

English–Hungarian medical relations in the XVI–XVII century¹

Contacts between Hungary and Britain, although their intensity changing, have nevertheless been continuous over the long centuries of the history of medicine in Hungary, up to the present day. Their complete survey would require a whole monograph and can only be a task for future research. In this brief study we wish to call attention to a short but significant period of these contacts.

The protagonists of our study are *John and Arthur Dee, Sir Philip Sidney and János Bánfihunyadi*; from the four only the second was a real physician, the others came to be recorded in the history of Hungarian medicine on account of being versed in alchemy or else by their scientific contacts with Hungarian physicians and natural scientists.

The second half of the 16th and the first half of the 17th century was the advent of alchemy, but this was already an alchemy which was able to step over its own insignificant shadow, and was inspired apart from wanton goldmaking also by the desire to defeat all sorts of ailments afflicting mankind. At the same time – and this was characteristic of the age – the two altogether opposite driving forces lived together in peace in the mind of scholars.

Born in 1527, John Dee² was a well-known mathematician, astronomer, astrologer and mainly alchemist. He received a first-class education and excelled with his talents already at a very early age. In 1547 he became one of the first professors of Trinity College, founded by King *Henry VIII*. However, his smoothly starting career was for a time interrupted, since he was imprisoned under the suspicion of treason during the reign of *Mary Stuart*. Cleared from the suspicion, John Dee regained his liberty and was allowed to teach again, then he left England. His lectures at the universities of Louvain, Brussels and Paris, as well as at the college of Rheims earned him a European fame. While in France, he got acquainted with the famous physician and magician of the age, *Michel Nostradamus*, author of prophecies ranging over three centuries.³ Having returned to England he became the astronomer of Queen *Elizabeth I*; he was requested by *Lord Dudley* to appoint a favourable day for the coronation.⁴ From this time on John Dee was continuously in the good graces of *Queen Elizabeth I*; she paid several visits to him in his home in Mortlake in order to admire his library and the instruments he used for experiments. On ground of his good connections in the court Dee was sent to study „hieroglyphy” abroad. He stayed in Antwerp in 1562 where he studied *Joannes Trithemius* 's „*Steganographia*”, regarded at that time as the most outstanding work in the

¹ Publ. in: *Communicationes de Historia Artis Medicinae* Suppl. 6 (1972) pp. 97–112. Written with E. Schultheisz.

² For his biographical records see the *Dictionary of National Biography*. Oxford, 1886. Vol. V., 721–729.

³ Deacon, R.: *John Dee – Scientist, Geographer, Astrologer and Secret Agent to Elizabeth I*. London, 1968.

⁴ Róna, E.: Magyar vonatkozások a XVI–XVII. századi angol irodalomban. (Hungarian References in the 16–17th century English Literature.) *Studies in English Philology*. Publication of the Dept. of English, Hungarian Pázmány Péter University of Sciences. Vol. I. Budapest, 1936, 7.

science of cryptography. Dee also copied it, and on the basis of this book he later wrote his own work under the title „*Monas Hieroglyphica*”⁵ It was here that he got first in contact with Hungary. It turns out from a letter he wrote to *Sir William Cecil* that he was being able to get on with his work well because a Hungarian gentleman, who at the time stayed also in Antwerp, had undertaken to copy half of the book in order to help him.⁶ However, neither his letters nor his diary reveal the name of this gentleman with whose help he worked in the tavern „The Golden Angel.”

In Spring 1563 he visited *Conrad Gesner* in Zürich and then took part in the coronation to Hungarian King the later Emperor *Maximilian* in the town of Pozsony, the Hungarian capital, on 8 September 1563. Pozsony was a frequented meeting place of Central European natural scientists for more than two centuries,⁷ in 1537 for instance the town was visited by Paracelsus. But the physicians and alchemists of Pozsony too, made important contributions to the literature, as did the two *Ruhlands*. The elder one, *Márton Ruhland*, alludes to *Paracelsus* already in the title of his work „*Lexicon Alchemiae*”, and he includes also those hermetic sciences which, not much earlier, John Dee treated in his „*Monas Hieroglyphica*”. *István Weszprémi* who deserves being regarded as the classic of Hungarian medical history mentions, that Dee handed over his work personally to the sovereign whom he mentions it on several occasions.⁸

