Alexander Monroe; and Patrick Neill, secretary of the Wernerian Natural History Society and the Caledonian Horticultural Society.[368]

From the standpoints of both prestige, and the history of scientific networking, however, the most intriguing encounter of Gerics's time in Scotland was that with Sir John Sinclair, whom he recalled in a report to Festetics dated 19 October 1821 as

> "a venerable, respectable gentleman, who sympathised greatly with my endeavours and, fortunately, found me worthy of them, thus

[367] Ibid., fols. 19v-22

[368] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 434v–435; Stewart Richards: Agricultural Science in Higher Education: Problems of Identity in Britain's First Chair of Agriculture, Edinburgh 1790–c. 1831, *Agricultural History Review* 33 (1985), 59–65.

> gladly promising me his assistance. He was happy to hear that Hungarian agriculture had found in Your Lordship a true guardian patriarch".[369]

Sinclair welcomed him into his home on several occasions, inviting him to lunch with his other elite guests and accompanying him personally across the Firth of Forth, along with numerous visits to shops and a number of local factories. Smitten with Edinburgh's intellectual scene, the *Georgicon* professor expressed his wonderment in multiple ways, including a reference in his journal to the city's unusually large number of periodicals—*The Edinburgh Review*, *The New Edinburgh Review* and *Blackwood Magazine*—going so far as to place Edinburgh's print shops and publishing houses on par with those of London.[370]

Having secured a letter of introduction from Sinclair, Gerics then charted a course for Markle, where he called on Robert Brown, writer on various specialist topics in agriculture. Markle was followed by Phantassie, home to a model farm owned by George Rennie. These two locations interested Gerics, in part because of the fallow element included by both Brown, and Rennie in their six-course crop rotation systems since that the costs involved in relinquishing a year's production from the once cultivated section were justified by the overall improvement in soil quality.[371] The inspections in question concluded, Gerics made his way southward through several smaller Yorkshire farms to the area of Newcastle, a region dotted with coal mines. In Benwell, he had himself lowered into a shaft, where he saw, among other things, "several railways: those

[369] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/6 fols. 33–34v; MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 433–435v

[370] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/6 fol. 54v

[371] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 164; A copy of Brown's book on the subject is also kept in the former Festetics family library: Robert Brown: *A Treaties on Agriculture and Rural Affairs*, 2 vols., Edinburgh, Longman, Hurst, et al., 1811.

creations by which loaded carts proceed up and down the mines without the necessity of horses".[372]

The trip southward eventually took him back to Liverpool, where he boarded a steam packet boat for Dublin. This, unfortunately, was forced "back to Liverpool, greatly damaged", after just sixteen hours of being tossed about by rough seas. At this point, understandably, Gerics gave up the idea of making the crossing to Ireland, opting instead to head further southward toward Cheshire, an area he remembered in his report home for its cheese manufacturing. The specific destination in the county, however, was Eaton Hall near Eccleston and the stables of its master, Lord Robert Grosvenor, the first Marquess of Westminster.[373]

Leaving Cheshire, Gerics turned next to the Shropshire village of Coalbrookdale, where he applied himself to the study of a variety of mills, constructed largely—as his notes concretely mention—of cast iron rather than wooden parts. Doubling back northward, he made for Bradford, where he discovered that, despite laws to the contrary, "poor children [stood] at the machines starting at age four and [were] forced to work for up to twelve hours at a time", followed by Birmingham, which he described in his journal as "all fire and smoke due to the magnitude and plenitude of mills, all run on coal". The smoke, in fact, he found to have forced every factory there "to employ artificial lighting, even during the day". Woodstock, by contrast, proved a truly refreshing experience: "Blenheim Park, gifted by the English nation to Duke John of Marlborough as its victorious champion, is considered the most beautiful in all of England". Naturally, his report to the *Directio* also included a brief description of the park's layout, "its charms consisting in its splendid natural scenery, its waterside strands, and the groupings of trees that surround them".[374]

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[372] Ibid., fol. 168

[373] Ibid., fols. 436-436v

[374] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/6 fol. 87; MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 147, 169v;

The next leg of Gerics's journey took him back toward London via a series of traditional centres of knowledge. Of these, a crucial stop was Oxford, where the Hungarian spent a considerable length of time. While covering all the more natural points of interest—i.e. a variety of libraries and museums—he did not make any real personal contacts. His annotated journal does, however, describe the education system employed by the colleges, noting in regard to the usefulness of Oxford university lectures that "in Hungary, the mind is rather suppressed than expanded by the number and variety of subjects, which is why the way of the English is originality, while that of the Hungarian is imitation".[375] Reaching London by the week before Christmas, Gerics applied himself first and foremost to the procurement of models, as well as to attending lectures by Sewell and soliciting letters from Weatherley addressed to various London mills and merchants.

In the meantime, during the initial months of 1822, Gerics, still in London, was attending lectures in veterinary medicine while studying the English wool trade's own special classification system. As per his sponsor's orders, his letter of March 1822 gave thorough account of both regional "divisions" and "subdivisions"—i.e. the relevant breakdown by country and quality class—and variations on the different price categories, all with a view to market opportunities for Hungarian wool. His next set of instructions, as his letter of 2 April reveals, was to be retrieved from Count István Széchenyi, his employer's cousin, who was to arrive in London during the period concerned. They regarded the coming period, in which he had undertaken to survey the island's southern and south-western territories, setting out on a course that would take him through Winchester toward Southampton. Upon reaching the former, he found no institution worth noting, and indeed, no sight beyond the

For more on the industrialisation of England, see the appropriate chapters of Roger Osborne: *Iron, Steam & Money. The Making of the Industrial Revolution*, London, Pimlico, 2014, especially 77–228.

[375] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/6 fols. 95v–103v

city's renowned cathedral. He did note, however, that Winchester was, at the time, suffering from a smallpox outbreak in which even persons previously inoculated had become re-infected. Citing the observations of local physicians, Gerics remarked that it would seem the "cowpox inoculation" only provided protection for a limited period and that it was thus necessary to "repeat the process every tenth year".[376]

In Southampton itself, he found little worth discussing: even Old Sarum and Stonehenge only earned mention in his journal as points of touristic interest. He did, however, study several of the monumental English homes and gardens located in the surrounding countryside, of which a particular priority was Wilton House. In writing about his experience there, he praised the layout of the park with its conspicuous cedar trees, but found the building itself an object of neglect, remarking that to the observer, it presented "but the ruins of its former glory". He did not, however, request admittance to the house at Stourhead—also in Wiltshire—having heard that guests were not given sufficient latitude to view the premises, but he did look over the grounds, noting in particular the Palladian building's outward resemblance to the Pantheon in Rome. In reality, his true mission in Wiltshire was to leverage the letter of introduction provided by London attorney and member of parliament Richard Wilson to gain access to multiple farms where irrigated meadowlands permitted the keeping of larger than average flocks.[377]

In Warminster, he visited the wool mills of Henry Wansey—industrialist, collector of arts and antiquities, and vice-president of the Royal Bath and West of England Society—before proceeding to Bath, which he dubbed the "prettiest and most orderly" city constructed according to the noblest English taste. In his revised journal, he would later make mention of the Parry family, famous for

[376] MNL OL Festetics Lt Központi Birtokigazgatás P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819-1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 451–454v; OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/6 fols. 106v–107

[377] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/6 fols. 108v–117v

having produced several notable physicians, and most particularly of former *Georgia Augusta* student Charles Henry Parry, then working at the city's hospital. In a letter sent to Festetics on 17 July 1822 from Bath, the Hungarian also mentioned an important encounter in Berkeley with "that benefactor of humanity", English physician Edward Jenner, with whom he discussed both stringhalt, i.e. the sudden flexion of one or both hind legs in horses, and the causes of blood in the urine of cattle. What began as a mere consultation developed over the course of these discussions into a deeper professional friendship, resulting in the *Georgicon* professor's gaining permission to copy a letter Jenner had received from the chiefs of five North American native tribes expressing their gratitude for his development of the smallpox vaccine that had assisted them so profoundly in their quest for survival.[378] From Bath he moved on to Bristol, where he visited the Barrow & Wiser Co. wool merchants.

Circling northward to Gloucestershire, Gerics next visited the town of Stroud, where he toured a number of additional producers of felted textiles. These were followed by a study of cheddar cheese making in the area of Wookey Hole, then Wells and Glastonbury, where he neither gained new agricultural knowledge, nor made any notable new acquaintances. In Exeter, he had the occasion to attend an entire judicial proceeding; then, in the borderlands of Cornwall, visited Launceston and Warrington, where the 'elegant meadowland residence' of the Duke of Northumberland, with its oak-adorned park, was the only sight of note. While in Cornwall, he investigated local mining enterprises, descending into a mine near St. Agnes that boasted shafts reaching even below the ocean bed. It was in Truro, however, that he again stumbled upon a serious professional opportunity, meeting the physician Clement

[378] Ibid., fols. 124–127v; MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 460–463; "The speech of five nations assembled in Council at fort George in Upper Canada" was dated 8 November 1807. See the full text published in Kurucz: *Technológiai utazás* [Technological Journey], 162–163. See also the importance of the activities of Jenner's contemporary: J. F. Hammarsten – W. Tattersall – J. E. Hammarsten: Who discovered smallpox vaccination? Edward Jenner or Benjamin Jesty?, *Transactions of the American Clinical and Climatological Association* 90 (1979), 44–55.

Carlyon—a friend and former Göttingen schoolmate of Bath doctor Charles Henry Parry and subsequent author of a body of observations on the region's recent typhoid epidemic.[379] Carlyon not only welcomed the Georgicon professor into his home, but—seeing that he was both exhausted, and in ill-health—hosted him there while ensuring that he received proper medical attention. In fact, the esteemed physician even called for the coach for the next leg of his journey to pull up in front of the house, so that Gerics could climb in from there. The stop after Truro was Plymouth, where he gained immediate admittance to the manor home of Lord Edgecumbe by means of a letter penned by a certain "Mr. Lewis", one of his travel companions. Once inside, he was permitted to make probing investigations without an escort and to study not only the mediaeval-looking building, but also its surrounding park, decorated with stands of trees, Gothic ruins, and grassy lawns.[380]

Following his tour through the southern and south-western parts of the country, Gerics returned once again to London, where he observed the practice of veterinarian John Field, studied the various cases brought into the "livery stables", commissioned additional models, and made some purchases, running into certain difficulties in the last of these due to the interim deterioration of his relationship with Weatherly. However, Gerics should not be to blame for it, because Count István Széchenyi also noted the condescending attitude of the Englishman.[381] At the same time, at his patron's behest, he procured a number of different types of special seeds, including for the hedge species *Ilex aquifolium*, or common holly, with the intent of introducing and propagating the species at

[379] Clement Carlyon: *Observations on the Endemic Typhus Fever of Cornwall*, Truro, Carthew,1827.

[380] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/6 fols. 151–156v, 160–161v

[381] Széchenyi, who spent a few months in London, characterizes Weatherly in his diary as follows: "… dummer und eingebildeter kann man aber nicht seyn – wie dieser Mann." In mid-July 1822 he bluntly writes: "W[eatherley] hat sich als Betrüger declarirt." Viszota: *Gróf Széchenyi István naplói* [The Diaries of Count István Széchenyi], Vol. 2, 292., 297.

Keszthely.[382] Gerics's final, comprehensive report to the *Directio* on his travels in England was posted from Boulogne in April of 1823. In it, he writes of passing through Dartford to North Cray and of viewing the Marquess of Londonderry's home, gardens, and leased model farm, which turned a good profit despite its poor-quality soil. The Marquess's vegetable patches drew his attention for their *Rheum palmatum* (rhubarb), which—he wrote—was grown for consumption "in a sauce served with beef". As regards the remainder of the journey, his letter to Festetics reveals that he hoped to meet Lehrmann in Paris and to procure appropriate letters of recommendation once he was in the French capital. His diary notes that the passage from England to France transpired without incident.[383]

In summary, Gerics's tour of England and Scotland proved highly successful because he met and had discussions with an extremely large number of scientists, doctors, and academics as well as visiting a similarly large number of learned societies such as the Royal Society, the Society of Antiquaries, the Royal Academy, the Linnéan Society, the Wernerian Society, the Medical Society, the Medical and Chirurgical Society, the Craniological Society, the London Veterinary Medical Society, the Royal Institution, the London Institution, the Horticultural Society, the Society for the Encouragement of Arts. Manufacture and Commerce, the Bath and West of England Society for the Encouragement of Agriculture, Arts, Manufactures, and Commerce.[384] Gerics was welcomed by the owners of model farms, numerous of the"spirited landlords" and entrepreneurial minded aristocrats of the era, including some of the great industrialists. He sent over thirty models of various machines, tools and an unspecified number of books to Keszthely. He also wrote twenty letters to

[382] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 464–465v
[383] Ibid., fols. 466–467v; OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/7 fol. 5
[384] See the full list of learned societies and institutes visited by him: MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 519–530v

Count László Festetics from England and Scotland[385] His reports to the *Directio*, including his redacted journal on observations and experiences he recorded during his tour of England and Scotland make up almost half of the reports and other documents he produced during his entire journey between 1820 and 1825.

[385] Unfortunately, no complete list is available regarding Gerics's book purchases, but Rigby's volume of the farming practices of Framingham was specially bought by Richard Bright and forwarded to Hungary with the help of the visiting *Georgicon* professor. Edward Rigby: *Framingham, Its Agriculture, &c*, Norwich, Burks and Kinnebrook, 1820.

Chapter 6

Back on the Continent: France, Switzerland, Bavaria and Italy

In 1821, having been reminded by the onset of autumn of his commitment to study the harvest in Champagne, Lehrmann elected to heed the advice of other travellers and, in mid-September, boarded a boat not for Le Havre, but for Calais. From there, he proceeded toward Amiens and, after that, Paris, where he visited the Jardin du Roi. Late September saw him again pass through Épernay to Aÿ, and other locations, some of which have been covered above. Although his writings depicted the area of the River Marne as primarily a white-wine-producing region, his report home also discussed the light, pleasingly-coloured red wines made from the Pinceaux, Morillons and Meuniers grapes that were distributed under the names Oeil de Perdrux and La Rose. In relation to sparkling wines, he thought it worth mentioning that in some cases, as many as thirty or forty out of every hundred bottles produced would explode at some time after bottling, a factor he assumed contributed to the steep price of the product. In Paris, he paid multiple visits to the diverse collections of the Musée National d'Histoire Naturelle, founded on 10 June 1793 during the time of the Jacobin dictatorship, a privilege granted him by none other than director André Thouin, a former student of Bernard de Jussieu.[386] A botanist himself, Thouin recommended that a comparison be made between the institution's catalogue of agricultural flora and that of the *Georgicon*, a clear indication that the director had some form of co-operation between the two institutions in mind[387]

He paid a visit to the famous tree nursery at the Jardin du Luxembourg among other things, as a priority, because it afforded the opportunity of observing the specialist classes attended there every year from February to

[386] Roger Hahn: *The Anatomy of a Science Institution. The Paris Academy of Sciences, 1666 –1803,* Berkely–Los Angeles–London, University of Calfornia Press, 1971, 367.; Charles Coulston Gillispie: *Science and Polity in France: The End of the Old Regime*, Princeton–Oxford, Princeton University Press, 1980, 154–155.
[387] MNL OL P 279 Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], 130. d. T. III. fols. 138–140v

October by fifteen budding young pomologists from various regions of the country. Naturally, Lehrmann's report to the *Directio* provided an account of the layout of the Jardin du Tuileries, as well, nor did the Hungarian omit an account of his visit to Montrouge and the gardening enterprise of the Cels family, which, since its launch in 1787, had featured several times in Alexandre Pioteau's almanac *Le Bon Jardiner*. Another nursery to garner Lehrmann's descriptive attention was that of Louis Claude Noisettes, which specialised in the sale of exotic plants. The case is of interest for multiple reasons, among them that the list of the enterprise's customers included the princely branch of Hungary's Esterházy family. After viewing the then somewhat neglected gardens of Château de Malmaison, he proceeded to Versailles, then to the garden of Château de Saint-Cloud, which had not long been newly landscaped in the English style. It seems notable that Lehrmann did not have a high opinion of Versailles in his summary account compiled a few months after his actual visit there, although he considered the growing of exotic saplings in Trianon the most outstanding enterprise of its kind. [388]

Another opportunity afforded the *Georgicon* professor was that of surveying early work on the garden of the Duke of Orléans—the future King Louis Phillippe—near Neuilly. The completed project, the Hungarian opined, promised to earn the title of the best-situated garden in all of France. Among persons of interest to receive a call was royal gardener and botanist Philippe André Vilmoren, who had developed his family enterprise into the greatest seed and cultigen business of the age. It is not insignificant, perhaps, that Lehrmann was not only able to converse at length with the esteemed French authority—an expert in his field who had been to England multiple times and made an in-depth study of the nation's intensive arable land cultivation practices—but even received from him several letters of recommendation. Institutions sought out in

[388] "In Trianon selbst in der Anlage ist eine Exotische Holzzucht welche wielleicht die beste und vollständigste von Frankreich seyn kann". OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Germ. 1325 fol. 69

the city included the Conservatoire National des Arts et Métiers, founded in 1794 in response to a proposal by a Member of the National Convention Bishop Henri Grégoire with the idea of creating a central hub of French advanced technical professional training. Naturally, Lehrmann also inspected the collections of several museums, including the Musée d'Anatomie and the Bibliothèque du Roi.[389]

Gerics's letter to Festetics of 19 April 1823 makes absolutely clear that by that point, the Hungarian was travelling without precise instructions as to either course, institutions, or persons to contact. Hoping for his patron's approval, he expressed a desire to embark on various "excursions" from Paris, beginning with Alfort, then forging on toward Épernay in the company of Lehrmann, whom he had fortunately already managed to locate there. The letter then specifies Nancy and Troyes as further destinations before a return to Paris, followed by a circuit that would include Versailles, Rambouillet, Dupin, Rouen, Saint-Cloud, Malmaison, and Fontainebleau, and in winter Montpellier, Valence, Lyon, and Limoges, capped by visits to Toulouse and Bordeaux.[390] While in Paris, he redeemed a "letter of exchange" at the banking house run by Pierre François Paravey,[391] for the cash he needed to continue his mission, and then, according to his journal, took the self-evident first step of visiting and attending lectures at the university in Paris. Of the institution itself, he found it worth mentioning that scientific education there was conducted according to a system not of faculties, but of *école*s, that is, as an *academie*, with the exception of medical training, which accorded the title of Docteur en Médecine de la Faculté de Paris. Gerics does not mention paying tuition, although he does say that "Dean Landrais Beauvais examined me for a full half hour, mercifully, politely, and with

[389] MNL OL P 279 Festetics Lt Directorátusi Ügyiratok [Files of the Directorate] 130. d. T. III. fols. 142–147
[390] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 468–469
[391] For the story of this specific banker, see Karl-Georg Faber: Aristokratie und Finanz. Das Pariser Bankhaus Paravey et Compagnie (1819–1828) *Vierteljahrschrift für Sozial und Wirtschaftsgeschichte* 57 (1970) 145–230.

humanity, perhaps, but rather severely" before finally consenting to his attending the lectures.

Of course, Gerics gave meticulous account of both the institution's medical curriculum, and the department's 1200-student building, while also remarking on the practical principle by which the director at the university hospital alternated between therapies, deciding as to their further use depending on his observations on relative success of his efforts. Internes did rounds at hospitals outside their home institution to gain experience with the diseases in which they specialised, e.g. skin diseases at the Hôpital Saint-Louis and "afflictions related to syphilis" at another hospital. However, not all his experiences were positive. Although he found the edifice of the Hôtel-Dieu de Paris impressive, his diary claims that "Dr. Gensoul dissected a corpse with face deathly yellow and entrusted me to an intern barely living", while beggars kept harassing the visitors in and around the building as well.[392] Another point to make a positive impression was that apothecary students studied alongside medical students for certain subjects, as was the case with chemistry lessons given by forensic medicine professor Matthieu Joseph Orfila. Occupying a similarly important place in Gerics's notes was the observation that

> "at the Sorbonne, one could attend lessons by Gay L'Ussac, and at the College de France, those by Thenard and others, free of charge—and every day and in regard to all that is presented, with all its expensive equipment and experiments; and what has been said of chemistry is equally true of other sciences, such that he who desires to perfect himself

[392] MNL OL Festetics Lt Központi Birtokigazgatás P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 450; OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/8 fol. 61v; Joseph Gensoul (1797–1858), surgeon and pioneer in the field of opthamological surgery.

in any of them can nowhere else select from among the best teachers as here".[393]

He reported to the *Directio* on the stethoscope invented by College de France doctor René-Théophiele-Hyacinthe Laënnec, offering a precise description of this new medical instrument.[394] In parallel these activities, he attended anatomy lectures by Henri Marie Ducrotay de Blainville and minerology lessons by François Sulpice Beudant, while also visiting every major park, garden, and nursery business the city had to offer, sometimes alone and at other times in the company of Lehrmann. On the topic of the pruning of fruit trees, he would later compare what he learned from André Thouin with the techniques he witnessed on his tour of Champagne.[395]

As for Paris's many scientific societies, he took part in meetings of the Société Centrale d'Agriculture chaired by François de Neufchâteau, while also attending events held by the Société de Médecine de Paris and Société Philomathique de Paris. In the latter case, he made a thorough record of the election to the seat of president botanist Augustin de Saint Hilaire, "who had just a short time before returned from a trip to Brazil",[396] but also followed his instructions to develop a more in-depth familiarity with the institutions by which the French capital was provisioned and agricultural products were processed. As he noted at one point, during the time of Napoleon, prodigious sums had been applied to development in these areas, including the relocation of major

[393] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/7 fols. 76–81; For further details on the hospitals of Paris and related medical training, see the appropriate chapters of Stewart F. Campbell: *The Hospitals and Surgeons of Paris. An Historical and Statistical Account of the Civil Hospitals of Paris*, New York–Philadelphia, Langley,1843.

[394] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on Hhis Travels Abroad 1819–1825] fol. 314v

[395] Ibid., fols. 81v,302v–303; Philip F. Rehbock: 'Transcendental Anatomy', in A. Cunningham – N. Jardine (eds.): *Romanticism and the Sciences*, Cambridge, Cambridge University Press, 1990, 152–153. The French scientist's reputation in Europe was founded on the book he published on his travels in Hungary: François Sulpice Beudant: *Voyage minéralogique et géologique en Hongrie, pendant l'année 1818*, 3 vols., Paris, Kessinger, 1822.

[396] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 284

slaughterhouses, together with their stench, biological waste, and potential for disease transmission, to the outskirts of the city. Similar measures had applied to the industries of soap-making and candle-dipping, both crucial to nineteenth-century urban life in terms of not only the use of animal fats, but also the daily needs of city residents. In his journal, Gerics made additional reference to the not negligible priority given in Paris to the development of a system of aqueducts capable of supplying the city with water sufficient not only for drinking, but also for industrial use. Naturally, his survey of provisioning and consumption infrastructure extended to visits to the central storehouses at the grain market (Halle aux Blés) and the 134000-acre, 91-cellar wine market (Halle aux Vine) situated on the left bank of the Seine.[397]

The most important French institutions named in Gerics's instructions included the École Royale Vétérinaire in Alfort, to which the Hungarian was taken by a person of no lesser stature than Jean-Baptist Huzard, son of and professional successor to the veterinarian of European repute of the same name. It was also Huzard who secured the two *Georgicon* professors admittance to meetings of the Institut de France and Société Centrale d'Agriculture. As regards the first, which was chaired by Georges Cuvier, he made an exhaustive report to the *Directio* on the meeting but was particularly struck by a lecture given by François Magendie on the sensory nerves and related locomotor problems, i.e. on the causes of "paralysis".[398] The institution itself made a deep impression on Gerics, despite there being only eight horses and three dogs under treatment there at the time of his visit.[399] Certainly, its library, collections, plaster casts, wax models, and botanical gardens were of instructive value to both men. Through Huzard, Gerics made the acquaintance of director and anatomy instructor Jean Girard, surgeon Éloi Barthélémy, agronomist Charles-

[397] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/7 fols. 136–139

[398] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 283

[399] Ibid., fols. 278v, 324v, 470–471v

August Yvart, and physicist Pierre Louis Dulong. His report to the *Directio* of 3 June 1823, beyond the natural topics of curriculum and scholarship opportunities set forth in his instructions, conveyed certain of the traveller's thoughts on medical ethics: specifically, that a veterinarian is "forced to dictate death sentences" where treatment is not economical, while "a human doctor must never do so under the same circumstances", even where convinced that a patient cannot be saved.[400] That Gerics succeeded in developing professional contacts with the Alfort veterinarians and natural scientists to unusually high levels can be surmised from the sixteen page exposition he compiled and left behind for Prof. Alexis Casimir Dupuy under the title "Mémoire sur le Georgicon Dounné".[401] While there, he naturally visited a number of small farms as well, an activity that held out the opportunity of studying not only the typical land cultivation practices of Normandy, but also Rouen area fruit processing techniques, with particular reference to the production of apple cider.[402]

Gerics secured the letters of introduction he required before he could leave Paris through his personal connection with banker Étienne Louis Ternaux-Rousseau, who, not unimportantly, owned a wool washing and sorting venture just outside Auteuil that the Hungarian also had the opportunity of visiting. Thus, with Ternaux-Rousseau's letters in hand, Gerics left the French capital behind, heading northward for Champagne. Like Lehrmann before him, he sought out Jean-Rémy Moët's cellars, permitting him on 10 November 1823 to pen a report to the *Directio* on the intricacies of the production, bottling and storage of sparkling wine.[403] This same document demonstrates how Gerics kept

[400] Ibid., fols. 279–279v; Ronald Hubscher: *Les maîtres des bêtes. Les vétérinaires dans la société française (XVIIIe-XXe siècle)*, Paris, Aubier, 1999, 249–251.
[401] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–825] fols. 478–485
[402] Ibid., fol. 281
[403] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/7 fols. 172–178; MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics

himself regularly informed on the natural and economic peculiarities of each region he visited, procuring or ordering for his patron any professional literature he found available. In writing his reports, he compared all he witnessed to information found in an economic topography by André Jullien and interpreted his pedological observations, such as the origins and ages of calcified snail shells, with reference to French natural scientist Jean-Baptist Lamarck and his coherent theory of evolution.[404] Upon reaching the vicinity of Colombes, he toured the model farm and nursery previously operated by the very recently deceased Jean-Joseph de Tschudy, gardener in the service of the Kingdom of Naples, whose enterprise—he remarked—was of greater interest to dendrologists than to one seeking to expand his knowledge of crop farming and animal husbandry:

> "The beauty of the thujas manifests when arranged in a *petit allée*, with *Juniperus virginiana*[405] and *Thuja orientalis* in two rows.[406] The *grand avenu* or *allée* consists of all manner of trees, which are planted nine or, in places, twelve feet apart in a double row along the road to Metz. Though the *allée* would be most entertaining for aficionados of *dendrology*, a crop farmer would be more acutely interested in the nearby planted forest. This consists in all pines, and its soil is sandy, having been planted after ploughing *in quicuncem*[407] in novel varieties of *Pinus sylvestris*".[408]

Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 302–303

[404] Ibid., fols. 303v-304; André Jullien: *Topographie de tous les vignobles connus, contenant: leur position géographique, l'indication du genre et de la qualité des produits de chaque cru, les lieux où se font les chargements et le principal commerce de vin*, Paris, Huzard et Colas, 1816. Lamarck's age–defining work upon which Gerics relied was *Systême des animaux sans vertèbres; ou, Tableau général des classes, des classes, des orres et des genres de ces animaux*, Paris, Deterville,1801.