Dee's work is interesting also from the point of view of medical history. The careful study of the work has led us to the conclusion that it points beyond the treatment of cryptography, cabbalism and symbolics, and it contains the basic tenets of his work as an alchemist. The detailed treatment of elementary qualities, the *Calidus* and the *Humidus* leads already over to the theory of fluid-circulation. There is no doubt that in the cosmic symbolism of his work, Dee appears as a classic neo-Platonist, who in this respect reminds us of *Giovanni Pico Della Mirandola*.⁹ It would be wrong to judge John Dee exclusively on the ground of „*Monas Hieroglyphica*” and of his activity as an alchemist. *Dampier*, the famous science-historian points out how closely magic and science could live together in such an excellent scholar as John Dee, who for all his spiritualism and alchemist mysticism was an outstanding scientist and mathematician and also the earliest follower

⁵ Cfr. Apponyi A.: *Hungarica*. Ungarn betreffende im Auslande gedruckte Bücher und Flugschriften. 3 Bd. München, 1925, 237.

⁶ „Of this booke one half (with contynual labour and watch, the most part in 10 day) have I copyed oute. And now I stand at the curtesye of a nobleman of Hungary for writing furth the rest; who hath promised leave thereto, after he shall perceyve that I may remayne by him longer (with the leave of my Prince) to pleasure him also with such pointes of science as at my handes he requireth.” *Philobiblon Society*. Bibliographical and Historical Miscellanies. Vol. 1., 5–16. – Cfr. Róna E. op. cit. 8.

⁷ „... *Huiusce rei causas, Ego, proxime iam praeterito Septembri, in Hugarici vestri Regni Posonio, aliquam trahens moram, luculentissimas, easque variis exploratas modis, oculatus cognovi testis.*” Josten, C. H.: A Translation of John Dee's „*Monas Hieroglyphica*” etc. *Ambix*. Vol. XII. 1964. Nos. 2–3, 114. – Pozsony (Pressburg) is not inaptly referred to as the centre of Hungarian alchemists for centuries by L. Szathmáry one of the author dealing with the history of alchemy in Hungary in his work *Magyar alkémisták* (Hungarian Alchemists), Budapest, 1928.

⁸ Weszprémi I.: *Succincta Medicorum Hungariae et Transilvaniae Biographia*. Centuria prima. (New edition). Budapest, 1960. 186.

⁹ Schultheisz, E.: *Giovanni Pico della Mirandola's Bedeutung für die Medizin. L'opera e il pensiero di Giovanni Pico della Mirandola nella storia dell'umanesimo*. Vol. II. Firenze, 1965, 405–412.

and most consistent representative of the Copernican systems in England.¹⁰

It is not known how much time Dee spent in Hungary. However, it seems certain that his visit was quite long. He returned to England, but in 1583, after some interesting antecedents, he again appeared in Hungary, this time with his son Arthur, later a famous physician, who at that time was but five years old. This second journey – about which we know considerably more than about the first – is connected with a colourful but somewhat adventurous figure of Hungarian history: *Albert Laszky*.

Albert Laszky was the son of the Polish-born *Jeromos Lasky*, voivode of Transylvania and seigneur of Késmárk (Kežmarok, now in Slovakia). Albert Laszky inherited a huge fortune after his father's death and when he married *György Serédy's* widow, he rose among the ranks of the wealthiest Hungarian noblemen. However, he piled failure upon failure both in his political activity and in his private life. When *István Báthori*, Prince of Transylvania was elected to King of Poland, Laszky organized resistance. Upon this the king occupied Albert Laszky's castle in Poland in no more than five days and Laszky was compelled to flee to his estates in Hungary. Here he got into serious financial troubles owing to his extravagance; he was forced to mortgage the castle of Késmárk, after which, as *István Weszprémi* writes – „*he left for England, for London¹¹ to which many years earlier his uncle, the bishop János Laszky had also emigrated. In London he joined hands with two alchemists, Edward Kelley and John Dee. They both promised Laszky that he would get hold in the near future of the whole of Poland, Moldavia and Wallachia and would be richer than King Croesus had been. Upon this Laszky invited Kelley and Dee to Hungary, who were pleased to accept the invitation, especially Dee, who had practised his craft of alchemy in Hungary already earlier in 1563 for a long time and to the great admiration of a number of people...*”¹²

The laboratory was opened in 1584 in Albert Laszky's castle at Szepeshely (North Hungary, today in Slovakia), however the prolonged experiments did not yield the expected results, so the two Englishmen hurried on to Prague, to the court of Emperor *Rudolf*, King of Hungary.