[405] Virginian juniper.

[406] Eastern tuja, scientific name: *Platycladus orientalis.*

[407] *In quicuncem digere* – A category in agricultural writings as early as Roman times; in essence, a cross consisting of five plants, arranged in the manner of the dots on game dice.

[408] Scotch pine. MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 304

In Lorraine, Gerics called upon Mathieu Dombasle—a figure in French agriculture comparable to Sir John Sinclair in England—who had, in fact, visited the British expert personally, translated one of his works into French, and, not unimportantly, expended considerable time working on technologies for crystallising sugar. On a model farm he was organising in the vicinity of Roville-devant-Bayon, Dombasle planned to implement English crop rotation schemes, although Gerics noted with some smugness that the *Georgicon* was ahead of the agriculturist's *ferme experimentale* with regard to both the equipment it possessed and the crop farming techniques it employed.[409] While in the region, there could be no question of his omitting the stud farm in Rosières-aux-Salines, where breeding had depended in part on a herd French troops had confiscated as spoils of war from the Principality of Zweibrücken in 1793. Upon inspection of the letter furnished by Éloi Barthélémy, the Marquis de Vaugiraud, who served as the director of the institution, received Gerics immediately, then, following a brief introductory conversation, spent the entire day acting as the *Georgicon* professor's personal guide. Next, Gerics turned toward Sedan, where he visited every textile mill in the area, paying particular attention to the preparation of a textile dye known as "Berliner blau"—or "Prussian blue".[410]

Proceeding in a very similar manner, Lehrmann used the banking house operated by Pierre François Paravey both to make financial arrangements, and to receive further instructions. Keeping to his written objectives, he then spent a period of almost three months south of Paris along the banks of the River Loire

[409] Ibid., fol. 304v; Dombasle's impactful work: *Faits et observations sur la fabrication du sucre de betteraves et sur la distillation des mélasses*, Paris, Huzard, 1822. On his activity as a mediary: Thomas Depecker, – Nathalie Joly: Agronomists and accounting. The beginnings of capitalist rationalisation on the farm (1800–1850), *Historia Agraria* 65 (2015), 77–81.

[410] Ibid., fols. 305–306; Anon: Zur Geschichte und Statistik des Pferdezucht in der Pfalz, zunächst mit Berücksichtigung der Gestütanstalt zu Zweibrücken, *Centralblatt des Landwirtschaftlichen Vereins in Bayern*, 37 (1847) 309–311.; M. Bottin: Rapport sur l'exploitation du domaine de M. le Baron Louis, à Petit–Bry, *Annales Administratives et Scientifique de L'Agriculture Francaise* 3 (1829), 263.

and in the region of the south-west, applying himself to the study of French gardening and viticulture. Given certain differences between the natural attributes of the region and those applicable to Hungary, at least as far as the ripening of fruit was concerned, his tale of having eaten ripe, sweet grapes at the table of a Garonne riverside vintner can be seen as a crucial observation.[411] As regards the development of a scientific network that constituted one of the principal aims of his tour—i.e. the use of previously made acquaintances in collecting information and, where possible, paving the way for future business opportunities—Lehrmann succeeded in leveraging a letter from Bethmann to gain admittance to a wineselling enterprise run by Christian Gaden and Karl Christoph Klipsch, who oversaw a significant proportion of the Bordeaux wine trade. Gaden and Klipsch had originally immigrated to France from Magdeburg and Saxony, respectively, then—having formed their partnership—launched a successful venture in Chatrons, with a quarter of the city frequented primarily by foreigners.[412] It should be noted that Bethmann also had an estate on the right bank of the Garonne.[413]

In November 1822, having returned to Paris, Lehrmann commenced attendance of chemistry and physics lectures held by Louis Jacques Thénard and Joseph Louis Gay-Lussac, while simultaneously delving into the study of Italian. He also made a number of noteworthy acquaintances during this period, among them natural scientist Ignaz Döllinger and physician Franz Joseph Gall. The latter, in turn, led to an encounter with no less estimable a personage than Antoine-Alexis Cadet de Vaux, founder of the *Journal de Paris* and friend of American political luminary Benjamin Franklin. It was also during this period,

[411] MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 130. d. T. II. (without number or folio).

[412] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 6. Lehrmann József jelentései külföldi útjáról 1819-1825 [Reports by József Lehrmann on his Travels Abroad 1819–1825] fol. 98v; Roy Dilley: *Nearly Native, Barely Civilized. Henri Gaden's Journey through Colonial French West-Africa*, Leiden–Boston, Brill, 2014, 17–18.

[413] "Beym H[errn]. Bethmann & Co. das Landgut ganz einen Mauer eingefangen, was ein schönes Landhaus, Weingärten, eine hübsche englische Anlage und einen beträchtlichen Küchengarten sammt Orangerie enthält". OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Germ. 1325 fol. 42v

moreover, that he formed a close connection with Prussian botanist Friedrich Sello, who was residing in Paris while making preparations for a collecting expedition in Brazil.[414]

Gerics, on the other hand, holding to the principles outlined in his original instructions, signalled to Festetics in a report dated 15 August 1824 of his intention to follow a route that would take him through Lyon, Geneva, Hofwyl, Hohenheim, and Munich. Thus, leaving Paris in the autumn of 1824, the Hungarian would head directly southward to Lyon, home since the mid-18th century to France's greatest school of veterinary medicine. His choice of route from there he explained in his communications to both Festetics, and the *Directio* with reference to the activities of his fellow traveller and countryman:

> "(…) given that Lehrmann lingered long in France, gaining experience in the fields of viticulture, the making of wine and spirits, the care of olive groves, the breeding of silkworms, etc., I intend to plot my own course in the immediate direction of Geneva".[415]

In the annotated version of his journal, he would stress in particular that, from the standpoint of the advancement of its central and southern territories, France's development of inland waterways as a means of transporting both goods, and passengers was a factor of extraordinary value. This claim was supported by his own personal experience, among other things: to reach Lyon, city of the École Royale Vétérinaire (formerly the École Hippiatrique), his chosen means of transport was to be a riverboat down the Canal de Charolais.[416]

As he visited Lyon immediately following after the death of Louis XVIII, Gerics had the opportunity to join the veterinary school professors there as

[414] MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 130. d. T. II. (without number or folio)
[415] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 326, 498v
[416] Ibid., fols. 328–328v

honoured guest at a church service to commemorate the monarch's life and reign. Regarding the institution itself, his diary offers a brief historical overview, commencing with a proposal put forth by solicitor Claude Bourgelat by which it was established. Self-taught in the ways of veterinary medicine, the school's founder had ascended to fame through his achievements and writings on the care and breeding of horses and, not unimportantly, was also invited by Jean le Rond d'Alembert to take up a position as one of the contributors to the French *Encyclopédie*.[417] After the revolution, although the school's buildings had been expropriated by the state and the institution itself slated for relocation to Toulouse, a material donation from the administrative region of Rhône-Alpes and the people of Lyon had conspired to keep it in the city. The eminent personality there at the time of Gerics's visit, director Claude Julien Bredin, took it upon himself to personally familiarise the Hungarian with the institution's curriculum, educational framework, and collections,[418] over the course of which their relationship grew so warm, there was even a surreptitious exchange of words regarding Bredin's personal meeting with Napoleon, an event that led Gerics to present his host with a book on the former emperor that had been banned under the Bourbon Restoration.[419] It bears mention that although Gerics did not travel to the southern reaches of the Rhône, he did report to the *Directio* on the traits of the horses of Camargue, including both their stiff bearing and the illnesses with which they were typically afflicted, citing his sources as Director Bredin, the prefect of the Département des Bouches-du-Rhône, and the son of Antoine Claire Thibaudeau, a man who had served in a succession of political regimes.[420]

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[417] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/8 fols. 48v–53; Frank A Kafker – Serena L Kafker: *The Encyclopedists as Individuals: A Biographical Dictionary of the Authors of the Encyclopédie*, Oxford, Oxford University Press, 2006, 67–71.

[418] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/8 fols. 52–58v

[419] Ibid., fol. 66v; The volume in question is Gaspard Gourgaud: *Mémoires pour servir à l'histoire de France sous Napoléon, écrit a Saint-Hélène,* Vol. 1, Paris, Didot et Bossange,1823.

[420] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819-1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825], fols. 362–362v

On 30 September, Gerics arrived in Geneva. At the gate to the city, he ran into the physician Louis-André Gosse just as the latter was riding out on horseback. Early the next day, Gosse, who had himself taken a scientific tour of Europe lasting several years,[421] received the Hungarian at his home, persuading him that he should remain in the city for at least a week. In his journal, Gerics would first pen a brief account of various sights for which the city was known before shifting—as per the objectives set forth in his instructions—to a lengthy disquisition on its institutions and eminent men of science. He went into considerable detail, for example, in describing the botanical garden: its iron fencing, Linnaean nomenclature, lexical/numerical labelling system, and division into sections according to plant usage, i.e. between species used for fodder, human consumption, and garden design. The centre of the garden, he noted, boasted a fountain, around which contemporary plans dictated aquatic plants be cultivated in the not-too-distant future.

While in Geneva, Gerics had occasion to take part in a meeting of the Société pour l'Avancement des Arts, an organisation founded to promote industry and agriculture, where he spoke in favour of the use of agricultural machinery, citing the English-made threshing machines in use at the *Georgicon* as a specific example. "None interrupted" this interpolation, he reported with some satisfaction, as his audience had, in fact, believed him to be one of Thaer's men. Gerics, however, in deference to his true sponsor, brought up "the topic of the *Georgicon* and its Lord" but, as a Hungarian, regretfully noted that, "while

[421] Daniela Vaj: *Médecins voyageurs. Théorie et pratique du voyage médical au début du XIXe siècle, d'après deux textes genevois inédits: les Mémoires sur les voyages médicaux (1806-1810) de Louis Odier et les Carnets du voyage médical en Europe (1817-1820) de Louis-André Gosse*, Geneva, Georg, 2002.

[421] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 495; OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/8 fols. 74-84

the name of Festetics was not entirely foreign to them, the men of Geneva seemed to know even more about America than about [his] homeland".[422]

With the help of Gosse, Gerics also took the opportunity of making a thorough study of the library and collections at the Musée d'Histoire Naturelle, an institution founded in 1820, before paying visits to the vicinity's various model farms, a venture on which he was accompanied by the head veterinarian of the Geneva Scientific Society, Jean-Claude Favre. In Coppet, he met Baron Johann Erich Stael von Holstein, whose acquaintance he had made at the society meeting in Geneva, and in an example of contemporary scientific mediation, supplied him with certain advice on his imported English sheep. Of the breed in question, which was raised for its meat, he warned: "the Dishley will not thrive under transhumance, as it requires lusher pastures".[423] From there, like Goethe before him, he sought out the Jura Mountains, a fashionable attraction for tourists of the age,[424] However, for Gerics, the object of interest was not the formations themselves, but the region's finely woolled *escurial*, i.e. the Saxon "electoral" flocks that were regarded, according to the classification used by the wool merchants of Leipzig, as providing the best fleece in Europe. Of course, the list of destinations also included Ferney, where he inspected the home of Voltaire, whom the Swiss natural scientist Charles Bonnet—a well-known figure in Hungarian intellectual circles—had dubbed the "black bird".[425]

At his next stop—the Swiss city of Bern—the Hungarian was received by Samuel Anker, a veterinarian of widespread repute whose training and foreign

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[422] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 495; OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/8 fols. 74–84

[423] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/8 fols. 87v–88v

[424] Cf. Margit Wyder: Bergabenteuer mit Goethe. Zur Praxis der Schweizer Reise im späten 18. Jahrhundert, in V. Hug – M. Schmid – G. Folkers (eds.): *Adolf Traugott von Gersdorfs Schweizer Reise 1786*, Zürich, Chronos, 2018, 149–205.; Norman Backhaus: Landschaftswahrnehmung im Reisetagebuch von Adolf Traugott von Gersdorf, idem., 273-301.

[425] Ibid., fols. 91v-92v; The Hungarian edition of Bonnet's chief work is Károly Bonnet: *A természet vizsgálása* [The Study of Nature], Pál Tóth (trans.), 3 vols., Pest, Trattner, 1818.

study had been sponsored by the cantonal government. In the course of Gerics's stay there, Anker consulted with him on multiple occasions, supplied him with letters of presentation, and, in general, made every effort to advance his mission. Next on the list of locations important to the aims of the tour was Hofwyl, home to the institution run by Philipp Emanual von Fellenberg, which offered technical training for upper class and affluent middle-class youth in a government furnished building. In a letter to Festetics dated 3 November 1824, Gerics not only communicated a formal greeting on behalf of the Swiss educator,[426] but also made it a point to pen an opinion on his character, noting that "fault finders imitate[d] even his most gracious move, his most innocuous intent", while those that mocked him were either "jealous or ignorant". As to the institution's educational practices, Gerics's journal entry offers a concise assessment of its overall approach:

> "(in Hofwyl) they apply studies according to individual personality, and, admitting multiple students into their social lives and family circles, prepare them not only for their university studies, but, at the same time, for life. In educating, therefore, the primary concerns are to develop the talents of every student according to his individual nature and, while not abstaining from presenting all areas of study, to put them to practical purpose with a view to which future relations and personal inclinations they are best suited, always bearing in mind the Christian, the human and the citizen: so it follows that here, the emphasis is on grooming one for life, one's studies being regarded as but a part thereof".[427]

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[426] The author of the first comprehensive monograph on Fellenberg's institute noted the frequent visits of *Georgicon* students and professors to Hofwyl, including Count László Festetics's sojourn of 1804 in Switzerland, Kurt Guggisberg: *Philipp Emanuel von Fellenberg und sein Erziehungstaat*, Vol. 2, Bern, Lang, 1953, 408.

[427] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 495; OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/8 fols. 112v–113; For more on the topic of contemporary education and child-rearing with special regard to the age of

As regards the teaching of agricultural subjects, the relevant journal entry makes reference to Fleckel's previous visit, but notes that while Fellenberg did hold classes, he did not do so "in such a form as would endeavour to provide training as a practical farmer".[428]

On 19 October 1824, Gerics departed from Switzerland via Schaffhausen, traversing the Grand Duchy of Baden to reach his next destination: Hechingen, seat of the Principality of Hohenzollern-Hechingen and birthplace of his patron's wife. Due to an illness, Prince Friedrich Franz von Hohenzollern-Hechingen could not see to his guest personally, but charged his officers with ensuring that the *Georgicon* professor might tour the area and gather information as requested. In his diary, Gerics described a castle that had been remodelled in the Romantic style, giving a detailed account of its princely stables, dairy farm, and high-production brewery.[429]

After Hechingen came Tübingen, whose university, which specialised in "political science", actually offered instruction in agronomics as well. There, Gerics met a large number of faculty members, including technology professor Johann Heinrich von Poppe and forestry specialist Johann Christian Hundeshagen. Veterinary medicine at the institution was taught by Johann Daniel Hofacker, although, as Gerics remarked, his lectures were limited to "that part on illnesses of the gut". This deficiency was offset, he noted, by instruction in other areas of the field available at Stuttgart, his next stop, which he reached by way of Waldbuch. Of the array of institutions visited in this latest destination, he found the variety and quality of library material most impressive, noting that its collection featured "volumes from the library of our own glorious King Matthias Corvinus". Also superb in his estimation was the natural science

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romanticism see: Denis Lawton – Peter Gordon: *A History of Western Educational Ideas*, London, Woburn Press, 2002, 101–114.

[428] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/8 fol. 116v.

[429] Ibid., fols. 127–130

collection ("Naturaliencabinet") housed in the old castle, whose minerals, fossils, and collection of flora—or at least certain of their specimens—he felt rivalled their counterparts in Paris. With regard to agronomics, it was primarily the royal farm opposite the castle that captured his attention, as—he noted—the bulk of the milk produced there was sold in the city. Another point of interest was the royal botanic garden, which boasted some ten thousand individual plant specimens. The picture he painted of the greenhouse there was particularly exhaustive: "as the iron framework is indeed quite thin, [a traveller] might imagine himself in a land of palms, the light penetrating inward from every side and from above, as it would in a space out of doors".[430]

He found the institute of veterinary medicine, on the other hand, somewhat rudimentary, having been founded only a few years prior, in 1821, although he deemed the pace of acquisition of prepared specimens as evidence of a commitment to adequate standards of education. He judged the layout of the operating theatre and placement of the dissection table more convenient than that witnessed in Berlin, as no hoist was required in preparing it for each upcoming spectacle. Instead, "the desired cadaver [could be slid] onto the table whole", using a slab mounted on a track. The visit additionally enabled him to meet the young veterinarian Eduard Hering. Gerics also viewed the school's monumental stable building, noting with emphasis that its horses included some purchased from herds owned by Prince Miklós Esterházy and Count József Hunyady in Hungary.[431]

The next institution on Gerics's list, the school of agriculture in Hohenheim, had been in operation since 1818. In describing its model farm, the Hungarian's journal goes into considerable detail on crop rotation systems, equipment employed in field cultivation, and products from the farm's

[430] Ibid., fols. 137–142v

[431] Ibid., fols. 143–148v; For more on the operations and curriculum of this important school of veterinary medicine see Konrad Ludwig Schwab: *Ueber Zweck und Einrichtung der Veterinär-Schulen*, München, Pössenbacher, 1842.

"Ackerwerkzeug Fabrik", while also giving account of the author's consultations with director Johann Nepomuk von Schwerz and mathematician Friedrich Riecke.[432]

From Hohenheim, Gerics proceeded to Munich, where—as his mission dictated—he first contacted the Bavarian Agricultural Society (Landwirtschaftlicher Verein in Baiern). Relations between the society and Keszthely dated back to the days of the *Georgicon*'s founding, when—according to a certificate dated 13 February 1812—the society's board had made György Festetics an honorary member.[433] In his report home, Gerics happily explained to his sponsor that state councillor and president Joseph von Hazzi—associated with the establishment of the journal *Monatsblatt für Bauwesen und Landesverschönerung*, among other things—had "guided [him] with particular kindness to the house of the Bavarus Society and shown [him], one after the other, every implement the society had ever acquired, whether full scale or in model form". He furthermore remarked that the "Central-Veterinär-Schule [may have been] small", but those who taught botany, physics, chemistry, physiology, and surgery there, including Konrad Ludwig Schwab, Joseph Mundigl, and Joseph Plank, "were all worthy and well-known names in veterinary literature". Other points of interest in the city included the primary vocational school of agriculture in nearby Schleiβheim, whose model farm was known chiefly for its breeding of sheep. Founded in 1822, the school was shown to him by its director, Maximilian Joseph Schönleitner.[434]

One of the encounters communicated home from Munich offers not only a specific example of the circulation of knowledge during the period under

[432] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/8 fols. 157v–163

[433] MNL OL Festetics Lt, Memorabilia, P 235 121. d. fol. 57

[434] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 497-497v; For more on the courses taught in Munich, see: J. Peters – V. Weidenhöfer: *Geschichte der Tierärztlichen Fakultät München*, (https://www.vetmed.uni-muenchen.de/fakultaet/geschichte/index.html#1810, last downloaded 28 September 2023)

scrutiny, but also an illustration of the differentiated manner in which information was transmitted based on experience gathered while travelling. The incident in question involved Baron Joseph von Ruffin, who had himself just returned from England. As both Gerics, and von Ruffin had recently spent time in the region of Cambridgeshire and Lincolnshire, the two men were able to enter into debate as to the methods used in draining the marshy areas found along the border between the two counties. Gerics also relayed information on the book the baron was about to publish on sheep breeding, while reinforcing his growing professional network by providing him with Festetics's contact information, noting that "his name should be recommendation enough for Your Excellency". Finally, in a report dated 30 November, Gerics indicated that he had left Munich and arrived in Innsbruck, where he had inspected the collections of the local university. From there, he said, his plan was to move on via the Brenner Pass toward his next major destination: Milan.[435]

In the meantime, Lehrmann had himself reached Strasbourg, sending a report to the *Directio* from the city on 14 September 1824. In it, he described consulting with garden designer Gabriel Thouin on several occasions, asking him about numerous of the illustrations included in his epochal book of 1820, among other things, in particular those related to the design of greenhouses and to the techniques used to improve their heat conservation properties.[436] He furthermore spoke of having (while still in the company of Gerics) inspected the home of Étienne Soulange-Bodin, known both for the special botanical garden he had installed in the vicinity of Ris-Orangis, and for his efforts on behalf of French horticultural education. When Lehrmann finally left France, it was in a

[435] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 498; The book in question is [Joseph] Freiherr von Ruffin: *Ueber höhere Schafzucht*, München, Finsterlin, 1825.

[436] "Bey Herrn Gabriel Thouin architecte von Jardin des plantes und pepinieriste habe ich alle Pläne, nach welche seine zwey Editionen erschienen sind, gesehen, worüber Er mir viele Observationen und Aufklärungen gegeben hat." MNL OL Festetics Lt Directorátusi Ügyiratok [Files of the Directorate] P 279 139.d. T. II. No. 2. (no folio); Lehrmann was referring to Gabriel Thouin: *Plans raisonnés de toutes les espèces de jardins*, Paris, Vilquin, Treutel et al., 1820.

northeasterly direction, toward Nancy. There, on his second visit to the city, he met with botanist Hubert Félix Soyer-Willemet, secretary-in-chief of the local agricultural and horticultural society, afterward following Gerics's lead and visiting Roville-devant-Bayon, where he met Dombasle as had his countryman before him. Another person of interest there was affluent local merchant and landowner Antoine Bertier, who furnished him with letters of introduction for use on his route through Switzerland, including one addressed to Count Louis de Villevieille, patron of the institution in Hofwyl. In a letter addressed personally to Festetics, he provided a working itinerary that, for all practical purposes, corresponded to that followed by Gerics, taking him through Switzerland and Bavaria, southward through Innsbruck, and, finally, through the Brenner Pass to Milan.[437]

For his part, Gerics arrived in Milan on the 11 December, having made his way through Brixen (present-day Bressanone, Italy), Bozen (present-day Bolzano, Italy), Trident, the Lake Garda shore region and Verona to the place where the two *Georgicon* professors were to meet. There, in Milan, they were obliged to spend more time than usual waiting for their passports, while snow and freezing temperatures also prohibited travel. According to Lehrmann's report of 16 January 1825, the two men passed their time in the city studying what professional literature they could find on northern Italian rice production and procuring seeds to be sent to Keszthely. Lehrmann also expressed a desire to meet botanist Giovanni Battista Rossi, director of the Royal Gardens in Monza, to expand his knowledge of fruit production.[438] At the same time, Gerics's journal speaks of visiting the university in Pavia, where natural scientist

[437] MNL OL Festetics Lt Directorátusi Ügyiratok [Files of the Directorate] P 279 139.d. T. II. No. 2. (no folio); MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 6. Lehrmann József jelentései külföldi útjáról (1819–1825) [Reports by József Lehrmann on His Travels Abroad (1819–1825)] fols. 52-52v; For more on the Hofwyl patron's activities see W. A. C. Stewart – W. P. McCann: *The Educational Innovators 1750-1880,* London, Palgrave Macmillan, 1967, 142–145.

[438] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 6. Lehrmann József jelentései külföldi útjáról (1819–1825) [Reports by József Lehrmann on His Travels Abroad (1819–1825)] fols. 43–51v

Giuseppe Moretti, agronomics lecturer and director of the botanical gardens, proved an important ally. Indeed, the professor showed them not only the gardens, but also the institution's wax pomology and grain disease collections, while also introducing them to other lecturers and physicians. Gerics in particular expressed an interest not only in the school's minerology holdings, but also in Johann Goeze's collection of intestinal parasites, which had been purchased for the institution by the Emperor Joseph II. He judged the anatomical collection—described as "mostly natural preparations, save those relating to childbirth, which are of wax"—to be of very high quality, even when compared to the Hunterian Collection in London, while the pathology collection, founded by Johann Peter Frank, was also subjected to thorough scrutiny. In meeting the school's physicians, he made the acquaintance of Mauro Rusconi, whose activities included experiments on animal embryos, and inspected the institution's physics equipment, describing in his journal the "columns" employed in the electrolysis experiments conducted by Alessandro Volta.[439]

When their long-awaited travel documents finally arrived, the two set off immediately on a journey from Milan to Florence that Pál Gerics would record in his detailed report of 16 February 1825. By the time they reached the outskirts of Genoa, he wrote, they were beginning to see virescent fields and olive, lemon, and orange trees, although they found the region's hill terracing practices inferior to those they had seen in southern France. Beyond Sestri, the landscape shifted, and the hills through which they passed were barren. Finally, in the Grand Duchy of Tuscany, they called on a number of small farms, where Lehrmann endeavoured to collect information on several topics, including the aging process used in the making of *vin santo*.[440] Gerics found the crop farming

[439] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/9 fol. 46–48; G. C. Cook: History of Parasitology, in S. H. Gillespie – R. D. Pearson (eds.): *Principles and Practice of Clinical Parasitology*, Chichester–New York–Weinheim–Brisbane–Singapore–Toronto, Wiley, 2001, 2–3.

[440] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 6. Lehrmann József jelentései külföldi útjáról 1819-1825 [Reports by József Lehrmann on His Travels Abroad (1819–1825)] fol. 116v

practices in the region of Coltano adequate, although he considered the fields less effectively irrigated than those in Lombardy. At the same time, his report to the *Directio* described extensive efforts at reforestation following the removal of the most of the region's trees for sale to Livorno ship builders during the French occupation. It was at this point in their journey that Gerics stopped off at the university in Pisa, where he paid particular attention to the matter of clinical practice, viewing the dissection room, anatomical collection, and botanical gardens in the 300-bed hospital in the company of director Andrea Vaccà Berlinghieri. Despite a favourable estimation of the administrator's lecture on hernia surgery, Gerics was critical of his clinical methods, which drew on traditions laid down by French surgeon Pierre-Joseph Desault. In an instance encountered while doing a full round of the clinic's beds, for example, he recorded his observations of the tragic complications suffered by a patient who had had a kidney stone removed by epicystostomy.[441]

Of the journey from Pisa to Florence, Gerics's journal remarks on various architectural and historical monuments to be found in the Grand Duchy of Tuscany, although the real attraction for him was the destination city's natural science collections,[442] including, of course, the forty-room display of anatomical wax models commissioned by Grand Duke Pietro Leopoldo, later Emperor Leopold II. It was with a note of censure, however, that he wrote of the collection's veterinary models, which, he observed, filled only one room. Also in line for inspection was the city's collection of physics instruments, which he judged equal to that of Haarlem in both variety and quality.[443]

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[441] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 335-337v; OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/9 fols. 83–84

[442] Maurizio Bossi: Les voix du Monde. Le cabinet Vieusseux, carrefour de la curiosité pour les comptes rendus de voyages dans la Florence de la premiè moitié du XIXe siècle, in G. Bertrand (ed.): *La culture du voyage. Pratiques et discours de la Renaissance à l'aube du XXe siècle*, Paris, L'Harmattan, 2004, 239–267.

[443] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/9 fols. 119–120v

On 4 March 1825, Gerics and Lehrmann left Florence in the company of a group of English travellers, passing first through Arezzo, then the Chiana Valley (under transformation at the time with the draining of wetlands), toward Perugia, Viterbo and, ultimately, Rome.[444] There, although Gerics's journal speaks extensively of the city's sights and monuments, according to his report to the *Directio*, he saw little of interest from the standpoint of the *peregrinatio oeconomica*. For both men, vastly more important experiences came in Naples, and—as one might expect—their first excursion from the city led them directly to Mount Vesuvius. In both his report to the *Directio*, and his letter to Festetics, Gerics showed little restraint in chronicling their activities in the vicinity, noting, for example, that "the lower section of the mountain is planted with grapes held aloft by stakes; and although the parcels of land are almost entirely of lava, they are, as much as possible, diligently cultivated". Of course, he also made a precise record of all soil strata, remarking that he had collected various minerals and fossils for the *Georgicon*'s collection.[445]

As regards the lands around Naples, Gerics spoke of small farms worked as if they were gardens, of grape vines trained to grow on fieldside trees and—peculiar to the region—of a simple crop rotation system of grain alternated with fodder. In a report later sent to Festetics from Parma, he also voiced his conviction that some of the cattle raised in the region of Rome and Naples displayed an indisputable kinship with the Hungarian grey: "Though I could not assert that the people of Rome took their breed from us, I will say that such a thing would not be wholly unimaginable".[446] Another must-see attraction in the area around Naples was the Royal Palace in Portici, of whose stables and horses

[444] The unique manuscript of Count László Festetics's autograph instructions issued on 10 November 1824 was auctioned in Budapest in 2022. According to Lehrmann's note, having received them on 11 December 1824, Festetics prescribed the route he was supposed to follow and ordered him, among others, to study rice growing methods: "Ihr Reise in Italien soll nach Rom, Neapel (…) Ihre Rückreise soll über Venedig und Triest gestehen, so das Sie im Laufe des künftigen Sommers ganz gewiss hier eintreffe. Ich empfehle Ihrer besonderen Aufmerksamkeit den Reisbau, mit dem Sie vollkommen bekannt machen sollen."

[445] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 344, 499v

[446] Ibid., fol. 500

Gerics observed, in addition to his careful description, that the Arabian stallions were not mated before the age of five. He added that he had, remarkably, seen horses from Hungary's Bábolna stud farm there. An equally natural target for the Hungarian veterinarian was the *Reale Stabilimento Veterinario di Napoli*, an institute for animal medicine founded in Naples in 1796. There, although he consulted with professor of chemistry Vicenzo Mazza, he could not disguise his disappointment in reporting that the entire facility consisted of just one larger hall and a number of smaller rooms. Moreover, "A neat little yard and a bronchial model by Prof. Mazza aside, nothing of interest remains for me to tell". A few days later, the two *Georgicon* professors turned back toward Rome, reporting on 24 April that they had crossed the Apennines and, continuing northward through Loreto and Rimini, had followed the shores of the Adriatic until finally reaching Bologna.[447]

Gerics had nothing but admiration for the thriving agriculture in Romagna, the prodigious quantities of flax and hemp produced as part of the region's crop rotation practices catching his eye in particular. Special mention was also reserved for Giacomo Cardinal Boncompagni, who had earned himself a lasting reputation some one hundred years earlier by having brought an end to the flooding of the Reno and draining the province's wetlands for effective crop farming. Bologna, of course, had its university to offer, first and foremost, and Gerics, adhering as always to his instructions, sought both to make the acquaintance of multiple professors there, and to view the institution's multiple collections. He found the school's botanical garden small, but adequately arranged, remarking in particular upon the canal that traversed it and the utility of its brickwork paths. Guiding the *Georgicon* professors on their tour was the multifaceted natural scientist Francesco Orioli, about whose work Gerics wrote:

[447] Ibid., fol. 348v; OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/10 fol. 36; MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 352–352v; Salvatore de Renzi: *Topografia e statistica medica della città di Napoli*, Naples, Torchi, 1845, 384.

"In the garden he has erected sample hail deflectors—*paragrandini*—which he has described in two brief memoirs, and, having been given a copy of each, I have sent them for inclusion in the library at Keszthely". Among the instruments used in the study of physics, Orioli showed him an early welding machine that combined hydrogen and oxygen in a manner similar to that of Goldsworthy Gurney's oxy-hydrogen blowpipe. The holdings at the anatomical museum consisted primarily in curiosities, with a room dedicated to "those pertaining to midwifery", such that "all manner of complications suffered by the expectant mother were presented in wax".[448] Orientation within the university library was provided by Giuseppe Casparo Cardinal Mezzofanti, who, as a highly esteemed linguist, spoke with the *Georgicon* professor in Hungarian and even asked him to read aloud from a volume of poetry by Sándor Kisfaludy, sent to the library by Palatine Joseph. Gerics would remember Mezzofanti in his annotated journal, as well:

> "I found him to be a man of great knowledge, who held himself honourably and was quite obliging in his eagerness to help. And perhaps it is this, in part, that explains why the Italians regard him less favourably than we do: he avoids bluster".[449]

At the university hospital, always a particular point of interest, he found the number of patients regrettably incommensurate with the importance of medical education in general, noting that the university had not only reduced its medical staff compared to earlier times, but had also seen a decline in its student body. This, he felt, might be attributed to the institution's having abandoned the practice of teaching courses in multiple languages (including, perhaps

[448] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 357–357v; OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/10 fols. 119v–121v

[449] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/10 fol. 121v

surprisingly, Hungarian). A lengthy discussion with Antonio Alessandrini revealed that the physician had become disheartened at certain impediments to his efforts to provide quality veterinary training, as a result of which students were receiving "theoretical instruction only" in that particular discipline.[450]

From the university town the two Hungarians moved on to Parma, which impressed itself on Gerics's memory not only for its many works of art, but also for the exceedingly extravagant, almost palatial houses the men encountered there. The areas surrounding the city mainly supported cattle and sheep farms, including the dairies that supplied the local cheese making industry, although soil conditions would certainly have been adequate for profitable crop farming as well. The sections on the side of the town closest to the Apennines were home to a series of chestnut forests that constituted a serious boon to the local population, furnishing fodder for the region's animals, among other things.[451] Turning from there toward the north-east, they made next for Mantua, a city surrounded by water and swampland that was only accessible through breaks in its formidable ramparts. Indeed, Gerics observed, the only possible means of taking the city would have been siege and starvation, as judiciously constructed stations permitted all roads leading there to be held under continuous battery fire. The areas around Mantua were used for rice production, although local ordinances, born of the stench and potential for disease arising from an excess of rotting organic material, required that the intensive practice only be pursued at a safe distance from the city.[452]

Gerics's next destination was the Scuola Veterinaria di Milano, a veterinary institution founded in 1807 by Eugène Beauharnais, stepson of Napoleon Bonaparte. There, he received a warm welcome from director Giovanni Pozzi and, according to a report sent to Festetics, found himself especially intrigued by the institution's anatomical collection, which, if not as

[450] Ibid., fols. 122–122v
[451] Ibid., fols. 131–131v
[452] Ibid., fols. 171–173

rich as that of Alfort, was "superior to the latter in many respects by virtue of the beauty and utility of its prepared specimens". In both an earlier letter to Festetics, and a report sent to the *Directio* from Milan on 11 May 1825, Gerics claimed that he had only received instructions from Inspector György Palleta to send a cutting of the famed red wine grape known as Lacryma Christi on the return journey from Naples and therefore too late to accede to the request. He assured his sponsor, however, that Lehrmann had already informed him of having procured "precisely the Lacryma Christi variety for his collection from the garden in Luxembourg", while also noting that from the standpoint of planting, they would have had to present themselves the following autumn, as it was already late for the current season, but too early for the next.[453] In the meantime, Lehrmann was busily studying the region's garden, orchard and wine-making cultures, with particular reference to how wines were aged and to the storage procedures necessitated by the bleak terrain. His own final report to the *Directio* revealed that he had met there with a personage no less prestigious than natural scientist and traveller Giuseppe Acerbi, with whom he had discussed the methods used for the mixing, aging and storing liqueur wines.[454]

In addition, Gerics reported on such topics as the natural environment of Lombardy, the hydrography of the Po Valley, the practice of irrigated meadow cultivation, and the steaming process developed by Luigi Porro Lambertenghi for use in silk reeling.[455] In an effort to meet and negotiate with the French-born proprietor of the Pirard and Deschamps Co, a firm which played a decisive role in the textile industry in Lombardy, he made trips to both Turin and Como, resulting in an indication of readiness from Pirard's part to establish contact with

[453] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 502-503v
[454] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 6. Lehrmann József jelentései 1819-1825 [Reports by József Lehrmann on His Travels Abroad 1819–1825] fol. 117
[455] Ibid., d. 5. MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 506; The book in question is Luigi Porro Lambertenghi: *Sul metodo di trarre la seta dai bozzoli per mezzo del vapore*, Milan, Sonzogno, 1816.

Festetics directly. Additionally, he sought out the garden of Turin's Regia Società Agraria (i.e. the Royal Society of Agriculture), which had been "planted in the past year with numerous varieties of grapes, so that a monograph might be written about them in time", but which also boasted thirty different types of potatoes, along with a variety of other vegetables and grains.[456]

On 22 June 1825, Gerics departed from Milan through Verona, Padua, Venice, and Trieste for the Austrian Empire and, ultimately, Hungary. Lehrmann had left the Lombardian capital even earlier, travelling nearly the same route as Gerics, i.e. through Brescia and along the shores of Lake Garda to Padua, where the two men were to meet. In Verona, Lehrmann called on Bernardo Angelini, member of the local Accademia d'Agricoltura, Comercio ed Arti, through whom he secured the opportunity to examine the gardens of various local landowners.[457] They found that Padua, another university city and the next major stop on their route, had sunk far below the standards for which it had formerly been known. Gerics was equally critical of its medical faculty, saying that it was "so easy to receive a diploma there, it simply never [occurred to anyone] that a candidate would fail". During the mid-18th century, the Council of Venice had established a chemistry laboratory at the institution, along with an observatory, a department of midwifery, and even a school of veterinary medicine, although Gerics was unable to meet with the veterinary instructor, Antonio Zanon, who was only required to lecture during the summer months. He also disliked the layout of the farm garden, remarking in his journal that "Arthur Young had also been disappointed" in the institution when he inspected the university's facilities.[458]

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[456] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration] P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 367, 505

[457] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 6. Lehrmann József jelentései külföldi útjáról 1819–1825 [Reports by József Lehrmann on His Travels Abroad (1819–1825)] fol. 118

[458] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/10 fols. 184–186

In Venice, the two men inspected not only the Giardini Pubblici, but also the botanical garden at St. Job's and the garden of Count Francesco Rizzo-Patarol, scion of an old Venetian aristocratic family who cultivated relations with the likes of Lord Byron. In Trieste, they gained admittance to the home and garden of Luigi Petinelli and then continued on from the port city to the stables of Lipica. Finally, the two men returned home, Gerics by way of Laibach (present-day Ljubljana, Slovenia) Lehrmann following a side trip to Klagenfurt. For Gerics, it was in Csáktornya (present-day Čakovec, Croatia), the estate hub of the Festetics family, that his mission reached its formal conclusion.[459]

Although Lehrmann's summary report seems to have been misplaced in one of the classes of the former Festetics family archives, the available correspondence and reports, including Gerics's redacted journal, clearly indicate that the two *Georgicon* professors successfully completed their technological journey. As seen above, the two Hungarians established an extended network of professional contacts with French institutes and leading intellectuals, and it should also be noted that, before leaving Paris, Gerics posted forty-nine books, four technological illustrations, five models, and twelve medical and veterinary tools to Keszthely. Their subsequent trips to Switzerland, Württemberg and Bavaria, and finally, their explorations in Italy, through the various regions from Lombardy to Naples can also be deemed as an adequate completion of a meticulously designed technological tour of Europe.

[459] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 6. Lehrmann József jelentései (1819–1825) [Reports by József Lehrmann on His Travels Abroad (1819–1825)] fols. 119v-120v; Peter Vassallo: *Byron. The Italian Literary Influence*, London, Palgrave Macmillan, 1984, 57.

Chapter 7

Practices, Industries and Markets through the Eyes of Two Hungarian Professionals

As discussed in some detail, the objectives expressed in the introduction to the travel instructions for the two Hungarians were accompanied by a copious and highly explicit agenda, along with directives on how each item was to be executed and within which system, be it agronomic and/or technological information, it was to be recorded. While in reality, Lehrmann's assignment consisted of only a limited range of scientific and agricultural areas, the tasks assigned to Gerics required a substantially more complex and differentiated range of observations. Beyond veterinary medicine, stock breeding and animal husbandry (with specific reference to sheep, cattle, horses and pigs), Gerics was also charged with exploring and documenting crop farming systems, and,—similarly to Lehrmann,—vegetable and leisure gardening, pomology and viticulture. In addition, Gerics was also expected to observe and record various agricultural processing technologies, investigate trade practices tied to product distribution and sale, and even conduct explicit market research.

The comprehensive nature of Gerics's exercise shows that, in Festitics's mind, his employee's mission should eventually impact every facet of instruction at the *Georgicon*, from the teaching of theory to practical training at the institution's experimental farm. Equally important, however, was that he acquire the knowledge necessary to properly advance the profitability of his patron's 332,000-acre estate, with its 55,000 sheep and many thousands of heads of cattle, horses and pigs.[460] And if one considers all that is known both of these two spheres—of the intellectual, material, and instrumental features of professional training at the time, and of the specific volume of business done on

[460] Kurucz.: Adminisztráció, gazdálkodás, adósságkezelés [Administration, Farming, Debt Management], 543., 557–558.

the Festetics estate—one would certainly be justified in postulating that Gerics's mission would have ramifications for the economy not just locally, but also nationally.

In Brünn (present-day Brno, Czech Republic), his first significant stop, Gerics leveraged a letter from André to familiarise himself with the local textile industry and the processes involved in producing felted cloth. It was here that he first witnessed and described the methods used to prepare and process wool, from washing, drying and culling to dying, weaving, and fulling to pressing the finished cloth between hot iron plates. The energy required for production, the technology used, the labour aspects of the industry—all was dutifully observed:

> "Most of the workers have been replaced by man-made instruments so that the desired manufacturing may be done at reduced cost. Occupying the chief position among these artificial instruments is that powered by steam ..., scaled to furnish the power of eight horses, and indeed it takes as many to replace it if the tool requires adjustment and, for that same reason, must be reinstituted".[461]

This foray into manufacturing technology was essential because it was here, at the mill owned by Karl Offerman, that he received letters of presentation that would secure him admission to mills owned by the Schoeller brothers along the River Rhine, where he would not only gain further experience with contemporary production technologies, but also explore the potential of these companies as buyers for the wool produced on the Festetics estate.

Gerics's first opportunity to observe European crop farming practices in the regions outside the Habsburg Monarchy came when passing through the Olmütz, (present-day Olomouc, Czech Republic). He then recorded what he had

[461] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 210–210v; For the use of changing power sources in textile manufacturing, see Osborne: *Iron, Steam & Money*, 107–148.

learned when he reached the farms on the estate of Prince Lichnowsky in Silesia. As the time was early spring, his remarks pertained to the manner in which the fields along the River Oder were cultivated during that particular season, while encompassing not only the system of rotation employed, but also various agrotechnical considerations. This is important because, although most of Festetics's lands already underwent crop rotation,[462] here, Gerics was able to observe both the breaking of land used between sections as meadow or pasture—a practice used to improve soil fertility—and the operation of equipment not in general use in Hungary. Gerics's reports bore additional significance for their specific word usage, as it was precisely for the purposes of developing a consistent Hungarian technical vocabulary that Festetics had prescribed that he use the Hungarian language and required that everything be described down to the last detail. In "Notes on my Experiences", the title of his summary report to the *Directio*, he indicated that the tract in question had been worked using a plough that was very different from the ones at home:

> "behind the knife or coulter projecting vertically downward from the beam is a triangularly cut board, disposed so that the knife's edge and flat of the triangle face forward, one corner of the triangle points upward toward the beam, and the other two corners point laterally outward; and so that, therefore, as the knife slices the earth, the triangle behind it divides it into two parts. This field implement was called a *Ruhrmachine*. We might call it a *churning plough* or simply *churn*, perhaps, and the work done by it *churnage* or *churned tillage*, though for other reasons it might just as well be called a *pre-sowing* or *furrowing plough*".[463]

[462] Kurucz: Adminisztráció, gazdálkodás, adósságkezelés [Administration, Farming, Debt Management], 549.; MNL OL Festetics Lt, Növénytermesztés, vetésforgó, műtrágyázás 1799–1944 [Crop Husbandry, Rotation of Crops, Articial Fertilization, Records of Soil Probes 1799–1944], P 275 139. d. VII. fol. 111

[463] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 213

Among subsequent remarks, Gerics—consistent with the principles of complex observation set forth in his instructions—speculated that the implement in question might not be suited to conditions in Hungary, given that the alluvial soil flanking the Oder was "quite loose and, moreover, well worked". Of course, his commentary extended beyond the initial phase of breaking ground to cover the operations of harrowing, seeding, and rolling, as well, noting with emphasis, that weeds accumulated in the toothed harrow, for example, especially the dominant common couch (also known as quitch or dog grass), were dried and used by the local poor as fuel for heating. In reference to conditions in Hungary, he would later write in his annotated journal that the Prussian locals "would appreciate a felled tree more than would the peasants of Somogy County, if only they could find any", meaning that in this respect, his homeland represented the more hospitable environment.[464] In yet another self-explanatory comment, Gerics observed that at the Lichtenberg (present-day Kolnica, Poland) farm, "threshers [received] a thirteenth share of the grain", which compared poorly to the pay offered threshers in Hungary: an eleventh share on average, with some enjoying as much as an estimated ninth of the total threshed grain.[465]

The two farms, Gerics reported, employed a nine and a seven-field system of crop rotation, repsectively. At Krischanowitz (present-day Krzanowice, Poland), the first of nine rotated sections was planted with a "root crop" (turnips) in strong manure, the second with barley mixed with red clover, the third and fourth with red clover alone, the fifth with wheat, the sixth with legumes (i.e. a member of the vetch family), and the seventh with rye. The eighth section was left as ovine pasture and the ninth again planted with rye. The

[464] Ibid., fol. 213v; OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/1 fol. 23; Gerics uses the name *triticum repens*—known today as *elymus repens*.

[465] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 214v; Cf.: József Glósz,: Gabonakereskedelem Magyarországon a 19. század első felében. Kereskedelmen kívüli gabonatranszfer [The Early Nineteenth–Century Grain Trade in Hungary: Extra-Commercial Grain Transfer], in B. Háda – D. Ligeti – I. Majoros – Z. Maruzsa – K. Merényi (eds.): *Nemzetek és birodalmak. Diószegi István 80 éves* [Nations and Empires: István Diószegi Turns 80], Budapest, ELTE Új– és Jelenkori Egyetemes Történeti Tanszék, 2010, 231–232.

farm in Lichtenberg, on the other hand, rotated between seven sections, starting with a fodder legume in strong manure; followed by wheat; then three sections of ovine pasture; rye; and finally, a second section of wheat. In another instance, Gerics reported an additional twelve-field rotation, consisting in a first section of carrots in strong manure, a second of barley with red clover, two fields of wheat, a fifth section in peas, a sixth in rye, a seventh in oats, an eighth in legumes in marl-enhanced soil ("Mergelung"), and a ninth again in wheat. The tenth section was either left to the flocks to graze or was sown in white clover. The eleventh field was planted with rye and the twelfth again in oats. Another peculiar field usage involving grains on Lichnowsky's farms appears in both Gerics's report and his journal:

> "The estate at Grabowka (present-day Grabówka Opolskie, Poland) counts eighteen lakes of various sizes, all of them having been artificially dug during the Middle Ages, which they are accustomed to using for three-year periods for fishing when the lakes are flooded with the waters of the Oder. Every fourth year, they are drained of their water and the land is cultivated. As this branch of farming is new to me, I was obliged to pay particular attention to it, all the more so, as I had heard it to be quite profitable".[466]

The exposition on lake usage provided in his revised journal went into greater detail, going so far as to propose additional new terminology:

> "Three smaller ponds were used for spawning and breeding. Each such spawning pool (as perhaps we might render in Hungarian the words Streich or Leichteich by which they denote them, but for which we have

[466] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819-1825 [Reports by Pál Gerics on His Travels Abroad 1819-1825] fols. 214v–215; OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/1 fol. 26v

likely had no use in Hungary before now, as I know of no instance in which fish are farmed) [*sic!*]".[467]

Once drained, most of the lake territory was sown in clover:

> "together with some sort of grain, which when harvested, was dried for clover hay. In the fourth year, the territory is turned back to water for fishing, before which the ditch is cleaned out and the collected weeds spread on the fields as fertiliser; in performing this cleaning operation, however, they are careful not to remove the topsoil, as failure in this regard would result in harmful consequences to the fish".[468]

The sections into which the land was divided and the crops grown on them indicate an obvious specialisation in animal breeding and husbandry on the part of the farm units in question. It was for this reason that Gerics stressed—as mandated by his instructions, with specific reference to his reports to the *Directio*—that on Prince Lichnowsky's estates, he would "pay special attention to the branch of farming that concerns the keeping, breeding, and treatment of livestock". From the foregoing it should be clear that the dominant pursuit in this case was sheep farming, in which Spanish Merino rams were kept yearlong with high-quality, previously selected, pedigreed ewes. As a result: "no matter when a foreigner comes to visit here, he will find lambs, whether many or only a few"; and as regards the rate of reproduction, he noted on more than one occasion that a mother that had been partitioned off had as many as six lambs with her. As ewes gave birth three times in the space of two years, producing "six offsprings each despite the ordinary system employed", that meant a total of no less than eighteen lambs. Naturally, Gerics included information on how the

[467] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/1 fol. 27v
[468] Ibid., fol. 28v

flocks were kept, the frequency of feeding and the composition of their winter fodder (straw, pea straw, chopped potatoes, oats), noting that they were put to pasture from spring to autumn, a practice that largely corresponded to that in place at the *Georgicon* model farm. At the same time, he made sure to mention that, in order to prevent the sort of lameness that was caused by mud surrounding the water trough, while also protecting the well itself, inspector Franz Hilvety had drained the water to a watering station constructed over filled earth at the front of the sheepfold. He also recorded that a solution of gunpowder in distilled wine was used to treat the "festering udders of ewes" nursing their young "more often than not with good results".[469]

The development of Prince Lichnowsky's core breeding stock was associated with Count Christian August von Haugwitz, the Prussian diplomat who later moved to Italy and who had initiated an advance order for the purchase of a number of Spanish Merinos years earlier. Upon arrival, the shipment had been found in such atrocious condition that the animals were rejected by all parties to the order. In the end, the prince had purchased forty of the ewes and two of the rams and was successful in having them cured. From these, "not only the Silesians, Moravians and Bohemians, but also many Hungarian farmers [had] acquired their own core flocks".[470]

In the introduction to his characterisation of the dairy farm at Krischanowitz (present-day Krzanowice, Poland), Gerics proceeded in much the same way as for Lichnowsky's sheep. That is, he began by naming the breeds (in this case Bernese and Tirolese), then moved to a discussion of fodder composition (chopped hay/straw mixed with chaff, plain straw and chopped potatoes), and concluded with a description of morning and afternoon watering. Gerics regarded as particularly important that the farms drove the flocks out into the yard to exercise both morning and afternoon, and then only milked them at

[469] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról (1819–1825) [Reports by Pál Gerics on His Travels Abroad (1819–1825)] fol. 212v
[470] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/1 fol. 30v

four. His entire description of the "*schweizeria*" appears somewhat scant in comparison to his remarks on the sheep farm, though he allotted considerably more space to the subject of the garden, observing, for example, that the greenhouse had begun to fall into disrepair, as "no expenditure [had been] made for its upkeep"—although fortunately, the lemon and orange trees "got on well" in the open air. The gardener, he noticed, transplanted many young wild cherry and apple trees from the lands adjacent to the Oder to an isolated section of the orchard, then the following spring, grafted the trees so that "just three of the year's fresh shoots [were] left on the branches to form the crown of the tree". The grafted surfaces were bound together with a soft cloth soaked in a mixture of wax, turpentine, resin, and melted fat.[471]

As regards the farm at Neuhof (present-day Nowy Dwór Prudnicki, Poland), Gerics's remarks recall, in addition to the dairy itself, a small cheese-making shop, whose processes he took pains to describe:

> "The sweet milk was curdled using the stomach of the calf, after which, placing it over the fire in a brass kettle fashioned for this purpose and warming it continuously, they press and knead it until the whey emerges from the curds. Afterwards, it is laid, wrapped in cloth or not, into a specially made mould and pressed, and, the solid parts thus liberated from the whey, the cheese is stored, one beside the other, in a special chamber; any mould that might beset it from without is scraped off with a knife, and in this way, it is kept in a dry place until a buyer can be found".[472]

It was also here that Gerics first encountered the fact of the negligible demand for Hungarian products:

[471] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 213v–214
[472] Ibid., fol. 214v

> "As there is no rock salt in Prussia, it must be imported from England. Every farmer dictates in advance how much salt he needs for the year, and the government orders accordingly. Why do they not have salt brought from nearby Krakow—from Poland or Hungary? Why rather from such a distance? I asked. The answer was that the salt from the more proximate source is more costly by a kreutzer a pound, while its distribution would necessarily take place by cart, which would also entail greater expense".[473]

It was likely in the same way that he learned the reasons for the paucity of Hungarian wines in Prussian Silesia: "There is little Hungarian wine in this land; the most common and least costly is Bordeaux, which, even transported from such a distance, requires less expenditure than the hauling of Hungarian wine the shorter distance by cart." It is conspicuous here that—perhaps with a view to the future publication of his journal—Gerics does no more than state the facts of the matter, making no mention of the variety of customs duties to which Hungarian goods were subject on the borders of the Austrian Empire. It escapes his notice—or at least appears to—that by the time Hungarian merchandise had crossed the Austrian hereditary lands and Austro-Prussian border, they had accumulated a serious burden of tariffs. [474]

In the next phase of his journey, Gerics—under the good graces of Countess von Reden—turned his attention to a farm in the Buchwald (present-day Bukowiec, Poland) area, where his experiences proved extraordinarily valuable to his understanding of arable crop production, sheep farming, and even the wool trade. In his revised, annotated journal, he would later stress that what he had happened upon here was a "mode of cultivation in the manner of

[473] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/1 fol. 20
[474] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/1 fol. 21v; György Kurucz: Hungary and British–Austrian Trade Relations in the Mid-18th Century, *Südost Forschungen* 59/60 (2001), 227–228.

gardening". The seven and eight-field systems included potatoes and cabbage in addition to the usual barley, wheat, oats, red clover, turnips, and vetches. He found the dairy farm, as with the one in Kamenz, Saxony, with its Mürztal and Oldenburg breeds, to be conspicuously clean and orderly, while the sheepfold was so tall and decorative, it looked, to his mind, "almost a church". The local sheep farm taught him numerous lessons as well, for instance, on the sale of shorn wool, as it was here that the Hungarian first witnessed English buyers procuring raw wool directly from the producer, without recourse to a Viennese Jewish or Saxon middle-man.[475]

The next set of estates to fall under Gerics's scrutiny were those of the famous Prussian von Richthofen family. Prussian state councillor Baron Karl Andreas von Richthofen's eight farms, which the Hungarian surveyed from beginning to end, employed crop rotation systems of four, six, ten, and even sixteen fields. Although the grains and fodder plants involved in them corresponded to the ones recorded on previously viewed estates, the sixteen-field system encompassed rotations where certain strips of land were left fallow as well, including both an untilled, unsown, multiple-year form (*parlag* in Hungarian), and a tilled, single-year fallow. An organic fertiliser was added to the *parlag* section and two fallow fields to improve fertility for future crops. Gerics's commentary on ovine husbandry also merits deeper consideration for several reasons, including that the *Georgicon* professor, during his consultations with von Richthofen, made reference to the baron's yet unpublished volume on a disease experienced in relation to the Merino sheep belonging to his Dessau tenant Christian Gebhart Nordmann,[476] and that it was here that he first recorded a feeding regimen that differed from those seen on previous sheep and dairy farms:

[475] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/1 fol. 58
[476] Karl Andreas Richthofen: *Die Traberkrankheit der Schafe, verglichen mit der sogenannten Schafräudekrankheit*, Breslau, Korn, 1827.