Data about the years that followed are rather contradictory. *Edward Kelley* tinged gold from

¹⁰ Dampier, W. C.: *A History of Science*. Cambridge, 1966, 112, 144.

¹¹ The outstanding Hungarian guest was most heartily welcomed in the court of Queen Elisabeth. He excelled with his eminent education. At the University of Oxford he entered into a controversy with Giordano Bruno the great Italian philosopher. Cfr. Szathmáry, L. *op. cit.* 362–363.

¹² „...*Londinum ergo in Angliam deproperat, quo jam multis antea annis patruus, Johannes Laszky, Praepositus Gnaesnensis, et postea Episcopus Weszprimensis, religiosam, fundandae Ecclesiae Presbyterianae causa, susceperat peregrinationem. Iniiit ibidem societatem duorum virorum chrysopoeorum, Edwardi Kelley, et Iohannis Dee anno 1583. Adepti hi duumviri Laszkyo promittunt, eundem propediem integra Polonia, Moldavia, Valachia etc. potiturum, immo ipso Croeso ditiozem futurum: ille hos in patriam inuitat; lubentes aduolant. Johannes Dee potissimum, qui ante iam anno 1563 in Hungaria artem transmutandi metalla, non sine multorum admiratione diu multumque agitavit, immo Maximiliano quoque Imp. et Reg. Hungariae Monadem suam, hieroglyphice, mathematice, magice, cabbalistiche, anagogice explicatam, Antverpiae anno 1564 impressam, inscripsit et Posonii obtulit. Anno 1584 in Castello Laszkyano Collegium alchemisticum asperitur; in aurea hac arte Laszkyus fidelissime omnium turpiter, vt fieri adsolet, deluditur. Haec M. Belius in Prodrum. Hungar. pag. 82, 92, 93 item in Not. Hung. Tom. I. Moreri in Diction. in voce Dee Georgius Matthiae in Consp. Histor. Medic. chronol. pag. 614 et Miscellan. Groning. Tom. III. fasc. I. et alibi.*” Weszprémi, I. *op. cit.* 186–187.

mercury before the Emperor's eyes, which aroused general astonishment. He was given nobility by the Emperor at once and Kelley gave in to the entreaty to stay. When, however, the King asked him for the formula of the philosophers stone he, of course, was unable to produce it to him and was put into prison. According to certain Hungarian sources he tried to escape but the rope did not hold; Kelley suffered serious injuries and died within a few days. According to others he got mixed up in a duel and was mortally wounded. The truth is that he returned to England and continued his adventurous life there.¹³

A Hungarian alchemist, *Ferenc Lukasoyszky*¹⁴ saved for posterity the recipe what Kelley had used. The recipe – as claimed by Kelley – was found in the tomb of bishop St. Dunstan and came into the hands of an innkeeper by theft. It was there that Kelley caught a glance of the text which was written in Welsh, and acquired it for an insignificant sou. According to Lukasoyszky the bishop's writing was forwarded to King Rudolf by Kelley and it was copied in the court at Prague by transcriber on 17 July 1604.¹⁵

John Dee's fate was different. After he had left Prague for the court of the Polish king István Báthori and performed there experiments of transmutation successfully,¹⁶ the fame of his activity spread all over Eastern Europe and he was invited in 1586 by Tsar *Fiodor Ivanovitsh*, that is by Boris Godunov who ruled instead of him, to carry on his experiments in Russia¹⁷ for the huge annual salary of 2000 pounds, since alchemy had been unknown in Russia up to that time. However, Dee, after his six-year stay abroad, mainly in Hungary, returned to England in 1589.¹⁸

By that time his son Arthur Dee was 10 years old. As *Figurovski* writes relying on British sources, Arthur, though still a child, got an inside view of the world of experiments.¹⁹ As is to be read in the work of *Wilhelm D. Richter*,²⁰ Dee the elder provided excellent opportunities for his son to study. He had been a student at Westminster school as early as in 1592; later he continued his studies at the medical schools of Oxford and Cambridge. He is supposed to have earned his medical diploma in Manchester; at any rate he is mentioned on a certificate of merit of the university of Basle as doctor medicinae.²¹

¹³ *The Dictionary of National Biography*. Oxford, vol. X., pp. 1230–1232.