> "Mr. Richthofen has not distilled potato brandy for several years now for the reason that there has been a truly high tax levied on the process. Thus, he leaves the potatoes to ferment for 48 hours, as if he were preparing for distillation, then, diluting the fermented potatoes with water, gives three pints to each sheep daily, and 30 pints to his cattle, which stock has been improved by breeding with a Schweitzer bull".[477]

Von Richthofen's son, Karl Friedrich, a former student of the *Georgia Augusta* in Göttingen, took Gerics to his country residence in Katzbach (present-day Kaczawa, Poland) as well. The building had undergone a full reconstruction following the events of 1813, in which embittered Prussian forces under Marshal Graf von Blücher had clashed with French troops led by Marshal Macdonald. As Gerics observed,

> "His sheep have a more comely appearance than those of his father; he does not feed them fermented potatoes, which he holds to be overly rich and aggravating, and this is one reason that his wool is—one might say—finer than his father's".[478]

Given both the commercial trends of the time, and the specifics of his mission, Gerics understandably paid heightened attention to Prussian state initiatives and so, when touring the estates of the younger von Richthofen, made certain to seek out the royal core breeding flock in Panten (present-day: Pątnów Legnicki, Poland) then managed by Albrecht Thaer's son Georg. His subsequent report to the *Directio* listed and characterised the French breeds he encountered there, stressing the point that, beyond the Rambouillet and Malmaison sheep, the breed from Moncey was "prized most for its wool, which was not wavy or curly, but

[477] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/1 fols. 59v–60
[478] Ibid., fol. 60v

straight and exceedingly fine". In addition, it was here that Gerics first experienced—and, of course, recorded—the manner in which sheepfolds were designed with a view to fire safety: "[The fold] is constructed quite handily, so as to offer multiple doors on either side". Another practice encountered and recorded here for the first time concerned the presentation and storage of wool samples: "The receptacle for a range of sample wools, once gathered together, has the appearance of a book, but, when opened, can be stretched out like a standard length of cloth." Incidentally, it is from precisely this period that one source speaks of a similar practice being used in Keszthely, based on an administrative order issued personally by László Festetics. It speaks for itself that the samples Gerics sent home from his travels would later be used as teaching materials at the *Georgicon*. Another event of interest associated with this occasion involves a conversation Gerics had with agronomist Albrecht Block. Although his revised journal would omit the incident, his report to the *Directio* cites Block as having remarked, "in improving one's stock, one must avoid mating cousin to cousin, as inbreeding in this fashion weakens the generation; one need only look to man [for proof]".[479]

As discussed above, the touring of university towns was regarded as key to the success of the *Georgicon* professors' mission. It is therefore not surprising that Gerics should have regarded Dresden as an essential destination, both for its many scientific societies and because he hoped he would have the opportunity to meet the veterinary science professor, Johann Christian Ribbe. Another, equally high priority was the potential for expanding Hungary's knowledge of prime quality Saxon "electoral" wool (so named for the "Electorate" from which it came), including considerations of husbandry, breeding, nutrition, and veterinary medicine, as well as seasonal practices, such as wool laundering,

[479] Ibid.; MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fols. 223v–224; MNL OL Festetics Lt, Jószágkormányzói Rendeletek [Estate Management Ordinances], P 274 25. k. No. 318 p. 369

shearing and various aspects of sale. Gerics's first truly important discovery in this regard was that, contrary to general practice in Hungary, Saxon breeders did not consistently shear their flocks in late May, but timed the event according to prevailing weather conditions. It sometimes occurred, for example, as it did the year of Gerics's visit, that the sheep were "swum" and shorn in early May.[480]

Upon reaching the Saxon royal sheep farm at Stolpe, he found the flocks already shorn, and, having missed what would have been the main point of his visit, instead took the letter of introduction provided by Countess von Reden and hurried to the estate owned by the Prince of Reuß zu Köstritz in Klipphausen. On the way, he ran into a flock belonging to a retired military officer just as it was being taken to pasture, and found that the quality of the animals surprised him greatly: "In Saxony, one also sees sheep with wool of a roughness hardly seen among even the flocks of the peasants at home". Indeed, upon exchanging words with their owner, he noted, with a degree of satisfaction, that even in educated Saxony one met farmers that displayed a certain level of ignorance. In his journal, he wrote, "With this, as I think back on the accusations levelled against my homeland, some weight has fallen from my breast".[481] In recalling his experience in Klipphausen in his comprehensive report to the *Directio*, Gerics offered only a few lines on the washing operation. In his later retelling, however, doubtless out of consideration for his future Hungarian readership, he would describe the event in minute detail:

> "The stream there is not large, as one might jump across easily at any point were the banks not so steep in most places, though its water never recedes. In its bed, in the place where it crosses the meadow and its bank is lower, piles in two rows have been pounded into the waterbed for a length of about three fathoms [1 fathom = 1.8 m – G. K.], at a distance

[480] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/1 fol. 83v
[481] Ibid., fol. 95

> from one another such that two sheep might easily fit through side by side, but so as to occupy the entire width of the stream. Beneath the spaces between the piles, i.e. laterally to the said piles, along the bottom of the stream, and on either side, the bed is laid with boards so that no earth, either from the bottom or from the banks can become mixed with the water, rendering it murky and thus unsuited for use in washing. Starting from below, moreover, boards are laid to a height of about three feet crosswise, so that the water at the boarded place might be held up to a certain height; then eighteen men are made to stand there at a distance of one pace apart, the sheep plunging crossways into the water of this boarded trench at the structure or channel constructed perpendicular to the water flow, while the line of men push them hand to hand, each of them dunking each sheep in turn, until the last one removes the animal from the water and transports it to the bank. It is this in which the soaking process consists".[482]

Importantly, Gerics had the additional opportunity to witness how compensation for this work was made. At the day's end, the prince himself rode out to the site and settled the labourers' wages not in cash, but "according to the custom, by assigning meadow space to them as temporary pasture". This having been accomplished, he took his Hungarian guest by the arm and, leading his horse by the bridle, escorted him on foot back to the castle.[483]

Despite the disparity in social status between the two men, the prince sat the *Georgicon* professor at his own table, a clear nod to his guest's education and refined demeanour. Their conversation at table proved decidedly instructive in its own right, as the prince recounted at some length his tour of England and

[482] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/1 fols. 96v–97; MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on His Travels Abroad 1819–1825] fol. 227v
[483] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/1 fol. 97

France, sharing with Gerics the "wool muster" he had brought from Rambouillet, which the Hungarian promptly sent on to Keszthely for use at the *Georgicon*. At the same time, the prince gave the order that evening reading material consisting of one volume each by Sir John Sinclair and Alexandre-Henri Tessier should be sent from his library to Gerics's guest accommodations.[484] Although Block did not approve of inbreeding ["Inzucht"], at his sheep farm in Klipphausen, Gerics did observe that "on the day of Michaelmas, the rams [were] let loose and the flock improved from within". As regards matters of husbandry, "in summer, the older animals [were] out to pasture and at night or, in the event of rain, during the day as well, [were] driven into a shed", while the lambs were kept in a protected place for the space of a year. Of the next day's shearing—"a proper village festival"—Gerics's report to the *Directio* went into ample detail. Participants in the event comprised an absolute majority of women, who, Gerics said, "pursued shearing by profession", and who used a type of scissors, also frequently seen in Hungary, that were "squeezed", similar to those used by tailors who worked with wool cloth. To shear the sheep, the women sat in a grassy area, placed the sheep in their laps and then tied the animals' legs to their own. For the duration of the operation, faeces was collected by a dedicated assistant to prevent the wool from becoming soiled. Pay was set at six *pfennigs* per ewe or wether, eight *pfennigs* per ram, twelve *pfennigs* per stud ram, and four *pfennigs* per lamb. The shorn wool was then gathered up and bound ten fleeces to a bale, or, for denser wool, nine to a bale. After baling, in the final step, the wool was weighed, after which "the prince distributed egg bread among the children, who had until then been scattered among the watchers". Naturally, Gerics also found occasion to ask his

[484] According to his report to the *Directio*, the reference is to two works in German translation: Sir John Sinclair: *The Code of Agriculture, Including Observations on Gardens, Orchards, Woods, and Plantations*, London, Hudson, Cook and Hale, 1818, published the following year in Vienna with the title *Grundsätze des Ackerbaues, nebst Bermerkungen über Gartenbau, Obstbaumzucht, Forstkultur und Holzpflanzung*, Joseph Ritter von Schreibers (trans.), Vienna, Heubner, 1819., and Alexandre Henri Tessier: *Über die Schaafzucht, insbesondere über die Raçe der Merinos*, Witte (trans.), Berlin, Hitzig, 1811.

host a number of questions on matters in veterinary medicine, from which he discovered that, in the prince's experience, animals suffering from compulsive circling could be successfully treated using trepanation, combined with Glauber salt (sodium sulfate) as a laxative.[485]

As noted in the previous chapter, among those Gerics met in Leipzig were persons of key importance to the purchase and distribution of Saxon wool: namely, merchant and banker Franz Joseph Grassi and dealers Speck, Campe, and Köhler. The portion of his journal entry that dealt with his experiences in the city bears repeating here verbatim, as the train of thought it reflects reveals much about the contemporary situation regarding Hungarian exports (among other things):

> "I spent several hours in the culling and cleaning institute belonging to these gentlemen – Wollklopferey und Sortiranstalt. It would, however, be a useless exercise to describe what I learned here, as (1.) The observations I have accumulated regarding wool since then have already been arranged into a scientific system, the entire affair having been developed into an expansive discipline, especially given the famous Wollconvent held precisely here in Leipzig under the presidency of old Thaer as well, and the work of Count Perrault de Jotemps[486] on Merinos, which in Germany alone has seen three translations in a single year. (2.) Because the handling of wool—or rather, the ability to handle wool properly—presupposes a knowledge of the material consisting entirely of practical skills, one cannot, as it were, describe it, so that here, I will instead note only the following: (1.) Although Saxon wool is valued most highly on average, still, the appreciation in question must be understood as applying

[485] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on his Travels Abroad 1819–1825] fol. 228
[486] The book by Alexandre Gaspard de Feuillasse, Viscount of Perrault de Jotemps, as redacted and translated by Albrecht Thaer, was published in Berlin in 1825 under the title *Ueber Wolle und Schaafzucht*.

> only to the wool from older sheep. As lambs are shorn immediately after their mothers, their wool is, upon reaching the merchant, quite short and yet unwashed. For reasons of pure consideration for their wellbeing, the Saxons do not have their lambs swim to wash them, as—this operation being most often conducted in May, when the weather often changes quite suddenly—they would certainly sustain grave losses in doing so. (3.) In all of Saxony, only the Rochsburg flock is kept stabled; yet the long, flaccid wool of its sheep is little valued and for this reason, is not purchased by the merchants in Leipzig. (4.) Although several of the farmers of my beloved homeland are known here, among them Count Hunyady,[487] Count Esterházy,[488] and Count Festetics[489]— and Ács in particular among relevant locations—the wool itself, once collected and classed, is not distributed under the name of the breeder or his homeland, but is mostly rechristened as Saxon wool, and the remainder as Silesian or Austrian".[490]

Although he does not say so explicitly, Gerics clearly recognises that in the process of distribution, Hungarian raw wool, being held in lesser regard than that of its competitors, was inevitably stripped of its label of origin to the detriment of both the prestige, and the market position of its Hungarian producer. This notion is supported by the traveller's later experiences in England, whose western counties were the principal customers for Saxon wool; and in fact, his journal records a statement made by a Gloucestershire industrialist who claimed that he used it exclusively in his own business. To Gerics's suggestion that—given his personal experience with Saxon merchants'

[487] Count József Hunyady (1773–1822), who operated a nationally famous sheep farm in Ürmény (present-day Mojmírovce, Slovakia).
[488] Count Károly Esterházy (1756–1828), Count László Festetics's uncle, owner of a model farm in Ács,
[489] Count Imre Festetics (1762–1847), younger brother of the *Georgicon* founder, who operated a nationally famous sheep farm at his estate in Kőszegpaty, Western Transdanubia.
[490] OSZK Kézirattár[Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/1 fols. 135v–136

mixing Hungarian wool in with their own—some of the gentleman's wool could well be Hungarian in origin ("there might be Hungarian wool mingled with yours, perhaps even our own, as we are wont to raise electoral—even purebred electoral—sheep"), the mill owner reacted dismissively: "Worthless is the miller who does not know his materials". Disillusioned, he was forced to conclude that many in Britain believed commodities sold "under the Saxon name" to be exclusively of Saxon origin.[491]

Leipzig was, of course, not the end of Gerics's mission in Saxony: indeed, given both what was expected of such a tour in general, and the prescriptions set forth by his instructions, the *Georgicon* professor's technological journey through Saxony could not, under any circumstances, have failed to involve an inspection of the mining academy in Freiberg. On arriving in the city, Gerics first, as a symbolic gesture, sought out the grave of that great minerologist of the age, Abraham Gottlob Werner, as a symbolic gesture. His meeting with Prof. Wilhelm August Lampadius, by contrast, represented more than an obligatory formality, as evinced by his previously unfulfilled desire to visit the foundry at Gleiwitz (present-day Gliwica, Poland) in Silesia, which neither time, nor his instructions would permit. Clearly, he regarded the site as more than a mere curiosity. His notes, furthermore, reveal a consistent comparison between industrial practice in Hungary and experimental results in chemistry abroad. In his redacted journal, he writes, "We are behind in the science of the elements." At the same time, he derived some satisfaction from the discovery that a treatise regarding the definitions of elements and classification of alloys written by his contemporary and countryman Ferenc Kerekes, a natural scientist and professor at the Calvinist College of Debrecen, had made a certain impact on the Freiberg academic: "[Because] these cannot be broken down into their constituent parts; Mr. Lampadius has wholly succumbed to the views of Kerekes, to which I also subscribe." After Lampadius

[491] Ibid., fol. 137v

had shown him his laboratory, Gerics thanked him, bade him farewell and then proceeded to nearby Halsbrücke, where, under the tutelage of mine supervisor Köhler, he made an on–site study of the processes of ore purification and sedimentation.[492] Equally important were his observations in Halle on the process of salt–making, which extended from the pumping of saline waters from underground aquifers to its boiling in copper tanks, distillation and, finally, drying for end recovery.[493]

After departing from Halle, Gerics took time to visit numerous smaller farms in Anhalt, noting down his reactions to a range of different experiences there. In the Gröbzig area, he encountered a three-field system of cultivation he assumed to have represented a necessary evil, having been adopted to mitigate the lack of sufficient stock (i.e. manure) to maintain soil fertility. He did note, however, the locals use of mud collected from the bottom of the region's numerous minor lakes mixed with lime, a clever approach, as even several years' composting would still have produced a material "unsuitable for spreading upon the land". He visited a farm owned by Baron Otto Leopold von Ende near Trinum for its 800–head of sheep fold and locally renowned dairy farm, although in the end he was forced to observe that he had found its "fifty–seven Friesian cows standing in a beastliness reaching very nearly to their hocks". Athough his summary report to the *Directio* indicated a prevalence of rye among the region's crops, the real strength of its industry lay in its brandy production, the by-products of which—"the dregs of distillation"—were added to dried medick and legumes to provide fodder for cattle. By contrast, at a farm owned by former soldier Carl Friedrich Breymann in Roschwitz (outside Bernburg), he found little to pique his interest, although he did make mention of

[492] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/1. fols. 85-85v, 88; For more on Hungarian minerology pilgrimages, see: Dezső Gurka,: A 18–19. századi magyar mineralógus-peregrináció művelődéstörténeti konnotációi [The Education Historical Connotations of the Eighteenth and Nineteenth-Century Hungarian Minerology Students' Studies Abroad] *Századok* 151 (2017), 1043–1062.

[493] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról (1819–1825) [Reports by Pál Gerics on His Travels Abroad (1819–1825)] fol. 233 v

the location for reason of its "plentifully producing Dutch cattle, comely English and Mecklenburg horses, and single tread mill". The importance of Bernburg, in fact, lay in the dipping technology employed in its paper-manufacturing industry, of which Gerics, again, provided a detailed account.[494]

In Anhalt, the *Georgicon* professor's recorded experiences in conjunction with sheep husbandry related closely to realising the links between the region's natural conditions and certain diseases. Specifically, the town of Nienburg had been experiencing a high death rate from an illness known as *Blutschlag*,[495] with regard to which he informed the *Directio*:

> "all of Anhalt is a flatland; e the meadows are quite rich everywhere between the Saale and the Elbe, and both waters suffer frequently from flooding; this might be one reason for the illness, a conclusion that seems all the more likely in that nowhere do sheep suffer more from this *Blutschlag* than here, in particular in places near the water. I could find no harmful plants in the meadow."[496]

In Wedlitz, he penned a summary of the diagnostic characteristics of another ailment, this one a crippling condition of the joints known as "Traberkrankheit".[497] Building on notes and accounts provided by a local tenant on a large number of dissections, he was able to describe several aspects of the disease, including the discolouration of the joint fluids and the manner in which the animals rubbed and bit at the offending places, noting that they were

[494] Ibid., fols. 234–235v
[495] *Apoplexia sanguinis*, a type of stroke or seizure.
[496] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról (1819–1825) [Reports by Pál Gerics on his Travels Abroad (1819-1825)] fol. 235
[497] *Paraplegia enzootica*, commonly known as *scrapie*.

"incapable of sustaining themselves if they [rose] even slightly from the ground".[498]

It seems clear that in Silesia, Saxony, and Anhalt, that is, up until the two *Georgicon* professors' meeting in Berlin, Gerics, in accordance with his instructions, recorded all he encountered by way of horticulture, animal husbandry (particularly sheep farming), and veterinary medicine with great care and thoroughness. However, his writings also cover such essential topics as the sales practices of major trade hubs, Prussian state regulatory interventions, and various infrastructural multipliers, such as transportation and shipping conditions, whose combined consideration prompted him to draw economic conclusions applicable both generally, and to the situation in Hungary in particular. Thus, in reporting on Eisgrub Castle (present-day Lednice, Czech Republic), Lehrmann's observations include precise numerical data as to orange trees and pineapple plots, notes on the fashionably decorative Chinese and Turkish stylistic tradition reflected in the buildings of its park, and a meticulous list of the species of trees adorning its avenues and grounds (*Tilia*,[499] *Pinus lariae*,[500] *Populus italicae*,[501] *Sorbus aucuparia*,[502] etc.).[503] Upon reaching the manorial vineyards of Feldsberg (present-day Valtice, Czech Republic), however, he departed somewhat from this more or less quantitative approach, providing information on planting methods and remarking in particular on the multiple-year quality inspections individual species underwent prior to large-scale implementation.[504] In Breslau (present-day Wrocław, Poland), as seen

[498] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról (1819–1825) [Reports by Pál Gerics on His Travels Abroad (1819-1825)] fols. 236–236v

[499] Linden.

[500] Cedar.

[501] *Aigeiros*, Lombardy black poplar.

[502] Rowan.

[503] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 6. Lehrmann József jelentései külföldi útjáról (1819–1825) [Reports by József Lehrmann on His Travels Abroad (1819–1825)] fols. 83–83v

[504] "Es wird auch keine Gattung unter was immer für einen Namen weder an Tilagen noch in Steinberge gepflanzt, bis sich selbe nicht in der Weinplantage durch ihre Früchte bestättigt." Ibid., fol. 84

earlier, while promoting the catalogue of the university's botanical garden as important to Keszthely's educational objectives and nurturing ties with its professor of botany for the same reason, Lehrmann also strove—unsuccessfully—to forge a connection with regional wine–trading entrepreneurs. Further north, his attention turned to the potential profitability of intensive tobacco farming, as well as to the matter of the fruit trees he observed lining multiple roads between Frankfurt an der Oder and Berlin, which he found to have been the result of a centrally orchestrated government initiative.[505]

In the previous chapter, Berlin was discussed as a place of interest primarily for its institutions of science and higher education, as well as for the many opportunities for contacts it offered. Gerics, naturally, turned his own attention outward from the capital to the provinces, where crops and animals might be studied in greater abundance, ultimately leaving Berlin behind to pay an obligatory visit to the school operated by Albrecht Thaer in Brandenburg. There, as he wrote in his journal, he found that the land had at first been "cultivated in the older fashion, in a three-field cycle". Once Thaer had acquired further lands, however, he had begun improving them by "pursuing grain production over a smaller expanse, the objective being to produce cattle fodder on which to keep more animals so as to better subdue his lands with manure and enhance the clear profit derived from his stock". Thaer's six-field, hundred-acre section rotation was planted with "(1) potatoes, cabbage, carrots, and broad beans in strong manure, (2) barley with clover, (3) clover, (4) part wheat and part rye, (5) peas in half-strength manure, and (6) another field of rye".[506] Although the method of row planting in place at Thaer's experimental farm had already been instituted at the *Georgicon*, Gerics did witness his first working hayrake there, which he described as being drawn by horses "to an exceedingly large savings of time". Among the things he felt it important to mention was the

[505] Ibid., fol. 86

[506] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/2 fols. 60–60v

manner in which corn was cultivated as fodder, the first instance of the practice he had seen thus far in his foreign travels. From Brandenburg, he next targeted the Prussian royal dairy farm in Königshorst, where he studied the methods used to process the milk from the facility's more than six hundred cows. In reports to both the *Directio*, and Festetics himself, he offered a detailed account of how the milk was cooled, strained, and turned into industrial quantities of butter, which he found to be "particularly flavourful and in the fashion of a delicacy", much prized on the Prussian grocery market, bringing in prodigious sums for the state treasury.[507]

In Mecklenburg, Pomerania and on the Island of Rügen, it was the methods of fertilisation used to offset poor soil conditions and an intriguing approach to crop rotation that offered new topics of study. Here, cultivated areas were divided chiefly into six and twelve sections, with one tilled, fertilised section left fallow for a year, another used as a pasture for cattle, and yet another used as a pasture for sheep. As a whole, the system was, as Gerics put it, "known by the term *Koppelwirtschaft* for the multiplicity of its pastures". Also of extraordinary importance in the Hungarian's estimation was that, due to the proximity of Baltic ports like Stralsund, grain had remained the dominant agricultural product in the region—a situation he speculated may well have stemmed from a desire to exploit favourable opportunities for export to England.[508] In Ihlenfeld and Ivenack, Gerics found his attention drawn to matters of equine husbandry, primarily due to the continual regional demand for draught horses, which, as he noted, was accompanied by a complete absence of oxen. He had little trouble explaining this situation, however: a five–year–old mare or stallion, he wrote, could be purchased for between 80 and 200 *Louis d'or*, while an ox could run as high as 16-20 *Louis d'or*. Beyond its effect on rotation practices, poor soil requiring fertilisation was also the likely

[507] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról (1819–1825) [Reports by Pál Gerics on His Travels Abroad (1819–1825)] fol. 398v
[508] Ibid., fol. 246

circumstance behind separate lease covenants stipulating that all stable manure belonged exclusively to the landholder.[509]

Following the previously discussed fruitless journey to Hamburg and somewhat lengthy detour along the Weser, Gerics reached Lauterbach and the agricultural enterprises operated by Baron Georg Karl von Riedesel, which, though of the highest standard, he would later remark revealed nothing of particular value to his mission. This assessment notwithstanding, the retelling of events presented in his annotated journal include a number of rather eye–opening observations on certain regional peculiarities of the lands around Frankfurt am Main. As regards the dominant branch of agriculture in the region, for example, he found that animal husbandry was largely favoured over horticulture, mainly—he thought—due to the high demand for meat from the cities: "some, when speaking of cultivation, in truth are referring to grain production". For another thing, in comparison to other German principalities, meadowlands were accorded an extraordinarily high level of care and, to this end, effort was expended to exploit natural resources as fully as possible, to the extent that "burgeoning streams were most often used in meadow irrigation". Water, for that matter, was shared rationally among communities, although conflicts were not infrequent: "some release the water onto their own parcels before their neighbours' times have run out". Moreover, many families there were found to specialise in the cultivation of flax, which, woven into cloth in small home workshops, was "in part sold in Frankfurt in larger quantities, and in part carried by door–to–door peddlers to distant lands".[510]

A decisive factor in the success of the *Georgicon* professor's study of the European markets as laid out in his instructions was his tour of the Rhine riverside textile mills and encounters with the various entrepreneurs who owned them. With the assistance of Cologne banker Friedrich Peter Herstatt, for

[509] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/2 fol. 74
[510] Ibid., fol. 139v

example, he met Heinrich Kamp, an industrialist and merchant who had studied in England and had earned recognition at a conspicuously early age; similarly, a letter of presentation acquired in Brünn (present day Brno, Czech Republic) was leveraged to gain admittance to a mill in Düren owned by the Schoeller brothers (Heinrich Leopold and Philipp Wilhelm), an experience of which he also provided a detailed account. Gerics's observations in these instances led him to conclude that the wool processed by the Rhine textile industry was actually Hungarian in origin yet was marketed as "Moravian wool" with rougher quality materials labelled "Hungarian muck" ("Ungarisch trek"). The *Georgicon* professor's remarks on mill purchasing were also telling:

> "Leopold Schöller claims that farmers do best to sell at the markets of Vienna and Pest, where unsorted wool is sold; to carry [wool] to Frankfurt or elsewhere would be an arduous affair and could not be accomplished without great losses".[511]

In his letter to Festetics he also called it lamentable that certain wholesalers, he had discovered, "filled manufacturers with prejudices against Hungarian wool", as a result of which the latter were reluctant to sign direct supply contracts with Hungarian producers.

In terms of marketability, Gerics saw proper washing as key, asserting that, "where the wool has been overly cleansed of its oils, it cannot be kept, and if not sold within a year, will go to waste". The opposite situation could also be problematic; that is, "If the wool is exceedingly oily, then it weighs more, but in negotiating, the buyer will take this into account". Indeed, "Very oily wool kept

[511] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról (1819–1825) [Reports by Pál Gerics on His Travels Abroad (1819–1825)] fols. 258v, 407

for considerable lengths of time will also deteriorate, particularly if not dried thoroughly after washing".[512]

On 1 January 1821, in the first letter he wrote after crossing the border into the Netherlands, Gerics provided Festetics with comprehensive information on the sale of Hungarian wool in Brussels, as well. For one thing, he regretted having discovered that there, as along the Rhine, buyers held negative views of the quality of goods from Hungary, a circumstance for which he no longer blamed Viennese Jewish profiteers, instead stressing that—among other things—producers should take care that "fleece from dead or sickly creatures" not be mixed in with the good wool. In his estimation, it was adequate quality—"let it just once be known that the merchandise is good"—that would bring profit in the long run. Moreover, certain investments—be they in the mass application of estate washing contrivances that were already in the works, or in better animal nutrition and selection—would also serve the cause of quality production. Here, he made specific reference to developments in Keszthely:

> "the sheep washing amenities which Your Lordship had, prior to my departure, still intended to construct [would constitute sufficient guarantee that] grains of earth from the agitated waters not become deposited between the strands of the wool',[513]

and were all of the above taken into account, "damage from the same might be permanently avoided". Not unimportantly, Lehrmann's reports also relayed important observations on the reception given Hungarian merchandise by buyers abroad. At his previously discussed stop at Frankfurt am Main, for example, while consulting with some of the city's preeminent bankers, he was given a personally guided tour of a wine cellar owned by Manskopf Sarasin. In his

[512] Ibid., fol. 408v
[513] Ibid., fol. 410v

report of the occasion, he recounted tasting wines from the 1811, 1815, 1818, and 1819 vintages, commenting that, of the various Rhine wines, his host deemed those of the Rüdesheim area the best, with allowance given for certain vintages associated with neighbouring Johannisberg. To Lehrmann's suggestion that the city's winesellers might carry Hungarian wines as well, his host replied that, although they were superior to French wines in terms of storage, Hungarian wines were, in fact, too "fat", while failing to match those of the Rhine River region in bouquet, colour, or spiciness. Of course, the *Georgicon* professor could not refrain from pointing out his host's obvious bias.[514] Lehrmann's report on the Rhineland vineyards naturally extended to pruning methods, as well, while also allotting considerable space to the topic of cider production. Comments in the latter case included a description of how, depending on the size of the barrel used, a quantity of brandy was added prior to fermentation for the purposes of enhanced conservation.[515]

What the two men learned in the Netherlands in general had largely to do with the region's natural geography. Although Gerics's acquaintance with the Duke of Arenberg, as suggested in the previous chapter, was of great assistance to him in his upcoming travels, his inspection of the duke's estates proved instructive beyond the mere registration of its crop rotation regimen and its various sections. Interestingly, it was here—and not at Albrecht Thaer's experimental farm—that Gerics first recorded the intensive cultivation and double use of broad beans.[516] Specifically, the bean plants were cut down before the beans themselves were fully ripened and, in places where firewood was scarce, its dried stems mixed with peat for fuel. The high volumes produced were justified in that they also provided quality feed for horses, thus yielding beasts of a condition for which Gerics at one point expressed profound

[514] MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 130. d. T. III. fol. 92v
[515] Ibid., fols. 94–94v; For more on the topic of pruning see Johann Metzger: *Der Rheinische Weinbau in theoretischer und praktischer Beziehung bearbeitet*, Heidelberg, Oswald, 1827, 146.
[516] Scientifically known as *Vicia faba*.

admiration: “More rests upon them than twice as much oats could contrive”. Yet another essential observation had to do with the plant known as “dyer’s madder”,[517] an important industrial crop for the textile industry of the estates along the River Scheldt. Specifically, the duke did not permit the plant to be grown on his lands, as removing its roots was not without detrimental effects: “The earth would be dug quite deep so that the water might easily rise, rendering the fields unfit for tilling, where they were not carried away by the floods”.[518] In his report to the *Directio*, he additionally stressed that in Flanders, even lands with sandy, less fertile soils were cultivated “with wondrous effort”, and that arable fields and meadows were partitioned by means of living hedges, which were also used for firewood in areas poor in trees. Of equal importance was his observation that great care was taken to roll all tillage throughout the Netherlands once sowing was complete.[519]

In weighing general agronomic trends and concrete market opportunities, it was Gerics’s fundamental perception that the previously thriving textile industry of the United Provinces, including Leiden, had lost its former significance, so much so that his account of the operations of the Amsterdam Stock Market was cursory at best and offered no concrete information at all on how daily business was conducted. Lehrmann, for his part, in keeping with the economic peculiarities of the age, trained his own perceptive powers on the profitability of luxury plants raised in greenhouses, although it can be said in general that, with regard to what they saw in this state which was relatively rich for the region, the two professors limited themselves to documenting

[517] *Rubia tinctorum.*

[518] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/3 fols. 14v–15

[519] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról (1819-1825) [Reports by Pál Gerics on his Travels Abroad (1819-1825)] fols. 145–145v

experiences with institutions, eminent personalities, and/or the workings of day–to–day life.[520]

England, on the other hand, proved a truly singular destination in every respect. By contrast to Lehrmann's briefer circuit of just a few months, Gerics—as explored in some depth in the foregoing chapter—remained several years in the British Isles, forging connections with scientific societies, institutions, and individuals and gathering exhaustive information on the agricultural life of a state considered to be on the cutting edge of the age. Naturally, meaningful exploration of cultivation systems, concrete production techniques, farm implement use, animal rearing methods, and other practical matters required lengthy jaunts through the countryside, far from the British capital. "One of the principal objectives" of his travels, however, was to document and evaluate the wool trade, and it was through his probing examination of London and other major textile-producing towns and cities that he gained some real facility in this regard. Alhough he first arrived in England in August of 1821, it was not until his fourteenth letter to Festetics from the Isles, dated March of 1822, that he finally delved into this particular problem[521] and explained his delay in dealing with it: it was not, he said, that he had lost sight of the objective, but, "sensing [his] own ineptitude in matters of commerce" he had wanted to first gain some experience in the factories of western England before tackling the matter in earnest.

First, Gerics reported that he had wished to achieve some clarification in the matter of product labelling, as existing designations each included reference to a given European country, leading the British to believe that the wool from the continent entering their factories all came from Spain, Germany and France. Sometimes, the labels were broadened to specify even smaller geographic

[520] Ibid., fol. 32v-33; MNL OL Festetics Lt, Directorátusi Ügyiratok [Files of the Directorate], P 279 130. d. T. III fols. 105–106

[521] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról (1819–1825) [Reports by Pál Gerics on his Travels Abroad (1819–1825)] fols. 451–454v

subdivisions—in the case of Spanish wool, Leon, Segovia, Soria, Seville, or even Portugal. Wool from the German territories was most frequently held to be "Saxon Electoral", a designation that encompassed the sub–categories of Austrian, Bohemian, Moravian, and even Hungarian wool. French wool, by contrast, was categorised not by origin, but by cleanliness, i.e. "French washed" and "French in grease" (unwashed). Of wool sold by place of origin, Saxon Electoral wool was held in the highest regard, with market sellers differentiating between first, second, and third grades of quality. It was worth noting, Gerics thought, that wool sold "in fleece"—with the wool of a single animal kept together—was considered more valuable than that sold "in locks". The Hungarian felt this distinction reasonable in that the fineness and uniformity of the wool were better guaranteed in the former case than when wool was culled from a variety of places and sold together.[522] In the same report, he also supplied his patron with a complete price list, according to which the costliest Saxon Electoral wool ran a minimum of 7 shillings, 6 pennies and a maximum of 9 shillings, 3 pennies per pound [0.453 kg]. At the same time, Grade One Austrian, Bohemian, Moravian, Silesian, and Hungarian wool earned at least 4 shillings, 9 pennies, Grade Two of the same designations earned 2 shillings, 6 pennies, and Grade Three a total of only 2 shillings per pound. The maximum prices for these same categories were 7 shillings for Grade One, 4 shillings for Grade Two, and 3 shillings, 6 pennies for Grade Three. Importantly, the most valuable category of Spanish wool was that which came from Segovia, whose price ranged from 3 shillings, 6 pennies to 4 shillings, 6 pennies per pound. Washed French wool fetched as little as 2 shillings to as much as 5 shillings, 6 pennies per pound.[523]

As regards the situation of Hungarian producers, Gerics explained, among other things, that the goods of Prince Pál Esterházy, ambassador of the Austrian

[522] Ibid., fol. 453
[523] Ibid., fol. 453v

Empire, enjoyed name recognition in the Isles, but added, "He derives very little glory—or profit—from his relations with English traders, as in procuring this direct connection, he has lost millions, and it is not myself who speaks thus, but the English". The name of Count László Festetics, incidentally, had gained some currency through the activities of the merchant Weatherley, who knew him through Festetics's cousin, Count István Széchenyi, although little might be expected to come of this, as "it [was] the express interest of the Viennese Zwischenhändler [intermediary merchants – G. K.] that they not speak of the matter at all, but rather, if the wool [was] mediocre in quality, name it for its country of origin, and if fine, warrant it Saxon". In any case, it was Gerics's assessment that the English market constituted a serious opportunity, as the customs duties levied against a single pound of wool were, at the time, only 6 pennies (at the contemporary exchange rate, just 14 *kreutzer*), though as customs costs were perpetually expected to rise, "only the finest wool, and never the Kaida variety, [was] exported to England". At the same time, in the interest of facilitating the eventual distribution of Hungarian wool in Britain (i.e. "if we wish to transport [wool] from our vicinity at a profit"), Gerics had a number of suggestions for his patron. Of fundamental importance, in his view, was that the wool be sent "washed and mounted", i.e. bound in bales. Washing should precede shearing, as was done in Saxony, by contrast to the French approach of making do with lower profits rather than subject sheep to washing, "particularly in places where the local climate changed frequently and suddenly". Equally crucial, however, was that the wool be properly sorted, particularly where flocks consisted of different breeds of sheep, even if it was nearly impossible to satisfy the requirements of distant markets in every respect. Saxon wool, which was of superb quality, reached Britain by way of Antwerp and Hamburg and was unloaded primarily at the ports of London, Liverpool, and Bristol. As regards the route taken by wool from the Austrian Empire—and therefore from Hungary—Gerics spoke of the extensive connections of the merchants in

Vienna—"they are everywhere in a great nexus"—noting that all business transpired through the agents of three Jewish wholesalers there: Ignaz von Liebenberg, Bernhard Heinrich Lackenbacher and Heinrich Samuel Kaan. In fact, Louis Kaan, the son of the third of these, had just purchased a house for himself in London.[524]

Several months later, on 17 July 1822, Gerics sent another report, this time from Bath, summarising his negotiations with regional mill owners and expressing further suggestions "with respect to the purport of" his instructions. In the introduction to this document, Gerics again established that the territory he was then covering was "interesting not so much for its agriculture, as for its felted wool mills", and that he had naturally done everything in his power to "trumpet and to raise the good name of [Your Lordship's] wool". His basic dilemma, however, was whether it was worth it to the Festetics estate "to be in direct nexus with the English manufacturers", despite their having "no doubt about buyers". Although each mill owner was "convinced wool [might] always be purchased at a fairer price first-hand", it was from the middlemen that they hoped to satisfy their differentiated needs, "even if nearly for less profit". This practice was evident in the sheer numbers of their agents ("muster riders"), "who all the year [did] nought but haul their musters about", sending on the desired types of wool "via all manner of branching canals", or if necessary, by overland vehicle.

Indeed, these merchants ran extensive business networks, leading Gerics, citing the counsel of London solicitor Richard Wilson, to suggest Festetics reason in a similar fashion: "If we wish to manage our wool profitably in England, we must maintain a depot and agent in London or give our goods to another dealer on commission so that he should choose a time for selling them when wool prices are up." At the same time, he felt both options entailed considerable risk, as profits might easily be eroded by appurtenant costs

[524] Ibid., fol. 454

(storage, transportation and agents' fees), nor could the individual taking the wool on commission be monitored: "He would not forget himself, not even if it should nearly cause the wool's owner to come up short." Importantly, in this same report, Gerics makes reference to an initiative devised with the purpose of exporting wool to the New World, although he expresses regret that he could not acquire "good addresses in America", despite having done everything in his power to that end.[525]

From the foregoing, it is apparent that Gerics, in accordance with the specifics of his instructions, strove to furnish his patron with rational recommendations on both market mechanisms and concrete, practical procedures for product quality. At the same time, however, he was expected to paint a very precise picture of the agricultural methods that had earned Britain such fame on the continent, an end toward which two reports to the *Directio*—dated 15 October and 30 November 1821—made significant strides. The first concerned a model farm owned by the Duke of Bedford at Woburn Abbey, whose diligent cultivation, according to Gerics's introductory remarks, had produced a thriving agronomy despite soil that was "sandy and lean". Here, tillage was not only liberally fertilised, but also planted with feed grasses instead of being left fallow, while planted meadowlands were used as both hayfields, and pastures. Facilitating this methodology was the construction of artificial reservoirs and channels that permitted regular meadowland irrigation, the results of which Gerics judged superior even to those seen in the Kingdom of Hanover.

The farm's crop rotation system consisted of five sections, of which the first was used as described above. The second featured turnips; the third: barley; the fourth: red clover; and the fifth: wheat or oats with red clover. The duke's sheep were of a popular English breed called Southdown and were fed hay, chopped turnips, and peas, but—unlike in Hungary—were never given salt. His cattle enterprise, on the other hand, boasted Devonshire and Hertfordshire

[525] Ibid., fols. 460–460v

breeds for draught work and slaughter and Holderness for use as dairy cows.[526] Gerics also toured the estate held by Lord Egremont near Petworth, although as seen previously, was more impressed on that particular occasion with the nobleman's parks than with his agricultural activities. The estate's farms, it turned out, were rented out to tenants, and Gerics noticed that the sheep grazing in the park were kept wholly in the open air. His Lordship's stables, on the other hand, were truly unusual in that they housed multiple prize–winning race horses, including the celebrated thoroughbred Whalebone.[527]

It may be remembered from the previous chapter that—according to Gerics's expanded and annotated journal—the Duke of Bedford, having been complimented on the quality of his farms, demurred, naming Thomas William Coke, the lord of Holkham Hall, as a man worthy of greater praise. In an in–depth report to the *Directio* dated 30 November 1821, the *Georgicon* professor recounted his eventual meeting with Coke and, following the prescriptions laid out in his instructions, recorded his impressions of the farm's general success: "The cultivation of its lands is excellence itself, such that since Mr. Coke took up farming in Norfolk, not only is enough grain grown to meet the needs of the household, but a large quantity is exported, as well." Although some of Coke's lands were leased to tenants, those he oversaw personally (1700 acres, based on Gerics's conversations with his host), employed a four–course rotation system:

> "in which are grown, in deep furrows, abundantly fertilised (1) turnips, beans, and potatoes, then (2) barley with clover; (3) clover; (4) wheat. Not a grain of oats can be found. In a special section, flax and hemp are cultivated, but the land in question is separated from the others and not

[526] Ibid., fols. 149–149v
[527] Ibid., fol. 152; A statue of Whalebone is still to be found among the artefacts displayed at Petworth House: No. 89a.

joined to its cycles, as if it were rather for the girls' sake than worked for the benefit of the farm". [528]

In detailing the implements seen on Coke's farm, the report makes special mention of "great iron cylinders"—or clod-breaking rollers—used after deep-tilling "both before, and after planting" and a "drilling machine"—or seeder—used for the planting process itself. He valued his acquaintance with inspector Francis Blaikie for what it had taught him about various methods of fertilisation and signalled to his patron that he would be attempting to procure Blaikie's treatise on this subject when he returned to London. [529]

It was Gerics's observation, furthermore, that all seeds were cleaned prior to planting on the Coke farm. At harvest time, although Coke did not wait for the grains to reach full ripeness, when they might be shaken loose by the wind, his produce still fetched the same price on the London grain market as that of other farmers. Threshing on the estate had been largely mechanised, although Gerics would offer the following insight in his later account of his travels into the impact of the transition from manual to mechanised labour which is important from a social history perspective:

"In Norfolk in general, and especially at Holkham Hall, implements and instruments of measure invented or improved upon in the most recent age are in great fashion, and although the penniless who destroy the machines customarily used in factories have vandalised the Norfolk farmers' implements as well, they have not done so on Mr. Coke's estate because here, the use of machines in cultivating fields does not remove the working man's means of earning a living, as is the case in the mills; [530] Mr.

[528] Ibid., fol. 155

[529] Ibid., fols. 155–155v; The book in question is Francis Blaikie: *On the Management of Farm–Yard Manure*, London, Harding, 1820.

[530] A revised description of Holkham and its agriculture was purchased for the Festetics family library: Edward Rigby: *Holkham. Its Agriculture*, Norwich, Hunter, 1818.

> Coke has proved as much through his own clear example: that he—the man who uses the largest number of machines on his farm, that is, who does everything by machine—has secured for the residents of Holkham a means of income that has lifted them from poverty into tolerable affluence, so much so, that the local poorhouse has been demolished and a decorative lawn in the urban fashion put in its place".[531]

Coke's method for protecting grain stacks also caught the Hungarian's notice: "The base of each stack is mortared in from the ground to a height of about two feet" so that "it endures for a period of up to three years without suffering damage by mice, etc." The meadow irrigation strategies witnessed on Coke's properties paralleled those described for Woburn Abbey, although here, in addition to perennial ryegrass, "*Dactylis glomerata*, commonly called Coke's foot by the English" (i.e. cat grass), was also sown in large quantities.[532] The farm raised large numbers of Southdown sheep and cattle for slaughter, and as regards feeding methods: "Profit is derived from the rows of turnips, such that alternating rows are harvested and fed to the cows, and the remaining rows are fenced in so that the sheep might be driven in upon them". Once the greens had been grazed to the ground, several rows were pulled up for the animals' subsequent enjoyment. The sheep were, Gerics noted, kept out–of–doors year-round.[533]

In the area of the capital, Gerics encountered agricultural practices of a quality very different from those of East Anglia. In his revised journal, he would moreover express agreement with contemporary English agricultural writer John Middleton, who opined that "in all of England, apart from its gardens, it is in the

[531] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/5 fol. 159v
[532] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról (1819–1825) [Reports by Pál Gerics on his Travels Abroad (1819–1825)] fols. 155v–156; The common name for this grass in England is *orchard grass*.
[533] Ibid., fol. 156v

vicinity of London that land is cultivated most imperfectly."[534] What London did offer the traveller was a profound lesson in supplying food directly, as well as in strategies capable of providing animal feed sufficient to support such a city's vast transportation and operating needs. In assessing urban consumption and the supply of fresh dairy products to the city, Gerics expounded intensly on London's "neat–houses", bovine stabling facilities that—apart from a few that stood alone—occupied entire urban streets.[535]

> "It is these that supply part of London with milk. Nursing cows are always bought at the Schmidtfield [*sic*] or other market, by and large from Devon or Yorkshire leaseholders, are used as long as they give milk, and are then sold, to be replaced by fresh nursing cows. Animals not on pasture are kept on malt, procured from the London brewers."

In Brentford, moreover, Gerics discovered not only the local brandy distillery, but also the accompanying large–scale beef–producing enterprises that helped secure the city's supply of meat.[536] In London, Gerics happened to make the acquaintance of royal veterinary surgeon John Field, an event that paved the way to a visit to Field's sprawling 250–acre farm near the capital in Kingsbury Green. Crossed by a brook the farm's sloping expanse was exclusively used for hay production, a point duly noted in Gerics's journal: it was "the first farm I had found in all of England that produced no grain, though this was no novelty, as a majority of the Dutch pursue that form of agriculture". Here, irrigation water flowed to sections bounded by natural hedges via artificially constructed channels, doubling the land's value. As regards the use of these parcels, "The

[534] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/5 fol. 3
[535] Gerics gave a full description of Samuel Rhodes's dairy farm in Islington which happened to belong to the properties of Cecil Rhodes's grandfather. Ibid., fols. 61–65; Robert I. Rotberg: *Cecil Rhodes and the Pursuit of Power*, New York–Oxford, Oxford University Press, 1988, 18-20.
[536] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/5 fols. 5v, 13v

first cutting is gathered as hay and the aftergrass is left as pasture. Where, however, grass fit for hay remains in the wake of grazing, a second cutting is also ordered." Gerics also felt it important to document that, as a rule, only as much hay was cut per day as could feasibly be dried and collected.

> "This is the reason so large number of labourers is assigned to each reaper, though they comprise cart loaders, carriers, and even stackers. If, once cut, the grass should be covered by rain, then it is left in rows for two days should the rain persist, but as the bottom will have begun to yellow by the end, it is at that time forked over and spread about."[537]

When the cost was lower, Field sourced hay for his horses and cattle at market, although, depending on prices, the reverse might also occur: "Sometimes his own needs having been met and with an enormous quantity left over, he can, in times when supplies are low, market his hay at great profit."[538]

Gerics's report to the *Directio* of 14 January 1822 dealt specifically with the markets of London. Having already been to Newmarket and taken part not only in a horse race, but also a public racehorse auction, he now set about composing a description of the horse market near Hyde Park Corner, one that suited the requirements of his instructions. The auctioneer of his earlier experience, he wrote, had "first called out the highest sum"; then, as the bidders spoke in turn, the price had ebbed ever downward from its original four to five hundred guineas. As regards the cattle market in Goswell Street, West Smithfield, he noted with some emphasis that "the objective of the market [was] not only to buy and sell, but also to motivate and reward industrious farmers who had done work of merit of any sort in the field of animal husbandry". Not unimportantly, this particular market, supported by the Duke of Bedford,

[537] Ibid., fol. 34v
[538] Ibid., fol. 40v

functioned simultaneously as an agricultural exposition, as indicated by its name—"Autumnal Show of the Duke of Bedford".[539]

Naturally, Gerics regarded the British capital, whose institutions impacted virtually every aspect of the economy in the Isles, as a location of key significance to his overall mission. In his revised journal, he would expound at length upon its securities market, the Lord Mayor's office in Mansion House, and the Bank of England, with particular reference to the bank's role in averting the crisis spawned by the French wars. In describing each of these, Gerics relied on the technical approach advocated by Samuel Leigh in his popular travel guide, localising each of the monumental buildings involved with reference to the towering spires of the cathedral that marked the city's skyline.

> "The Bank of England stands in the centre of the old city, north-east of S[aint] Paul's. If a traveller proceeds from the great church along Cheapside—a street that is relatively wide, yet short—which extends in that direction, he will find three great edifices come into view: on the left, the bank; directly opposite, the Royal Exchange; and to the right, Mansion House. Of these, the building of the bank is both the largest, and the most elegant."[540]

Although Gerics naturally refrained from documenting every aspect of banking procedure to an inordinate degree, he did disclose that "buyers of national bonds" were not issued receipts but were entered in alphabetical order in "the Great Ledger of National Debt". The bank, Gerics revealed, employed more than one thousand people, a number that guaranteed both that outgoing payments were executed promptly, and that semi–annual interest could be delivered to registered principal holders within a maximum of one or two weeks.

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[539] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról 1819–1825 [Reports by Pál Gerics on his Travels Abroad 1819–1825] fols. 175–175v

[540] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/4 fol. 53

Gerics employed no little sarcasm in referring to the chairman of the bank's board of directors, a position filled at the time by Samuel Thornton, as the "King of the World".[541] In describing (with careful attention to questions of first-hand credibility) the building and furnishings of the Royal Exchange, Gerics importantly observed that some travel guides claimed it to possess halls outfitted with "opulent mahogany furniture". This, he stated, "may have been true in various times", but did not apply to the period in which he had visited.

Gerics's final observations on the agriculture and economy of Britain reached his patron via a letter dated April 1823 and posted from Boulogne. In it, he related his experiences with the farms of Lord Londonderry in North Cray, where poor soil conditions had led to a preference for sheep husbandry over horticultural pursuits. That the choice had been a successful one is demonstrated in the purchase of twenty–five Merino sheep from the estate by none other than Prince Pál Esterházy. Upon reaching Paris, the Hungarian—as seen in the previous chapter—first paid visits to various scientific institutions, then as dictated by his instructions, made the rounds of institutions related to the processing and sale of wool. In his journal, he left a copious description of the circumstances surrounding the founding of the *Depôt Publique de la Laine*, a public storehouse for wool, of the commission system applied to its sale, and of the role of the "*courtier commissioné*", or middleman. By comparison to his report to the *Directio*, the relevant section of his revised journal constitutes a special source in this regard in that he again cites the problem of "credibility": at the time his notes were written, he says, he had relied strictly on information from the director, which he in turn wished to pass on so that the "good reader could judge for himself".[542]

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[541] Ibid., fols. 54v–55v

[542] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról (1819–1825) [Reports by Pál Gerics on his Travels Abroad (1819-1825)] fols. 466–467v; OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/7 fols. 165–168

As previously noted, in relation to English wool sales and the classification of products from other European countries, Gerics relayed his experiences with the distribution of French merchandise and the demand for a "washed" product both to his patron and to the *Directio*. When it came to putting French practice into words, however, he found himself hindered by questions of terminology, interpretation, and correspondence:

> "So that the wool might be used by the felted wool millers, it must undergo cleaning (*triage*) and washing (*lavage*), [such that the cleaning also incorporates] what is known as *sorting*, [which] regular processes together the French call *beneficiage*".[543]

In relation to the last of these, Gerics struggled to find an appropriate translation: "[It] corresponds perhaps to 'usable', 'manufacturable', 'suited to production', or 'viable', [as] we Hungarians do not yet possess [a proper designation]". This search for an appropriate nomenclature arose from a need to explain such facts that by comparison to Saxony, the French farmers were "'accustomed to releasing onto the market wool that [was] not washed, but shorn unlaundered". As a result, "It occurred to a certain group of merchants mediating between farmer or breeder and mill owner to prepare the raw wool procured from the farmer for delivery to the manufacturer". The French called these men "*beneficeur*s". Naturally, the Hungarian found this system "to the enormous detriment of both the breeder and the mill owner", and although attempts had been made to coordinate between the two, no serious breakthrough had yet been reached, given—he mused—that "unaffiliated entrepreneurs as a rule look no further than their own interests". To help remedy the situation, the government had resolved in 1816 to create a public storehouse, which in turn had spawned "a perpetual wool market", further promoted by a measure requiring wool

[543] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/7 fol. 165v

placed there to undergo central sorting and washing: "with the establishment of *beneficiage*, the power to sell wool was bestowed upon the *Directeur*"; further, although in principle, if the producer happened to find his own buyer, he might sell the wool himself, in fact, such things only occurred rarely.[544]

The discussion of the chief characteristics of the French wool trade in Gerics's journal, especially as it related to such experiences as his negotiations with entrepreneurs in Sedan, clearly illuminates why the *Georgicon* professor viewed the idea of selling Hungarian wool in France as a lost cause. In a copiously written report to Festetics dated 15 November 1823, he explained: "The factory owners who do not have the wool sorted themselves may procure domestic wool at a more favourable price than they would pay for foreign wool." As regards the totality of previously discussed factors, moreover, Gerics's opinion was unequivocal: "They deem [the French product], in its essence, as being above all other foreign wool"—with the exception, of course, of that originating from Saxony. In addition, the more significant traders had all abandoned the distribution of import wool, while the larger, richer mill owners, building on the idea of a regional supply, retained washers and did the sorting themselves. On top of all of this was, in Gerics's understanding of general trade policy, the difference between English and French customs officials:

> "The *douane* [customs—G. K.] system in place here tends to squeeze all foreign wool out of France.' In his definitive conclusion, therefore: 'It would appear that the French strive to ensure their country remains independent in terms of its agricultural production.'[545]

[544] Ibid., fols. 168–172

[545] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról (1819–1825) [Reports by Pál Gerics on His Travels Abroad (1819–1825)] fols. 475v–476v

During this same period, Lehrmann, having visited Paris's various scientific institutions and parks, had proceeded—as per his own instructions—to study the viniculture and viticulture of the regions beyond the French capital. In addition to encounters with prominent merchants and businessmen in Bordeaux outlined in the previous chapter, he also endeavoured to provide comprehensive depictions of the fruit, grape, and gardening cultures of Gironde. Given that his travels in the region took place during the summer months, he had the good fortune of being able to document actual processes employed in the care of grape vines (e.g. tying), as well as some of the practices favoured by the poorer classes, such as the inter–row planting of beans or potatoes, noting that, naturally, such customs presented a challenge to any intensive protection of the grapes. As for regional fruit, he found peaches grown with the grapes to be of very high quality and reported that he had even discovered multiple varieties of nectarine there ("auch mehrere Gattung Nectarinen nackte Pfirsiche"). In reporting procedures based on natural circumstances such as exposure, orientation, and soil type, he first focused on the flat, sandy-soiled, white-wine-producing territories of Cérons, Barsac, Preignac, Sauternes, and Langon, characterising the flavour, body, colour, and—not insignificantly—storage properties of the wines derived from Sauvignon Blanc, Semillon, Malvoisie, Muscadelle, Blanquette, and Enrageat grapes, at least as pertained to the wineries located on the right bank of the Garonne. As for the enterprises situated on the left bank in Graves, their Saint-Bris and Carbonnieux wines were deemed the best among the dry whites, although Lehrmann naturally visited the red–wine–producing estate holders in Médoc as well.[546]

While surveying the vineyards of Médoc, he noticed that grapes were destemmed (i.e. removed from their bunches) using a comb–like implement and the stems placed in a separate vessel, which, following a measure of foot-

[546] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration] Directorátusi Ügyiratok [Files of the Directorate], P 279 130. d. T. II (without number or folio)

pressing, were employed in the preparation of *piquette*, a lighter drink with lower alcohol content. Sorting was not done, he asserted, where only Carmeret or Carméner grapes were present, the former being the older Médoc designation for Cabernet Franc, and the latter a type of Carménère or Cabernet whose name came from the French word for the colour crimson.[547] The Malbec Lehrmann classified as a quality black wine and the Gros and petit Verdot types as long-lived and appealing in colour, by contrast to those from the lands of the *pétouille*, which produced prodigious quantities of grapes, but wines that were thin and weakly coloured. The juice of the Alicante, regarded as Iberian in origin, was none too pleasant in flavour and was used fundamentally as a *teinturier*, or colourant. He witnessed the Chasselas, Malvoisie Rouge and Muscats varieties of grape being cultivated on trellises or pergolas. Of the better recognised wine-producing estates and cellars of the region, he had the opportunity to study various methods and processes first-hand at Chateau Lafite, Latour, Chateau Margaux, and Haut-Brion.[548] Numerous additional observations were made while travelling through the Loire Valley on the return route to Paris. It caught his eye, for example, that in comparison to the Gironde, the region produced more "Tenturier" varieties, i.e. grapes used as colourants, in addition to the types that then dominated the wine-making industry. In Orléans, he made a circuit of the cellars and storehouses of the better–known wine merchants, making a study of both the barrique aging process, and the technologies associated with local vinegar manufacture.[549]

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[547] In his revised journal compiled at the end of 1822 Lehrmann penned downd the following of the dominant grape of the region: "Hauptgattung ist hier die *Carmenet*. Eine kleine schwarze Traube mit gedrängten, runden, nicht so sehr saftigen Beeren, die in solchen Weingärten an häufigsten gepflanzt werde, wo dem Boden für die Qualität des Weins am meisten geeignet ist". OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Germ. 1325 fol. 44v

[548] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration] Directorátusi Ügyiratok [Files of the Directorate], P 279 131. d. T. V fols. 348a-d; MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 6. Lehrmann József jelentései külföldi útjáról (1819–1825) [Reports by József Lehrmann on his Travels Abroad (1819–1825)] fol. 98; Lehrmann noted in the relevant section of his summary report that the region was famous for " [die] Cultur der niedrig gehaltenen Weinstöcke". OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Germ. 1325 fol. 45

[549] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration] Directorátusi Ügyiratok [Files of the Directorate], P 279 130. d. T. II (no enumeration or folio)

After the two men had left France and passed through the major cities of western Switzerland, they again parted ways, so it was without the company of his countryman that Gerics arrived at the agricultural institute of the University of Hohenheim, directed by Johann Nepomuk von Schwerz. Located in the vicinity of Stuttgart, the institute yielded several important connections and featured an experimental farm Gerics was able to subject to penetrating scrutiny. In his dutiful transcription of the particulars of its crop rotation system, for example, he submitted the observation—among other things, for consideration in Keszthely—that since corn did not "show well" there, the institute had found it necessary to include "broad beans, Dutch style", into the rotation of fodder crops. Of the products of the "Ackerwerkzeug Fabrik", he felt compelled to mention both the Brabantine plough and roller, and a special type of spading plough ("vielschaerige Schaufelpflug").[550]

It was from Hohenheim that Gerics finally turned toward northern Italy, making his way through Munich and Innsbruck across the Alps via the Brenner Pass. As instructed, he commenced his tour there with the scientific institutions of the region's major cities, while also seeking to forge connections with the leaders of its famed textile industry, Messrs Pirard and Deschamps. Weighing in on the various branches of regional agriculture, he was struck by the water management and meadow irrigation strategies in Lombardy and Piedmont, where hydrographic conditions—in particular, the melting Alpine snows—kept tributaries flowing year–round, unlike the waterways of the Apennines, exemplified by those of the Duchy of Parma. Furthermore, melting ice and snow collected into lakes and ponds to become sources for clean-water streams, by contrast to the waterflows of the lands east of the Adige (e.g. the Piave, Livenza,

[550] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/8 fols. 156v–158

and Tagliamento), whose flooding caused damage as serious as that associated with Piedmont's Baltea and Isera.[551]

In Lombardy, as in other countries, irrigation was first used on meadowlands, and only later on farm fields. Networks of canals, however, did permit some fields to be flooded, by which method, according to Gerics, they received "uniform flow for irrigation water, under which the grass [did] not decline, but [grew] abundantly, providing good, green fodder for the cattle all winter". The irrigated meadows, "if they were to be used for summer use, irrigated meadows were cleaned out in spring, at which time leached ash and stable manure were also mixed together and spread about". If, on the other hand, the pasture grass was damaged by frost, then the land was broken and fodder grasses such as ryegrass and red clover sown. It was also Gerics's observation that the number of contemporary farmers who kept meadowlands for three to four years, and then turned the soil "to maintain a change in crop for two to three years" was steadily growing. Usually, pastures were grazed by milk cows, which the farmers procured at the Lugano cattle market. Of the various breeds available, Tessin in particular was "held in deservedly high esteem". The resulting milk was used chiefly to make cheese and, although the method of selection was that associated with the producers of Parma, in fact, the one used to produce "*formaggio lodisiamo*", a cheese named for the Lodi market offered superior quantity and quality.[552]

A special part of the two professors' travels in northern Italy consisted in experiences related to the cultivation of rice, a feature of their tour that indicated their patron was seriously considering the possibility of large–scale domestic production. In an early 1825 report from Milan, Gerics informed Festetics that he had procured "all the tools in respect of rice cultivation", and that Lehrmann had purchased an appropriate quantity of seed for each cultivatable variety. In

[551] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/10 fols. 146–150
[552] Ibid., fols. 159v–160

his revised journal, however, Gerics voiced serious reservations. Indeed, reflecting on how various considerations of the national economy might affect the necessary investments and potential profits, he concluded that conditions in Hungary were not in place for such an enterprise to be feasible. It should be considered, he argued, that "a temperate country being an enormous asset", Italy was "better endowed" in this regard. In Hungary, on the other hand: "the warmth of our skies is shorter lived, our swamps are already so numerous, we have little need of proliferating them artificially, and money is so scarce, we cannot advance as much of it as the Italians can". Thus, in his opinion, Hungary should satisfy itself "with the cultivation of grain, in which less money and effort are expended and which therefore impels the greater pure gain".[553]

In analysing the observations and records made by the two *Georgicon* professors one cannot help but conclude (1) that the overall documentation of their tour of Europe was and is of enormous value, considering that they not only acted along the lines prescribed for them in their instructions, but their reports, and especially Gerics's revised journal, go well beyond a simple description of technological processes and that (2) their approach to local, regional practices invariably involves a more profound perspective of their experiences inasmuch as the cause of "the public good" should be promoted and served.

[553] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról (1819–1825) [Reports byf Pál Gerics on his Travels Abroad (1819–1825)] fol. 501v; OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/10 fols. 177–177v

Chapter 8

A Bit of a Sentimental Journey: People, Manners and Customs

The preceding chapters have attempted to offer as comprehensive a presentation as possible of certain elements of the "technologcial journey" undertaken by the two *Georgicon* professors. Of course, given human nature and its relationship to travel, the surviving documentation of their journey exhibits numerous characteristics of the "journey of sentiment", as well. Their periodic reports home, their summary "Reisebeschreibungen", and Gerics's updated and annotated "utazási jegyzések" (travel notes) all feature remarks—at times even lengthy explanations—that, in contrast to the tone of their instructions, illuminate the uniquely human side of the otherwise formal act of making foreign connections. Further, such commentary goes as far toward providing a full understanding of the inner workings of the institutions under scrutiny as it does toward exploring various countries' social, religious, cultural, administrative, and marital environments, or even dietary habits—like snapshots of a bygone age. Typically, however, these at times anecdotal accounts appear for the most part in Gerics's revised journal, understandable, given that the professors were required to register experiences appropriate to the objective of a "technological grand tour".

Of the numerous admonitions in their instructions, two in particular demanded their constant attention, as they ensured that their travels might proceed legally and without interruption: namely, the requirement of having their passports approved everywhere by the appropriate authorities and new ones issued where necessary; and the requirement of calling in specified towns on the financial institutions their instructions designated. From Gerics's journal it would appear that in the former regard, the imperial Austrian embassies and consulates proved extraordinarily helpful. In one instance, for example, Gerics enjoyed a truly pleasant surprise in making arrangements for his passport at the

Austrian consulate in Hamburg: "Bodemeyer, the Austrian consul, the spitting image of our Dániel Berzsenyi, spoke to me in Hungarian".[554] This remark permits the conclusion that the poet, who had been a guest at Keszthely on numerous occasions, was in fact a personal acquaintance.

Another official to have made numerous gestures on their behalf and offer important advice was the Polish–born Austrian consul Count Felix von Mier, whom they met during their extended stay in Brussels. Additionally, after crossing the channel into Britain, Gerics paid multiple visits to the office of Ambassador Prince Pál Esterházy, producing a great number of important personal contacts in the process. In relation to the use and validity of travel documents, however, it was upon the crossing itself that Gerics recorded a set of truly noteworthy experiences, such as were to impact his return crossing, and, indeed, the eventual success of his "technological tour" of France. He recalled it as follows:

> "Though our personal effects were examined at customs, the affable French treated us most graciously. They did, however, remove our passports to be retrieved at the *préfecture*. This caused us some entanglement, as the weather had become quite rainy since our having turned toward England, for which circumstance we had abandoned our previous intention of spending several days in Lille and its environs, and, leaving that place, had resolved to take advantage of the first opportunity of continuing our journey that might present itself. Thus, we set off to collect our documents, but the *préfect de la police*[555] was loathe to provide them, foisting French passports upon us instead; in truth, we were required to pay just two *francs* each (one *franc* in our currency being equal to 23 kreutzers in silver), but—in part because we only desired to

[554] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/2 fol. 98; August von Bodemeyer (1790–1854), Austrian Imperial diplomat.
[555] Police chief.

pass through France and therefore had need of the passports obtained from our own government, and in part because I was of the opinion that the prefect wished, if by a mere trifle, to blackmail us, I said, with some chagrin: 'can it truly be that my homeland holds so little respect in France that the passport I have secured from my government is so utterly disregarded? I have passed through so many lands, yet never have I been deprived of it before. We do not, under any circumstances, wish to part with our documents, all the more so, because we have no intention of passing any time in France, but would rather cross to England at the earliest possible convenience.' The venerable officer listened patiently to my appeal, and as I was finishing, responded benignly: 'I have great respect for both your homeland, and your zeal for its government. We, too, hold these things in honour and esteem. Who does not know that Hungarians are the best soldier in the world? We French know this very well. And it is for this, if nothing else, that I might excuse your outburst. But, to take a different tack, can it be that, as a foreigner, you were unaware of our procedures? You see, we tax a foreigner at the border by compelling him to accept the passport of our own government. Yet for this trifle, the foreigner gains the advantage of the right to access each and every one of our institutions free of charge, while proceeding with greater liberty than a born Frenchman. Travel documents presented to us from foreign governments, however, are returned to the traveller at the border. You, too, would have received yours in Calais, your intended destination. This notwithstanding, I shall satisfy your wish and stamp the passport received from your own government, but at the same time, I shall oblige you to accept the French document, as well, and to present it where required". [556]

[556] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/4 fols. 2v–3v

Although Gerics, discomfited, accepted the official's remonstrations, it was with sincere gratitude that, when writing about the incident two years later, he would look back on the greybeard's actions:

> "How I did marvel as, upon entering the gallery of the Louvre, (...) I read that a foreigner, with the passport issued to him, might enter the royal portrait and statuary exhibition at any hour of the day, freely, without payment, while the native Frenchman was restricted to certain hours and set days".[557]

In fact, it was with their French passports in hand that the two *Georgicon* professors were admitted free of charge to attend courses at the Sorbonne. Another point upon which Gerics would later reflect had to do with the awkwardness caused by the personal descriptions in their passports. Lehrmann, it would seem, had worn a moustache at the time of his departure. On French soil, however, not only was he continually asked the name of his regiment (at the time, "only soldiers or former soldiers" wore moustaches), but he was charged a lot more when he applied for a passport. Finally, "his person being described, among other things, by his moustache, he held it wisest to first report his moustache to the police, then have himself shaved only afterward."[558]

Not all such encounters with the authorities ended so benignly, however, and in fact, incidents in which they faced the arrogance or petty officer mentality reserved for lower-ranking travellers abounded. Gerics's journal describes an episode in which, during their tour of Saxony, he had just had his passport stamped at the gates of Freiberg, when a poor journeyman, who had entered as he was waiting, was taken to prison: "And why? Because his letters of passage

[557] Ibid., fol. 4
[558] Ibid., fol. 5

were soiled and somewhat tattered. And though they wasted no ceremony on me, to me, at least, they were not abusive." In Dresden, however, he found unpleasantness lobbed at him, as well:

> "At the gates, they took away my passport, such that, I received a letter guaranteeing right of sojourn—an *Aufenthaltcharte* in its place. Having sent my trunk ahead by way of post, I wished to see that first and only attend to money matters afterwards. Yet there, I had not only to wait a considerable length of time, but to suffer abuses, as well. Among the cultured Saxons, there remains today an adage regarding the rudeness of postal officials, even if the title no longer applies to all universally". [559]

In another incident occurring within Saxon territory, a policeman pursuing a vagrant challenged his identity, only permitting him to pass when his travel document had been found to be in perfect order.[560] Further, in Innsbruck, in a country where he would have considered himself a subject of the sovereign, he found himself embroiled in an exchange of words with the local police chief—a man wont to adorn himself with rings—who was unwilling to stamp his passport at first. In the end, it was only when he discovered that the Hungarian was an agent of Count László Festetics—or more accurately, his secretary warned him of the potential consequences of his hesitancy—that he eventually endorsed Gerics's travel document and provided him with the authorisation ("Thorzettel") he needed to leave the city.[561]

From Gerics's journal, it would appear that the limits set by contemporary society on human relationships of various types were appreciably less stringent than posterity has tended to assume, and that indeed, the intellectual and social

[559] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/1 fol. 56v
[560] Ibid., fol. 83
[561] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/9 fols. 14–16

elites of Europe were neither leery, nor dismissive *vis–à–vis* the Hungarian traveller and his quest. At the same time, there can be no doubt that their acceptance of the Hungarian derived in large part from Gerics's extraordinarily cultured demeanour, unmistakable education, and conspicuous facility with languages: a formal introduction, presentation of letters, and brief conversation with him were enough to impress anyone, from scientist to high aristocrat, and gain him prompt admittance wherever he sought it: at prestigious institutions, the salons of ultra-rich bankers, and even the receiving halls of English country manors. Naturally, his extensive travels involved participation in innumerable luncheons and formal dinners. His first host of high aristocratic birth was none other than Prince Eduard von Lichnowsky, whose wife was "particularly pleased to see Hungarians, being Hungarian herself". Lichnowsky had married the Countess Eleonora Zichy, daughter of Austrian state conference minister Károly Zichy, Lord Lieutenant of Hungary's Békés County, who would certainly have given them her fullest attention regardless of any question of status. The matter is an important one in its implications for the topic of identity among noblewomen of Hungarian descent.[562]

Another member of the upper aristocracy to seat the Hungarian traveller at his table was Czech nobleman Count Eugen Dominik von Vrbna, the company at the affair in question having included the officers of the Hussar Regiment of Archduke Ferdinand Karl Joseph of Austria–Este, then stationed in Groβherlitz (present-day Velké Heraltice, Czech Republic). As noted previously, Gerics was to receive privileged treatment at the hands of various members of Prussian aristocratic families, as well, including Countess von Reden, Count von Itzenplitz, the Barons von Richthofen, Prince Reuss zu Köstritz (a matter of course), and—later, in Lauterbach—Baron Riedesel. Riedesel, it will be remembered, even called upon his own family doctor to treat the Hungarian when he fell ill. Count Siegmund von Zedtwitz also put himself at Gerics's

[562] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/1 fol. 18

personal disposal and, as followed naturally in those circumstances, provided him with additional much–needed letters of recommendation. At the residence of Joseph Salm–Reifferscheidt–Dyck, it was the prince himself who guided Gerics through his gardens of European fame, and later, in Doel, a ready and willing Duke Prosper Ludwig of Arenberg who provided him assistance and again furnished him with multiple letters of recommendation.

Given the warmth evinced in each of these cases, the bristling tone in Gerics's response to the unusually negative reception experienced in Ivenack is hardly surprising. There, upon his arrival, instead of greeting him, Baron Albrecht Joachim von Maltzahn chose to remain at luncheon, sending word that, should he return the following day, a steward would be dispatched to show him whatever he fancied: "Such want of alacrity was hardly expected from a man of his rank".[563]

At the table of influential Berlin banker Wilhelm Christian Benecke, Gerics, as previously seen, had the opportunity to mingle with various Prussian scientific luminaries; the case was similar, however, in regard to his relations with Dutch ambassador Count Karl von Grünne in Frankfurt am Main, an acquaintance that played a part in his eventual invitation to the home of banker Simon Moritz Bethmann. This event would occupy considerable space in Gerics's journal, a point that warrants attention, if for no other reason than that, as a Hungarian, he would later have the opportunity to evaluate the emerging interest in Europe's classic inheritance by the social elite of the age—primarily in regard to the luxury objects and furnishings that defined contemporary fashion—within the context of his experiences in England:

[563] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/1 fol. 19. Attending officers of the regiment of Archduke Ferdinand Karl Joseph of Austria-Este were Count Karl von Wallis and Sub-Lieutenant Count Hugo von Logothety. *Militärschematismus des Österreichischen Kaiserthumes*. Vienna, Hof- und Staats-Druckerey, 1825, 305. OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/2 fols. 81, 140

> "Though I am loathe to address matters of eating, drinking and, as a consequence, dining in general, unless there be some memorable experience involved, I cannot, for the very same reason, leave the magnificent table of Mr. Bethmann entirely without remark. The table preparations were as unique here as they were at the home of the Benecke brothers in Charlottenburg. I will not even mention what one might see at the tables of other great persons, but instead relate what it was in particular that occupied my attention—what I deemed novel under the circumstances. In this case, the novelty was the porcelain vessels, pieces that, to Mr. Bethmann's taste, were unique in their production. The underside and brim of each were furnished with the finest possible glaze. The rest was in black, in which were engraved, in simple lines, the tales of mythology, which strokes were themselves painted red. The Master of the House claimed these to be in the Hetruscan [*sic*] style, of which I was to have some clearer concept only later, when viewing the Hamilton[564] collection in London."[565]

A telling detail concerning Gerics's relationship with the social elite of Frankfurt am Main is that, through his acquaintance with Bethmann, he was able to meet book publisher Friedrich Wilmans, who offered him a tour of the city's casino.[566]

In England, Gerics pursued a contact–making strategy similar to that which had served him on the continent, garnering him natural successes in his meetings with Lord Egremont, the Duke of Richmond, and even continentally renowned agriculturist, the Duke of Bedford. In each case, the amicable encounter was registered as a matter of course, as was his participation in a

[564] Sir William Hamilton (1730–1803), diplomat and arts and antiquities collector who served in the Kingdom of Naples between 1764 and 1800.
[565] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/2 fol. 142
[566] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/2 fol. 148

military parade near Hyde Park in the company of Austrian embassy councillor Baron von Moser. In the words recorded in his journal,

> "I myself attended one, at which C[ount] István Szécsényi [Széchenyi] drew to himself the attention of the English people; many asked about him—who he was—especially upon seeing the Duke of Wellington extend him a hand to ask 'How do you do my friend?'—and one wise individual answered his inquirer: A Hanoverian! How heartily B[aron] Moser and I laughed, and then we told them whom they were inquiring about. Still, it was with some pain that I experienced how little the Hungarian name is recognised."[567]

The previously described visit at Holkham Hall also proved instructive not only for its scientific import, but also for its social aspect. In one instance, for example, Gerics recorded a change in English salutatory customs as they related to the mutual introduction of an elite lady and a foreign gentleman:

> "So that I might present myself, I was led into an opulent hall, where there was an American youth who, it appeared, had been waiting for quite some time. In fact, he was staying in the same inn as I and had departed for Holkham Hall—the all but princely residence of Mr. Coke—before I had. I had been waiting but a few minutes, conversing with the American youth at the fireplace, when the lady of the house entered. The two of us turned to her, and Ralston (as the American called himself) shook her hand and asked, "How do you do?" I found myself stunned into silence, wondering at the spectacle of a foreign man treating a woman at their first

[567] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/4 fol. 188v; It is quite tell tale that the English public immediately assumed that a foreigner greeted with great affability by the Duke of Wellington must certainly be a Hanoverian on account of the fact that the royal family of England was of Hanoverian descent.

> encounter as if she were an old and close acquaintance. Nevertheless, I later grew accustomed to this custom, at least to the extent that I no longer batted an eye at it, though I could never myself approach anyone in this way at the first encounter."[568]

Another journal section worth scrutiny in this regard concerns Gerics's reception at the residence of Lord Egremont in Petworth. There, his host wasted no time in having the Hungarian's personal effects brought from the inn, lodging him instead at Petworth House and then, having shown him around the surrounding park, invited him to luncheon. Here, Gerics found it odd to find no napkins provided with his meal and wondered that his host had him sample each of the specialty wines brought to the table in strict ceremonial order—"Port, Madera, Cap"[569]—after the perry (fermented pear juice) that had been served for luncheon. However, he found the discussions that took place after their plates had been cleared, highly instructive. Carrying the conversation was the younger sister of the Duke of Richmond,[570] who, as the discussions were conducted in French, voiced her opinion that "one might travel the entire world with but this single language". Gerics would have thought it impolite to contradict her but considering what he had found effective in the course of his own travels, he hazarded to stress the importance of English, as well, perhaps not uninfluenced by his own recently acquired facility with the language. Also discussed was the role of England in shaping fashion and taste, in relation to which he found the company somewhat biased:

> "The young lady finally asked whether there were beautiful parks on the continent. Before affirming this, I brought up Wörlitz and Wilhelmshöhe,

[568] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/5 fol. 149
[569] This category includes the two most valued Portuguese wines after Port, i.e. Quinta beira Duoro and Quinta do Malho, both produced in the River Duoro valley region.
[570] Charles Gordon-Lennox (1791–1860), Fifth Duke of Richmond. The matter of which of his several sisters Gerics actually met cannot be established.

> but I had hardly numbered the adornments they possessed when all at once she cried: 'Ah, how ugly they must be! You see, here in our country, one finds such a mimicry of nature, beauty of turf, effortless arrangement of plants, shaping of trees, bushes, groves, ponds, and streams as bespeaks no trace of artifice, but appears wholly natural. We seek the magnificent view, and by planting vegetation to hide the boundaries of our parks, innocently make the objects in the distance ours, as well; and just as we have summoned the outside to come in, so do we strive to produce beautiful landscapes on the inside, as well—in various ways, depending on the nature of the place; but we do not mar their beauty with unnecessary buildings or ruins of buildings that never were".[571]

His momentary discomfiture notwithstanding, in composing his description of Petworth House and its park and placing all aesthetic considerations upon the scales, Gerics found nothing to contradict what his charming tablemate had had to say: "[On the whole], its layout appears so natural, that seeing it without the benefit of explanation one should not discern that it were the result of human endeavour."[572]

Similarly instructive from the standpoint of British hospitality was Gerics's visit to the home of Scottish agriculturist and writer Sir John Sinclair, in part in the matters of seating arrangement and social pleasantries, but also for what it taught him of how men satisfied their natural needs.

> "The table was large and opulent, laden with fruits and cakes. At one end of the long board sat the lady of the house, and I at her right; at the other end sat the eldest maiden, with Sir John at the middle of one side and, opposite him, his son, a soldier bound for India in the coming days. The

[571] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/5 fol. 87v
[572] Ibid., fols. 87v–92

> remainder of the guests were seated so that each lady fell between two gentlemen. The service was prompt, the food was excellent, and all was coloured with lively discourse, which is quite rare at English luncheons. At first, here, too, the guests were silent. Finally, just as the conversation had reached its liveliest, Sir John lowered both hands before him, fingertips together, so as to produce an audible sound. I looked toward him and saw him raise his eyes toward the sky. He finished this tableside prayer in silence, during which time each guest remained wordless and with head bowed. The prayer having come to an end, the ladies rose and, some taking fruit, others cake, departed, one after the other. Once the women were gone, the men rose and, excepting those two of us who were foreigners, turned their backs to the table, there being laid along the wall a number of chamber pots. I stood as if turned to stone and knew not where to—or where not to—fix my gaze. Fellborg[573] laughed a little at this, and smiling, said to me in German: 'Nicht war, das haben Sie in ihrem Vaterlande nicht gesehen?' At these words, I regained my cognizance, at once remembering all I had heard and read about what happened at the British table. But Sir John, detecting my disoriented state, turned to me and, holding the chamber pot in his left hand, his trousers open before him, took my arm in his right and led me to the opposite corner, that is, to the little table placed at the wall at my back, and said: 'Your pot is here.' He left me there, himself returning to where he had been before."[574]

Gerics explained this procedure, which seemed odd compared to customs on the continent, as follows: in Britain, the privies were located in a far corner of the grounds outside the residence and, the name itself deriving from the word "privation", and the English weather being so changeable, a guest might easily

[573] Fellborg (?-?), an unidentified Danish guest.
[574] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/6 fols. 51–52

become wet and catch cold, not to mention the mud that would be tracked back onto the carpets. Thus, although he felt he would have to "become accustomed" to such a thing, it did not "feel inappropriate"', as long as there was "no want" of cleanliness.[575] In this same section, the Hungarian alluded to what he had often seen at inns in the course of his travels, at least on the part of the elderly: "as [such an individual] steps into the dining room, he calls for a chamber pot, and, with no regard for those already assembled there, faces the wall and relieves himself". Beyond this matter, in relation to the drinking that followed the meal, Gerics hastened to assert that neither here, nor at the tables of Lords Egremont or Bedford had he found the company following the departure of the women to devolve into wanton drinking.

> "The first glass we emptied to the lady of the house. Afterwards, the toasts proceeded guest by guest, until we had drunk to the health of our host, the royal family, and several other men of note, (...) yet I never saw a drunken man nor any other impropriety".[576]

Naturally, these were not the only strange or humorous events to colour the *Georgicon* professor's circuit of Europe, nor were his travel conditions themselves a simple matter. For one thing, his instructions required that the majority of his personal effects be kept in a trunk which, as he proceeded, was sent ahead of him to a central location: "I kept the most necessary items with me in a traveller's satchel, carried by a hired guide. All other articles were individually wrapped in waxed silk to protect them from the damp." Although he was compelled to traverse many long stretches on foot, he naturally availed himself of a coach at times or, in some cases, solicited rides on carts operated by various merchants. In leaving the Silesian town of Neustadt (present-day

[575] For an overview of the idea and reality of contemporary "cleanliness" and "comfort" see Jon Stobart: *Comfort in the Eighteenth-Century Country House*, New York, Routledge, 2021.
[576] Ibid., fols. 52v–53

Prudnik, Poland), for example, he found his trunk too heavy and, although lucky enough to have found a ride, soon ran into trouble in regard to the driver:

> "I soon regretted the situation: for as he drove swiftly, uphill and down, across that torturous land, I thought myself lost at every moment. He reassured me, saying he always drove this way and had not once upset his coach; and I, at that point, had no other choice but to submit myself placidly to what fate had dealt me".[577]

In the end, reaching the merchant's home unscathed, he was treated with a considerably lighter touch: "I was most taken, however, with the lovely lady of the house, who, though I had hardly stepped down from the coach, embraced and kissed me." Although the lady, it turned out, had thought him a relative she had never seen before, once the misunderstanding had been put to rest, his hosts continued to treat him kindly: "like a good friend or kinsman, such that my inquiry into the price of the coach they found almost painful."[578]

With Gerics's prolonged treks on foot came other experiences, as well, including one recounted in his revised journal having to do with the traveller's decidedly indispensable boots. In Rochsburg, at a somewhat lean-looking inn, he found the innkeeper's young wife attempting to dissuade him from spending the night there:

> "Take one step further? Perish the thought! What else might I have said? The good soul looked upon me with pity! 'Sit down, then, I see that you're tired and need to rest.' Her eyes filled with tears. I could say nothing. I sat down, wholly filled with emotion. 'If you can be content with such mean accommodations, I am pleased to put them at your

[577] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/1 fol. 54v
[578] Ibid., fols. 6, 54v–55

> disposal. We will find some corner for you to sleep in for the night. Once you have begun to cool down, please draw a little water for your feet, and it will sooth them, and you will see that they will be refreshed, though at the moment it might well cause harm.' At this she left, as new drinkers, and even some busybodies had begun to arrive."

Soon after, the innkeeper's wife returned with the water and removed his boots:

> "Pain pressed tears from my eyes, and I fell onto my arms, which were crossed upon the table so as to hide them. Exhausted as I was, I soon fell asleep. The good woman took my bloodied footcloths from the room, scrubbed them clean, and dried them. The rays of the burning sun worked quickly. By the time I woke, she had brought me good wine, bread, and cheese. Having requested my permission, she rubbed the soles of my footcloths thoroughly with suet and turning them inside-out, instructed me: 'Put these on in this way, for now just to discover if they will serve you; I suggest, however, that you do so always when you travel on foot'".[579]

If the Hungarian's journal is to be believed, Gerics would frequently think back upon the Rochsburg innkeeper's wife, the "good heart that beat within her", and her eternally good advice.[580]

There can be no doubt that a European tour in the age of the *Georgicon* demanded serious stamina, and as the travellers of the day would at times find themselves wet or soaked, illnesses that came with fever were not an infrequent occurrence. In reporting to the *Directio* on his passage from the Island of Rügen to Hamburg, for instance, Gerics wrote, "The cold, damp air of night so

[579] Ibid., fol. 90v
[580] Ibid., fol. 91

bedevilled me that I arrived in Hamburg with a terrible chill".[581] Later, in England, he struggled not only with returning fevers, but on one occasion even suffered an added indignity as a result of his own good intentions. Having just left the town of Plymouth, he had trekked on foot as far as the first stagecoach station, where a coach stopping for fresh horses had just departed, leaving a "pretty little girl eight years of age" behind. In his writings, Gerics described the situation with fittingly self–deprecating humour—"Such a sentimental old sod am I that I'd happily embrace the entire world with all my enemies in it; how not then so sweet and innocent a little girl"—and as no room remained in the postal coach, he took the child into his lap so that he could deliver her to her mother at the next stop. However, the affair did not end well: "Imagine my horror to discover as we set off from that place that my wee protégé was afflicted with scabies." Hurrying back to London, he sought and received the "effective medical redress" that saved him from further trouble, then closed his account of the episode with a paraphrase of a quote by Napoleon Bonaparte: "A man's heart must be in his head."[582]

A repeating phenomenon in Gerics's journal is its references to the banished French emperor, including one in which he laments at the "wholly unceremonious" way in which his books on Napolean were confiscated upon his return to France from England. The distinct distaste he appears to have cultivated for the Bourbon Restoration is evidenced by an episode that took place in Rambouillet, one of the locations listed in his instructions, having to do with a French *vidame* and baron by the name of Watteau who claimed to have been born in Flanders. In the course of their conversation, it emerged that the gentleman had served in the hussar regiment of Imperial Royal Field Marshal Lieutenant Vinzenz von Barco and, likely because Gerics was regarded as a

[581] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról (1819–1825) [Reports by Pál Gerics on his Travels Abroad (1819–1825)] fol. 403
[582] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/6 fols. 174v–175v

subject of the Austrian Empire, "boasted that he had taken up arms against France [and] subjected the French people to much abuse and libel". For Gerics, however, his tirade produced precisely the opposite result as that intended:

> "It offended me that one sustained on French bread might not resist this manner of speech, though I am not French myself. I felt glad to escape the baron in peace and without offence and did not wonder that the Bourbons should be so hated by their people if the king's officers behaved thus even before strangers."[583]

Another event related to the Bourbon Restoration, one associated with one of his stays in Paris, reveals much about the *Georgicon* professor's daily moods. The episode in question involved a carter struggling up an incline, who, as he urged his horses, was cursing heatedly, calling them as "dumb as Jesuits". It was a fairly obvious taunt, as a group of novice priests happened to be walking by at that very moment, listening to the abuse with downcast faces as malevolent onlookers added remarks of their own. In fact, Gerics was hardly surprised, given that the churches in France were all but deserted, a state of affairs born of several factors: the impact of the revolution, the roughness of French youth in the wake of the long wars, and, not insignificantly, the Bourbon Restoration's entire approach to the practice of religion, which it "brought to life in the spirit of medieval zeal, and hence with minimal success".[584]

His experience in Britain had been entirely different. There, he had seen packed pews every Sunday, writing in his journal at conspicuous length both on country's various denominations, and on such phenomena as may have adversely affected him, despite his having been a devout Catholic himself.

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[583] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/8 fol. 31
[584] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/7 fols. 25–26

> "I have experienced the people of London and, in truth, the English opulation in general to be—at least to all appearances—intensely religious, not attending church daily, but keeping Sunday holy to a fault. Though I will, as the occasion arises, be offering multiple examples of this in the pages to come, I nonetheless see it fitting to mention here that the lady of my house, Mistress Andrews, on my first Sunday in her care, upon hearing the sound of my flute, rushed up to my room in considerable agitation, asking me in God's name not to desecrate her home with such a clamour as would be heard not even in the worst bordello of a Sunday. I fell to wondering at this, and, as one might easily understand, my flute lay silent for the duration of my stay in England".[585]

The English, Gerics found, viewed French religiousness with notable disapprobation, citing such grievances as their failure to properly celebrate Sunday and a propensity to hold services that "gravitated toward theatre". By the Hungarian's account, the English condemned those who failed to go to church on Sunday, a point to which he offered the story of a German living in London who, conversation had revealed, had been found guilty of this particular laxity, thus putting an end to all acceptance of his requests to call. Indeed, as Gerics experienced, the English did not generally receive visitors on Sundays, for the most part reserving their hospitality for weekdays.[586] His journal also told of his acquaintance with Sir John Sinclair, who had asked him without a shred of hesitation "where he performed his devotions". Upon hearing Gerics's response, the Scottish Presbyterian nobleman had, within the space of two hours, sent him both an English-language prayer book, and a letter of presentation to Scottish apostolic vicar and bishop Alexander Cameron.[587]

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[585] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/4 fol. 42
[586] Ibid., fols. 42–43v
[587] Ibid., fol. 44

Other passages in Gerics's journal offer insight into matters, such as the particulars of Anglican worship services and common perceptions of the elites of the Anglican church.

> "I have no doubt that the holy service in more than one English church is of an edifying nature, as I have felt edified myself on several occasions, but of the rest, I must judge by my own experience that it is generally otherwise. The clerics conduct the liturgies without devotion, in near mechanical fashion, and read their sermons from the pulpit motionlessly and dispassionately. This may be in part because clerics in the Anglican church, particularly the deacons, are not held in the highest regard by their public (which, of course, is a great dishonour both to the whole, and to many particular individuals, as I know a few personally myself who are as above reproach in their duties as in their comportment), having some of them created such scandal, even during the time of my presence, as made not only the perpetrator, but indeed, the entire Anglican clergy an object of derision and contempt. I would feel shame, even as a layperson, to speak such tales in public. I will therefore remark only that the stranger is easily prejudiced, in advance of any real experience, at the mere sight of the Anglican cleric, and what is it then if his dry words lift up neither heart, nor spirit, failing to move them to that essential place. So it was for me at least in the English church, and not only in the city, but also in rural places, where I was obliged to attend the Anglican church, there being no other."[588]

As regards the religious practices and public judgement of denominations not yet known in Hungary, Gerics's encounter with blacksmith and veterinarian Bracy Clark proved illuminating, especially given that Clark—a man of repute

[588] Ibid., fol. 44v

well beyond Britain—was himself a Quaker. Asked to take the Hungarian to church with him, Clark informed Gerics that the denomination in fact maintained no dedicated buildings of worship, but instead congregated in meeting houses: "I would happily take you to one. We seek our faith within ourselves, and not in external ceremony". Gerics agreed, saying that "God must be worshipped in spirit and in truth". His direct experiences, however, were even more positive, as it turned out that the Quakers, although they did not study theology, were excellent doctors, pharmacists, and artisans. As regards their status in society, he noted:

> "Indeed, they are a people whom the government has exempted from such duties as are obligatory for all citizens, such as bearing arms and taking oaths. Never has it transpired that a court has found any Quaker guilty of a crime, much less condemned one to death. Never did I experience that a Quaker did not remove his hat: to the contrary, those with whom I had contact paid due respect, as did any other Englishman".[589]

It goes without saying that while in London, Gerics took time to visit the iconic St. Paul's Cathedral, where the Anglican services more closely resembled the Catholic mass he knew, and both the oratorio by Händel, and the sound of the children's choir moved him deeply. A further point of note was that the congregation placed their offerings not in an offering box on entering the cathedral, but on a plate so that the ceremonies were not disturbed by the clanking of coins. His recollections of Westminster Abbey, another essential sight for travellers to London, testify not only to an extensive education in philosophy and literature, but also to a personal acquaintance with future statesman Baron Miklós Wesselényi, who happened to be in the city at the time:

[589] Ibid., fols. 46–46v

> "To the right at the pillar of the choir stands the Stanhope memorial, to the left that of Isacc Newton, which is identical in shape, but much more ornate and with an inscription that is lengthy, yet says much less than Newton's own simple name, or than that praise of the S[ainted] Pope, the likes of which have exalted no mortal. The words of that writing, 'Let there be light,' he applied to Newton, with: 'Nature, and Nature's Laws lay hid in Night, God said: Let Newton be! and all was then light [*sic*].' Our own Dajka [Gábor Dayka–G. K.] rendered these same words nicely in the language of our homeland, as one may read in the book published by Ferenc Kazinczy: 'Setétség vonta bé törvényid oh természet! Mond az Úr: Newton légy! s világosság tenyészett.' As I recited these lines in Hungarian before the memorial, B[aron] Miklós Wesselényi called out with great sentiment: 'Hey, my friend, never would I have thought to hear Hungarian spoken in Westminster!".[590]

The site to provoke a true religious experience, however, was the Episcopal Floating Chapel on the Thames:

> "I must make special mention, however, of the floating chapel, which I visited out of pure curiosity, as any tourist, shortly prior to my departure from England. Here, a scientifically trained middle-aged gentleman of true heart and soul, attired in a humble, black urban suit devoid of all ecclesiastical frippery, moved me so with his speech that to this day, I cannot recollect ever having left a church feeling as sobered as on that occasion. His sermon was nearly without action, as is that of every

[590] Ibid., fols. 33–33v; Ferenc Kazinczy (ed. and publ.): *Újhelyi Dayka Gábor versei* [Poems by Gábor Újhelyi Dayka], Pest, Trattner, 1813.

> educated Englishman, who hold the use of hands and feet while speaking to be improper. But in applying his nimble words to the nature of the subject matter—though doing so, he seemed to have keenest in mind those who live upon the sea and, indeed, the lowest class of these, the common sailors—he nevertheless moved the hearts of every listener to ample degree. As for me, had I never been a religious man, I would here have taken the first step toward becoming one."[591]

Fundamentally, however, Gerics found the excessive religiosity of Londoners quite oppressive:

> "Nowhere have I seen as much religious madness as here. At each of my lodgings, I have had trouble with the house mistress for pressing the secrets of religion upon me. Indeed, my reason for leaving the first was that I wished to flee such dreamers, but soon after was forced to understand that others were the same, though I did not give occasion, but rather avoided the subject, just as I did political debate. I cannot wonder after this that the greater part of those suffering in the London insane asylums do so for reason of *mania religiosa*. How different Paris was!"[592]

Throughout his travels, whenever he came to a city of any size, Gerics purchased tickets for performances at local theatres. In reporting on his experiences at the theatre in Hanover, he recounted with some wryness a scene in which an army officer sitting next to him at first thought him an Englishman. This was not particularly surprising, and not just because the English royal family had roots in Hanover, but also because many English officers could not live well—or even at all—in their homeland on their meagre pensions and, for

[591] Ibid., fol. 45
[592] Ibid., fol. 51v

this reason, settled in various German principalities instead.[593] Although his journal is silent on the topic of theatre in Paris, he did write at some length about the "places of public entertainment" in London.

The Italian Opera House failed to win his approval, as its "angled boxes [made] viewing as uncomfortable as [did] the laterally arranged ones in Pest", and although "all with name and fame abroad, be they musician or singer" turned up there, the performances were poorly organised. One of the works of Rossini had been advertised five times, for example, but was always replaced by a different piece: "Thus, not everything in England proceeds perfectly and as designed, as many who are prejudiced in favour of the English would have others believe". However, not all of his remarks on English theatre were negative: "I never experienced the slightest impropriety of the sort of which I have generally heard and read every English theatre piece accused".[594]

Naturally, the two most prestigious theatres of the age, Drury Lane and Covent Garden, both receive mention in Gerics's journal:

> "I was most pleased to have visited both theatres, as superb actors were playing at both and, though of course, the works of Shakespeare are performed there alongside more modern pieces, the great bard is held in such high honour before his nation that there are always numerous members of the audience there from among its native sons. As for foreigners, what could be more interesting than to see these works of classic worth set to stage, and with the true pronunciation of the English language, which differs in so many ways from that of social life".[595]

[593] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról (1819–1825) [The Reports of Pál Gerics on His Travels Abroad (1819–1825)] fol. 230v; For more on the issue of British army pensioners having to live abroad see: Norman K. Crowder: *British Army Pensioners Abroad, 1772–1899*, Baltimore, Genealogical Publishing Co, 1995.
[594] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/4 fols. 177v-178
[595] Ibid., fol. 181

In the end, however, he was unable to view the performance wholly without interruption, as the occupants of the gallery seats, whom he described as "less cultured" members of the audience, were wont, on occasion, to throw nuts and orange peels at those seated on the lower level. In one instance, a play he was watching was attended by King George IV, although to the Hungarian's dismay, the king was actually singing the national anthem delivered in his praise, keeping time throughout by beating his sceptre against the balcony railing. Neither could Gerics refrain from mentioning that peculiar phenomenon of the London theatre "not to be found elsewhere in Europe", the nonsense song, which, "where the singer [who was] skilled in buffoonery, might have listeners of every order laughing". In Gerics's case, however, the genre was a source of considerable head-scratching, as it seemed to him perfectly at odds with the rational English mentality: "Who would ever believe that such silliness should not only be tolerated on the great stages of London, but that it is even deemed pleasant that there should be something to make one laugh—or as the English are accustomed to saying, a bit of 'dry humour'—between the fall and rise of the curtain".[596]

Gerics's appreciation for the material benefits that came with urbanisation has already been noted. Of course, this worldview made it inevitable that he should form certain impressions of English political life. Although his reports and journal indicate that, in accordance with his instructions, he avoided engaging in any form of political debate, he did purchase tickets on multiple occasions—together with his acquaintance, Baron Miklós Wesselényi—to that great "theatrical stage" of political debate, the House of Commons. Further, while his writings are silent on any bills he may have seen introduced there, one particular remark has much to say about his knowledge of political history: "They were, for the most part, immersed in the past; I imagined in that place

[596] Ibid., fols. 181v–182

Fox, Pitt, and others who first exhibited their glittering talents here".[597] However, in the end, he felt at least a degree of satisfaction: "I now have some concept of the ordering of that house, and of the debates that take place in the English parliament."[598]

At the same time, Gerics was not impervious to the cruel realities of London life, reporting to the *Directio* on the illegal use of child labour in as dismayed a tone as he displayed in relation to the young chimney sweeps, who were driven up the flues of multi–storey buildings as living brooms from a very young age. His writings also make reference to the establishment of a parliamentary board of inquiry on the snatching of children from their parents or the poorhouses:

> "It is not only by beatings that the inhuman masters of these children force them to climb the chimneys; often they send the more practiced among them up after the weaker to prick their feet with thorns or light straw beneath them in order to compel them to climb, children who at the age of but six or even four are pressed into such bitter labour"'[599]

It should be a mistake, however, to believe that Gerics's "Anglomania", as he self–deprecatingly referred to it, was in any way diminished by such experiences. To this point, the section in his revised journal on his return to the continent begins—quite tellingly—with a comparison between the quality of innkeeping on the Isles and that experienced elsewhere in Europe:

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[597] Direct reference to two British statesmen, Charles James Fox (1749-1806) and his political opponent William Pitt, the Younger (1759-1806).
[598] Ibid., fols. 72v–73..
[599] Ibid., fol. 195; For an excerpt from the minutes of this particular parliamentary inquiry see John Lewis-Stempel, (ed.): *England: The Autobiography. 2000 Years of English History By Those Who Saw It Happen*. London, Penguin, 2005, 239–241.

> "The traveller will experience throughout England that, as long as he requests nothing very extraordinary, the service he receives will be prompt, even if it is commonly rumoured that there is nothing at the ready. On the opposite side of the ocean, on the other hand, upon entering an inn, even in the villages, one is generally brought a menu of tempting food and drink longer than the litany of the saints, and if he asks whether all items are ready, they respond that they are, and if he selects something, the courteous citizen generally returns with the news that the desired dish has just run out, though there be not another stranger to be seen beyond the traveller himself."[600]

As regards inns and meals in general, perhaps his worst experience derived from his time in Mecklenburg, where not only did his personal encounters yield little of positive value to his mission ("here, the more they flatter you, the less honesty and warm-heartedness I find in them"), but the inns and the "delights" of their tables were also found wanting:

> "A strange thing befell me in Neubrandenburg. My coach driver wished to take me to the princely palace which occupies one side of a four-sided square in the middle of the round city, but which was neither as large, nor as beautiful as the grand inn to be found upon the opposite side nearby. Fortunately, I divined my error in time, having caught a glimpse of the guardsman and his quaint little sentry–box. Here, I thought, I will procure for myself a bowl of soup, something one sees precious little of in these parts. I ordered one, but one could have—or was compelled to—cut it with a knife, rather than employ a spoon. Indeed, the elegant inn offered not a single course that was of any use. Yet all was terribly expensive. I

[600] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/7 fol. 2v

> was forced to pay a *thaler* and a half[601] to sit at Hund's table[602] (Hund was the actual name of the innkeeper), yet could eat nothing. One might imagine that I was not terribly late at that crumb of a palace and with luck, will be moving on shortly".[603]

Although at least one inn proved both more welcoming and less costly in Pomerania, he was stunned at the cold fish starter served according to the northern custom: "I reeled at the sight of that enormous ocean fish at the *table d'hôre*, served with bacon two fingers thick. I hardly need mention that when they took it from me, it was still intact". What followed it, however, was at least some recompense:

> "[the] soup dish, on the other hand, evoked an unspeakable joy in me such as I had never felt at any table. I was first to partake of that delectable victual, as among his sixty guests, my presiding innkeeper treated me so specially as to seat me in prime position".[604]

Of course, he had little desire to insult his host, but the dishes to follow, offered as specialities of the region, failed to win his approval: "To my Hungarian palate, the raw, smoked goose pleased me as little as the green ham."[605]

Interestingly, his experience with English cuisine was not limited to the Isles themselves. In Hamburg, where he was invited to lunch with the Bavarian consul, he found an example of English food on the continent, as well:

> "The first dish was a large roast quarter of veal, which the master of the house began carving in the English fashion. First, he sliced into the

[601] 1 Prussian thaler = 24 groschen, though there was also a one–thaler banknote in circulation at the time.
[602] Hound or dog.
[603] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/2 fol. 73
[604] Ibid., fols. 76–76v
[605] Ibid., fols. 79

> middle, at which raw blood flowed out. My fellow guest, a local senator, pronounced it 'quite *delicieuse*', though it looked precisely otherwise to me. I kept my tongue, as no matter what lies before me at table, there, I prefer to speak of other things, though perhaps the lovely lady of the house—and the gentleman, too—would have liked to hear me say something similar. They all looked at me from across the table, silently. Then my host spoke: 'My good sir! Having come from the imperial provinces of Austria, perhaps you were expecting soup. I regret to disappoint you. It being ten years since I left Vienna, I have placed my table on English legs, and there has never been soup upon it. Here, we start luncheon not with soup, as they do in Vienna, but with roast beef, as you can see'".[606]

Although, as he would suggest later, he never did grow accustomed to beef cooked rare, his time in England did rid him of one of his former "prejudices", leading to a true appreciation of one of the country's well-known specialities. The event that sparked the change occurred as he was strolling along the seaside one day. At a certain point, he was astonished to see "a number of people taking paper from their pockets and, twisting them into the form of a cone, along with several others, commence barking that they had shrimps—tiny marine crustaceans—to sell". For Gerics, the sight was an unusual one:

> "As some began crunching, I felt repulsed, as if I were seeing someone eating cockchafer-grubs at home. My travel companions, however, began to press me, and I was compelled to sample one. In the end, I found the unpleasant-looking things so tasty that I bought some myself, rejoicing at the prejudice I had just vanquished".[607]

[606] Ibid., fol. 89v.
[607] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/5 fol. 180

As per his instructions, whenever Gerics visited a slaughterhouse, grain market, or other food processing facility, he strove to leverage the opportunity to better understand how large cities were provisioned. The docks on the east side of London, for example, made an enormous impression on him, while also furnishing special information in relation to the city's wine supply:

> "In this port, I have seen tobacco, wine, and brandy in the greatest quantities, but what evoked true wonder in me, beyond the enormity, marvelousness, and efficiency of the entire enterprise, was what I heard in regard to wine. Most of the wines unloaded here are from Madeira. They are picked up as ballast on the way to India, and, carried even south of the equator, they improve by the time they reach the port of London. It is mainly ships sailing to the Antilles that carry such freight".[608]

Beer too was the subject of several of Gerics's writings, although he found nothing in particular to discuss about beers brewed on the continent, including those produced by farms in the German principalities. When travelling far north in Scotland, he once commiserated with Sir John Sinclair about a recent fashion for replacing healthier beer drinking with the consumption of brandy, a trend that had had a negative impact on barley production. In London, on the other hand, the Hungarian traveller made a thorough study of the phases entailed in making the specialty ale known as porter—and not just anywhere, but at Barclay, Perkins & Co. in Southwark, on the right bank of the Thames, one of the city's most important breweries:

> "To my question as to whether they used burnt sugar to colour and sweeten, flour in place of malt, or other ingredients such as spices, the

[608] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/4 fol. 213v

> reply was: 'never'. The law stipulated that they must use nothing but barley, malt, hops, and water. To mix flour into the malt would be highly economical without compromising the beer's integrity, but, due to the malt tax, it was prohibited at the risk of penalty by excise law".[609]

In his revised journal, Gerics invokes elements characteristic of the 'journey of sentiment' that were, by necessity, wholly omitted from reports and letters geared to the expectations of a "technological grand tour". His experiences immediately following the border crossing at Brabant, for example, speak volumes about contemporary conditions, as nowhere else did he encounter such a large crowd of vexing beggars. The phenomenon was, in his opinion, attributable to the history of the region, a part of the Netherlands that practised Catholicism and had once belonged to the Spanish crown: "the old Spanish custom is still wildly fashionable here, despite the government's every ordinance".[610] In Italy, the two *Georgicon* professors visited several cities, but it was Gerics who voiced his admiration for the beauties of Tuscany, Rome, Naples and, then on his way back, gave a vivid description on the cities of Parma, Bologna and Mantua in particular details. No doubt, Rome fascinated him with its grandeur, but he was slightly critical of the decadence of the centre of Roman Catholicism.[611]

Beyond examples of formal social interaction, Gerics dedicated some thought to the socio–cultural peculiarities of the male-female relationship, as well. He did not refrainfrom weighing in on the external manifestations of the "oldest profession" where he encountered them, for example, although his

[609] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/6 fol. 45; OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/4 fol. 200; For more on the history of the company see Ronald Pattinson: *Porter*, Amsterdam, Kilderkin, 2013, 381–387.
[610] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/3 fol. 4
[611] Ágnes Berecz: Itália művészeti élményei egy technológiai utazás mentén. Gerics Pál *Utazási jegyzései* [Artistic Experiences of Italy Gathered during a Technological Journey. *Travel Notes* Compiled by Pál Gerics], in Á. Dóbék (ed.): *Olasz-magyar irodalmi és művelődési kapcsolatok a 18-19. században* [Italo-Hungarian Literary and Cultural Connections in the 18th and 19th Centuries], Budapest, Reciti, 2022, 225–242.

remarks were delivered with a measure of restraint and, perhaps, a certain moral tinge. Two not unimportant features of these discussions, however, are their consistent emphasis on his status as a mere observer and repeated references to his first, and seemingly unavoidable experiences to support his assertions as to what what he would see later. This approach is evidentin relation to his recorded impressions of Hamburg and its environs:

> "Altona does not bow down to Hamburg, for the latter has neither strength, nor gate, nor wall, for which reason it cannot extort money for entrance or departure.—Its prostitutes, too, are at liberty, and shamelessly so, even in broad daylight, they, too, doubtlessly working for money only, and neither in this respect does Altona permit itself to be outdone, as one travelling there from Hamburg arrives promptly upon a spacious square, where not one or two temptresses, but simultaneously several approach one from every side. It was here I first saw the hapless slaves of Venus behave in so scandalous a manner that any man with a modicum of dignity would but turn away in disgust."[612]

In Amsterdam, he found the situation handled with somewhat more regularity. The prisons, he noted, "number[ed] among the city's unique features", demonstrating that he interpreted the problem as one of law enforcement, and in this vein, stressed that in the Dutch capital, men and women sentenced to loss of liberty were kept strictly separate:

> "The women are in a different building, the *spinhuys*, or spinning house, where they are made to spin yarn. Prostitutes who behave impudently in the streets are brought here, too: for though the harlots have been expelled

[612] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/2 fol. 93v

from what are known as the *Musicos*, or gambling houses, still, seduction by low people wandering the streets is prohibited."[613]

The *Georgicon* professor would later think back to these "hapless slaves of Venus" when visiting the hospitals of London, although he did not return to the subject in his writings about France. However, he thought it important to detail a particular form of solicitation experienced in the city of Livorno:

"So that I might obtain a clearer concept of the city's orientation, I climbed the tower of the main church just before sunset. Upon descending from that place, I was witness to such a scandal as I scarcely dared believe. Just as evening set in, I saw a crowd of people thronging toward the street, and the desire to know swept me up, as well. And what did I see, but on one side of the wide avenue a great many prostitutes standing all in a row; each held a candle or oil lamp that illuminated face and breasts, as the lot of them sang seductive songs. On the other side, a solid wall of men stood gawking. I, too, had to jostle my way through to see what it was about. Would anyone believe that so many men would be willing to take one of these impudent tarts by the arm and lead her into some house by the light of candle or lamp? Yet that is what I saw."[614]

The discomfort he clearly felt in his experiences with the seedier side of male-female relations was, however, entirely absent from his writings on the finer forms of courtship, where, quite the contrary, his journal exudes admiration:

"From my stay in Amsterdam I would mention the luncheon with Bavarian consul Wächter for the refined French manners that were the

[613] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/3 fol. 52v
[614] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/9 fol. 135

> reigning fashion there. Mr. Wächter was himself born in Württemberg, but settled in Amsterdam as a merchant. Being a widower, he had entrusted the care of his house to his only daughter, and naturally, the lovely maiden was, as elsewhere, the idol of all at the table. Four young Frenchmen gathered about her, but in a manner that to me appeared so refined as to be neither low wheedling, nor delusory promise-making, but rather well-rehearsed sweetness. And the German discourse alongside which they continued to pepper their gentle pleasantries served only to endear me further to their light–headed spirit".[615]

In some cases, the tone Gerics used to describe a given scene reflected surprise at attitudes he considered divergent from the conventional or forms of women's dress or communication that contrasted with his understanding of the norm. This was certainly the case with Countess von Itzenplitz, née Henriette Charlotte von Borcke, a member of an important aristocratic Prussian family:

> "First I visited Kunersdorf (present-day Kunowice, Poland). On arrival, given that Minister Reden's wife had furnished me with a letter of presentation to Countess von Itzenplitz, I enquired as to her whereabouts. I was shown a garden pavilion, and entering, found myself entirely embarrassed by the masculine figure sitting opposite me at the table. The person's head was covered with a high, round hat with locks of hair teased up at the left ear. The neck was covered with a high, stiffened collar that reached halfway to the ears, above which at the front was a little white handkerchief tied in a bunch. The wide torso bore a dark blue, Hungarian-style dolman covered in silk cordwork and buttoned to the neck. The figure rustled in its seat, a whip in its hand. 'I had thought to find a

[615] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/3 fols. 75–75v

> woman, and instead find a man before me', I thought. This in and of itself would not have been a problem; had I not then addressed the figure as a man. To my great fortune, the Countess saved me from my embarrassment by standing up from her seat, at which the figure that had appeared so masculine from above immediately showed itself to be a woman's in equestrian attire. Having glanced over my letter and exchanged with me a few courteous words, she led me to her husband, of whose existence I had had no knowledge, being of the view that she, too, like the woman who had sent me, was a widow".[616]

Although there can be no doubt that the manner in which Gerics's experiences are communicated in his retrospective writings continues to be largely determined by the rational mindset of and criteria for the "technological grand tour", in describing certain scenes in the anecdotal fashion typical of the "journey of sentiment", he occasionally displays a tendency to wax patriotic. Conspicuously, when offering a verbal summation of the intellectual spirit of the famed Dutch university town of Leiden, although giving due attention to his meetings with its academic elites, he nevertheless takes the time to paint a vivid and somewhat artistic picture of a special historical event he felt would be important for the education of future generations:

> "In another church is the stone monument to Hadrianus Vervius, [617] who was the commander in Leiden during its siege by [the Duke of] Alba[618] and who was ready to give himself up as a martyr to the mobs rather than hand the city over to the Spanish. Van den Bree[619] has given us a

[616] OSZK Kézirattár [Manuscript Department of the National Széchényi Library]Quart. Hung. 3727/2 fol. 64v
[617] The reference is to the second siege of Leiden in 1574, when Pieter Adriaansz van der Werff (1529–1604), burgomaster of the city, made himself an emblematic figurre of perserverance against the besieging Spaniards.
[618] Don Fernando Álvarez de Toledo y Pimentel (1507–1582), Third Duke of Alba, Governor of the Netherlands during the reign of Phillip II, King of Spain (1556–1598).
[619] Historical painter Mattheus Ignatius van Bree (1773–1839), Director of the Acadamy of Antwerp.

> masterful depiction of the moment in which he hands over his sword, saying it would be better for them to kill him than that he be constrained to break his oath and relinquish the city. What a praiseworthy character who, taking pity on those who are starving and, fearing not the clamouring siege forces without, thinks only of the sanctity of his obligation and stands, steadfast as a rock. How majestically are the emotions that vie with one another expressed upon that countenance, all to be subjugated by masculine determination! A worthy thing it is to hand down such a picture, to commemorate—to communicate—such a deed, a source of inspiration for future generations".[620]

Although the experiences of *Georgicon* professor Pál Gerics were many and, by continuing to cite from his account of them, one might eventually reconstruct, thread by thread, the extraordinarily rich tapestry of socio–cultural observations his story has to offer, the attempt would exceed the limits and objectives of this book. Still, it is hoped that those already provided above will prove sufficient to leave posterity with at least one vivid illustration of what a Hungarian traveller once encountered on journey through the lands of Western Europe in the early 19th century.

[620] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/3 fol. 32

Chapter 9
Epilogue

In 1850, three decades after Count György Festetics's death, the daughter of a wealthy Viennese banker, Madame Pulszky, née Theresa von Walter, published *Memoirs of a Hungarian Lady*. Having been married to Ferenc Pulszky, an educated Hungarian nobleman, who was politically active and held various offices over the course of Hungary's freedom fight against the Habsburgs in 1848 and 1849, Theresa recalled her impressions of her adopted homeland after settling in London.[621] While reconstructing the political and constitutional efforts of the reform minded Hungarian nobility, which culminated in the abolition of the feudal system in 1848, she argued that Hungary was adversely affected by the Habsburg government's policy of only promoting the "public good" for the peoples of the hereditary lands. "The Hungarians claimed a fair application either of the principles of free trade, or of those of protection; and protested against a system, which at the same time stopped the foreign markets, and was oppressive to national industry".[622]

It is also telling that she felt it necessary to evoke the figure and intellectual legacy of a Hungarian aristocrat, whom she had never met but who seemed to epitomize the better part of Hungary's nobility as opposed to the adherents of an outdated socio-political system. Her description must have been based on anecdotal sources, but it certainly explains why the story of a unique personality whose peculiar attitude yet unfaltering determination to support the establishment of national institutes of professional training should be of interest to the English public. According to Theresa, György Festetics

[621] For a comprehensive overview of Hungary's freedom fight see: Róbert Hermann: *The Hungarian War of Independence 1848-1849 - An Illustrated Military History*., Budapest, Helion & Company, 2023.
[622] Theresa Pulszky: *Memoirs of a Hungarian Lady*, Vol. 1., London, Colburn, 1850, 6.

> "was not only learned, but also very clever; of a powerfully satirical turn, directed against all the world, which he disguised under the mask of politeness, united with the semblance of such perfect humility, as to appear at times awkward. It was never to be made out whether he spoke in joke or in earnest".[623]

On one occasion, as she recalls in her memoirs, György Festetics went so far as to test the emperor himself by offering him to burn banknotes up to the value of 100,000 forints in his Imperial Majesty's honour, since Zala County fire regulations prohibited him from launching the fireworks which had been prepared.

> "After the Emperor had retired to rest, the Count again presented himself before the lord Chamberlain, requesting an immediate audience of the monarch. In vain did the Chamberlain plead the impossibility of disturbing his majesty. The Count asserted his business to be of the highest importance; (…) The Chamberlain utterly perplexed at this strange demand, went to the Emperor, and gave an account of the whole affair. Francis I, for whom money always had a peculiar attraction, took the sum, and said, smiling: 'the old Count is a fool, but we will not burn the notes'".[624]

Nevertheless, Theresa concludes with what really made Festetics worth remembering. She described him as one, who

> "still more grandly manifested his noble generosity and superior tastes. On his estate in Keszthely, he founded an institution, the *Georgicon*, for

[623] Ibid., 85-86.
[624] Ibid., 86.

> all branches of rural economy. This establishment, of first-rate importance to an agricultural country, like Hungary, was also highly prised in Germany. He admired, studied, and supported science and its scholars, while he himself was well worthy to rank amongst them. In such a Maecenas, peculiar whims may not only be pardoned, but may readily be allowed as a privilege due to genuine originality".[625]

It has always been quite intriguing for a historian to explore multi–faceted sources and, by doing so, attempt to shed some light on the activities of historical figures. In some cases, it is an almost impossible task to present a fully balanced analysis because there will always remain certain phenomena which might appear to bear more emphasis and scrutiny than others. In any case, the previous chapters have attempted to outline the specific aspects of the vision of two members of the Festetics family by exposing the practical fulfilment of their intention to leverage the circulation of knowledge of their times. Their purpose to integrate their private institution into an international network of European academic and intellectual life, as well as attempting to explore and find potential markets should certainly preclude the harsh judgement of later generations of historians based on a superficial juxtaposition of the Habsburg dynasty's modernization efforts and the apparently hidebound and retrograde mentality of the Hungarian nobility. The previous chapters have aimed to elucidate the determination of György and László Festetics to extend the horizons of Hungary's professional training, and by doing so, it will be impossible to present the Hungarian nobility in general as "ignorant, uncultured, barren of ideas, incapable of grasping the fundaments of politics, and both naive, and inexperienced in matters of public import". On the other hand, it should also be noted that they respected talent and achievement since they invariably based the

[625] Ibid., 93–94.

fulfilment of their visions on the cooperation and performance of their employees of non–noble descent.

It is with a view to this I have endeavoured to explore and analyse a unique "open source" kept in the former family archives of this Transdanubian aristocratic family. The reports, missives and journals that documented the technological journey of physician and veterinarian Pál Gerics, and oenologist, József Lehrmann, present us with a complex image of contemporary Europe. The important issues of individuality, professional accuracy, and originality clearly went beyond the impersonal registration of technological processes with a valid assumption of the material's future utility; that is, references to direct dialogue, or to reactions to questions did help them convey and represent the backdrop of the day to various economic phenomena or simple technological practices.

Nevertheless, it is quite clear that the two *Georgicon* professors recorded and interpreted their experiences quite distinctly. Beyond the obvious observation that Gerics's training and education surpassed Lehrmann's, the difference between their respective written products can be explained in so far as the latter's subject matter focused heavily on the elegant parks and gardens of the elite strata of contemporary society, among other things. It should be noted, however, that Lehrmann's other duties regarding the topics of wine–making and viticulture, activities that were important for their ability to generate revenue, did require a more analytical approach; and here, the second *Georgicon* professor employed the documentary model set forth in his instructions, tailored to some degree to the peculiarities of the two fields. Lehrmann's journal and reports tend to be more purely descriptive in nature, a point that is all the more conspicuous given that the course he followed was very similar to the one taken by his colleague, thus permitting close comparison to Gerics's sometimes deeply analytical writings.

At the same time, we should note that a reassessment of Gerics's firsthand experiences was made possible for him in the light of his familiarity with professional literature. For example, it was not until years later, when working on his revised journal, that he would offer a retrospective account of his Leipzig experience from a complex economic point of view and express his articulate views on the politics of the Prussian state as it strove for dominance in the region. Although the city was situated at some distance from both the sea, and other waterways that might have facilitated domestic freight haulage, and while its roadways, too, were far from perfect, it still managed "to support not merely national, but global trade". In reference to a Prussian railway construction programme concurrent with the writing of the later journal, Gerics expressed his concern that the ascendance of Berlin would be detrimental to trade in the whole Saxony, although in his analysis at the time of his presence there, both the city in particular, and Saxony as a whole had continued to maintain a privileged status as a result of the ill–considered policies of surrounding states, including, not insignificantly, Prussia. As to the specific nature of these policies, his remarks left little unsaid:

> "Prussia seeks to bring the Leipzig wool trade to ruins, and so that it might effect this outcome as certainly as possible, it undertook to draw a magnificent road from Merseburg to Naumburg, one that cost several millions; and for what consequence? On June 25th in Naumburg, there commenced a market which the Prussian government wished to dedicate specially to wool, and so that one need not proceed toward Leipzig via the usual route, there was constructed a very costly road, surpassing in quality any I have ever seen in all my travels in the more civilized parts of Europe. It was during precisely this passage of time that I, too, found myself upon this road, and visited Leipzig, as well. But for the entire length of it, from Weiβenfels to Merseburg, I saw not a single soul. By

> contrast, Brühl, the widest, longest street in which I lived in the inner quarters of Leipzig, was full of wool carts, so much so that not only was the Leipzig wool market unaffected by the Prussian initiative, but the one held in Naumburg, too, took place in the former city. Why? 1.) Because the road toll was set high so that the government might collect enough each year to cover the interest on the cost of the road's construction. 2.) Because there have been imposed many restrictive ordinances that compel the market sellers to take other roads, even where of poorer quality but with a high fine, or to go not to Naumburg at all, but elsewhere. In this, the Prussian government has erred on several counts. 3.) Because less than half the interest on the capital spent on the road is collected; much more must be made if the excessively high customs are to be reduced to half, at which point many would take that way. 4.) Because restricting trade with reference to cameral considerations alone will neither feed the chamber to the extent anticipated, nor permit the men of Naumburg the hoped-for return on capital invested into their buildings. 5.) Because thereby, precisely those rivals the Prussian state wished to oppress have instead been lifted. The Prussian government, however, had not until now bothered itself with the matter of trade, and the positive side of their legislating in this vein is what the merchants and millers wished of Colbert when he asked them what must be done if the mills and markets were to thrive. The answer he received was, '*laissez nous faire*'."[626]

Apart from these explicit remarks, however, the Hungarian's journal also reveals much about the Prussian influence and internal economy of Saxony in its account of Gerics's financial transactions in the region: when he presented himself to a local banker, Michael Kaskel, to redeem a letter of credit, he was benevolently advised to withdraw the amount in question in Prussian currency,

[626] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/1 fol. 134

which was the more common means of exchange in Saxony, thus sparing him the losses necessarily incurred from conversion.[627] Another instance, confirming that Gerics was rather aware of the global consequences of the extension of world trade, is demonstrated in a specific section of his revised journal on both the Royal Exchange Assurance, and the underwriting process that indemnified businesses. His more insightful ruminations, however, imply his stance on certain processes and phenomena that became more and more discernible in the mid-19th century:

> "An Englishman cannot look out upon all which—from this perspective—can be seen of his nation's scale, might, and power, without some feeling of pride, as its commercial zeal, which now holds the entire world in its compass, is displayed nowhere as intensely as where the representatives of so many nations are seen, and so many tongues heard. Representatives, I say, for can I not regard the so–named "factors" of the great merchants as akin in some fashion to the chief ambassadors at the royal court of any crowned head? They, too, I say, are representatives! Indeed, the king of kings himself, as I have heard him called (Nathanael Rothschild), can be seen here, if anywhere. And what the pursuit of trade has done for urbanisation, and in consequence, for all such benefits as devolve from it upon the human nation is so well recognised, it hardly warrants any broader presentation here. And if this is so? Cannot the Englishman, if anyone, deservedly call himself a citizen of the world? And what would England itself be without commerce?"[628]

[627] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról (1819–1825) [Reports by Pál Gerics on His Travels Abroad (1819–1825)] fol. 557 v
[628] OSZK Kézirattár [Manuscript Department of the National Széchényi Library] Quart. Hung. 3727/4 fols. 57v–58v

We cannot say that such observations and statements can be deemed as the ultimate manifestations of Gerics's capability of describing the overall operation of world trade and global economy, but the above lines, including his previous observations on the English and French wool trade, certainly show that their author did have the acumen to understand a complex system and was not just recording technological processes, farming methods, or veterinary therapies.

The diaries of Count László Festetics's nephew, István Széchenyi, who later proved to be a leading figure in the process of eliminating the hidebound feudal system in Hungary in the pre–March period of the 1848 revolution, also demonstrate that the young Hungarian aristocrat was more than impressed with England. Nevertheless, his society engagements made it impossible for him to occupy himself with studying various institutions other than political ones. He was entertained by the Duke of Wellington, paid a visit to the Houses of Parliament and moved in the highest circles of English society.[629] Baron Wesselényi's journal of his tour of Western Europe is more specific as far as the institutions, industry, farming, or accessories of modern life are concerned in England.[630] However, it was Széchenyi who published his seminal work *Hitel* [Credit] in the depressed period of one of Hungary's worst credit crises in the second half of the 1820s and, by doing so, he became instrumental in the awakening of the Hungarian nobility to launch a radical political campaign to abolish the feudal system and establish a modern Hungarian state.[631] Indeed, Széchenyi founded vital institutions and he definitely surpassed his cousin

[629] An entry from Széchenyi's diary on 28 June 1822: "Bey den Herzog von Wellington gewesen, und früher in the house of peers and in the house of commons – Welches Land?" On his return from Greenwich Széchenyi noted the following on 10 August 1822: "England ist auf einem hochen Punct – wie noch nie ein Volk gewesen – es kann aber noch höcher steigen: denn es hat durchaus kein Zeichen von Verdorbenheit in sich." Viszota: *Széchenyi István* [István Széchenyi], Vol. 2., 293., 301.

[630] Wesselényi: *Napló 1821–1822* [Journal 1821–1822], 124–137. See also: Kristóf Fatsar: 'Enjoying Country Life to the Full—Only the English Know How To Do That!': Appreciation of the British Country House by Hungarian Aristocratic Travellers, in Jon Stobart (ed.): *Travel and the British Country House: Cultures, Critiques and Consumption in the Long Eighteenth Century*, Manchester, Manchester University Press, 2017, 145–167.

[631] István Széchenyi: *Hitel* [Credit], Pest, Petrózai, Trattner, Károlyi, 1830. For Széchenyi's activities see George Barany: *Stephen Széchenyi and the Awakening of Hungarian Nationalism, 1791–1841*. Princeton, Princeton University Press, 1968.

whose shaky financial situation prevented him from taking part in the political struggles of the 1830s and 1840s, which culminated in the constitutional victory of the liberal minded nobility, thus resulting in the founding of the first government responsible to the deputies of a parliament elected by the people.[632]

With a view to the above, it does not seem far–fetched that the early 1820s saw the beginning of a new era and that László Festetics also contributed to the changing mentality of the noble and non–noble public in Hungary. The return of the two *Georgicon* professors—the event that brought their mission to a close—together with the network of personal and institutional connections that can be reconstructed from their writings and the totality of their experiences as evidenced by the indices of the professional literature, books, models, and scale drawings their journey produced all support the conclusion that the vision put forward by the *Georgicon*'s founder and carried on by his heir—their hope of establishing a place for Hungary within the European community of cultured nations—was, in fact, a realistic one. In regard to the two Hungarians' observations on the general nature of the contemporary European economy, it is clear that the extensive quantity of reports they produced and compiled along the lines of specific assignments set forth in their travel instructions, should be seen as evidence of Festetics's willingness to adopt advanced and effective methods in agronomy and to do so within the framework of such means as the circulation of professional knowledge conferred.

The previous chapters have sought to offer a meaningful overview of the two *Georgicon* professors' first–hand experiences with the agricultural technologies of their age, along with a probing look at the analyses provided by Gerics a complex set of observations that even extended to issues of the national economy. In closing this discussion, it would be no exaggeration to assert that the documentation produced by this multiple–year enterprise—a body of

[632] For a complex analysis of the period, see also István Deák: *The Lawful Revolution: Louis Kossuth and the Hungarians, 1848–1849*, New York, Columbia University Press, 1979.; András Gergely: *Reform and Revolution 1830–1849*, (Atlantic Studies on Society in Change, Vol. 130), New York, Columbia University Press, 2009.

material covering no less than several thousand folio pages—together with Gerics's revised journal, constitute unique source material toward a better understanding of the history of the advancement of the "common good".

To reconstruct the estate management practices of Count László Festetics and examine such activities as influenced both the day–to–day routines of the two professors and teaching at the *Georgicon* as a whole are tasks to remain to future researchers. Nevertheless, I trust that this analysis, based on the extraordinarily complex and varied writings associated with the European travels of Gerics and Lehrmann, will go a long way toward illuminating both the processes by which two scions of an early nineteenth-century Hungarian aristocratic family—*Georgicon* founder Count György Festetics of Keszthely and his son László—succeeded in their quest to serve the "common good", and such details of their endeavour as bear significance for a wider international context.

In his report to Count László Festetics of 29 March 1820, beyond the required expressions of gratitude, Gerics stated his fervent hope that, "upon returning to our homeland", in time, he might be a "worthy instrument" toward the objective whose foundations Count György Festetics, had laid down in his efforts to bring about "a dawn of Hungarian economy".[633] Upon Gerics's return to Hungary after five years abroad, Count László Festetics, in recognition of the sterling results he had achieved, appointed him *archon* ("directing professor") of the college of agriculture in Keszthely and ensured he would ever after take an active part in the managing the expansive Festetics estates as a member of the *Directio*. Lehrmann also continued his career as professor at the *Georgicon*, leading, in several years' time, to that memorable meeting between the noble

[633] MNL OL Festetics Lt, Központi Birtokigazgatás [Central Estate Administration], P 274 3. d. 5. Gerics Pál jelentései külföldi útjáról (1819–1825) [Reports by Pál Gerics on His Travels Abroad (1819–1825)] fol. 385. For a broader European context c.f. René Sigrist – Eric D. Widmer: Training links and transmission of knowledge in 18th century botany: a social network analysis, *Revista hispana para el análisis de redes sociales* 21 (2011), 347–387.

Transylvanian traveller, Sándor Ujfalvy, and the Keszthely professors “who exhibit[ed] such practical knowledge of both life, and the economy”.

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General Index

This index contains the most important subjects relating to the instructions and missions of *Georgicon* professors Pál Gerics and József Lehrmann. Accordingly, their names and Hungary are not included. Historical personal names are presented with the most important infomation of a person's activities or social status. Geographical names can be identified with cross references based on the original texts.

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