¹⁴ Cfr. Ms. Quart. Germ. 239 Budapest, Széchényi National Library; furthermore Szinnyi J.: *Magyar írók élete és munkái* (Life and Works of Hungarian Writers). Vol. 8. Budapest, 1902. Column 128.

¹⁵ Szatmáry L. *op. cit.* 205–212.

¹⁶ Hubicki, W.: *Chemie und Alchemie des 16. Jahrhunderts in Polen. Annales Universitatis Mariae Curie-Skłodowska*. Vol. X. 7, Lublin, 1955, 66–67.

¹⁷ Figurovski, N. A.: *The Alchemist and Physician Arthur Dee. Ambix*, Vol. XIII., 1965, No. 1, February, 40–41.

¹⁸ In the above mentioned work of his, R. Deacon points out that John Dee used to send cryptogram reports on these journeys to Queen Elisabeth. He liked to interfere in the machinations of diplomacy which is also proved by his strictly confidential letter to Don Guillén San Clemente, ambassador of Philip II and afterwards Philip III Spanish kings in Prague, written in Prague on 28. September 1584. *Correspondencia inédita de Don Guillén de San Clemente*. Zaragoza, 1892, 215–218.

¹⁹ Figurovski, N. A. *op. cit.* 42.

²⁰ *Istoriya meditsiny v Rossii*. Vol. II. Moscow, 1820, 24–34.

²¹ For the biography of Arthur Dee see the *Dictionary of National Biography*, Oxford, Vol. V., pp. 719–720. and Figurovski, N. A. *op. cit.* 42.

He started his medical practice in London and continued there until 1621. Though his father John Dee had brought upon himself the grudge of *King James I.* which disfavour accompanied him until the last days of his life, his son enjoyed the full confidence of the same king, so much so that he rose among the ranks of the courtphysicians.

In 1621 two envoys of Tsar Mihail Fiodorovitsh, *Yurij Rodionov* and *Andrey Kerkerlin*, appeared at the English court and asked the king to send along an experienced and excellent physician to Moscow. The choice fell upon Arthur Dee, who appeared on a visit of introduction before the Tsar on 8 September 1621.

The activity of Arthur Dee – known in Russia as Artemii Ivanovich Dii – in the Tsars court is outside the scope of our paper, since N. A. Figurovski treated this topic in his work in detail. It is, however, worth while to dwell a little longer on Dee's work released in Paris in 1631 under the title „*Fasciculus Chemicus*”. Regarding this work we are of the opinion that the strictly alchemist part of the text can be traced back in the last analysis to the „*Corpus Alchimisticum*”, which is a collection of Egyptian and ancient Greek alchemist manuscripts compiled similarly to the „*Corpus Hippocraticum*”. It originates from the 7th–8th centuries. Several variants of the same collection are known from the 9th century onwards. The oldest manuscript-collection was written by a Byzantine alchemist, named *Theodoros*. The manuscript came into the hands of Cardinal Bessarion who donated it to the Venetian Republic in 1463. Today it can be found in the San Marco Library in Venice. A 15th century copy of this Greek Marcianus Codex is kept at the library of Kassel. The manuscript has a fascinating history: in April 1567 John Dee bought the so-called Oxford alchemist manuscripts from *Jean Baptist Hardencourt*, as is testified by the note made on the first page of the codex which reads: „*Johannes Dee hunt librum Mortlaci in aedibus meis emi a Jo. Baptista Hardencurti pro sexaginta Angelotis aureis qui valent monetae nostrae Anglicae libras triginta sterlingenses. 4. April 1567*” This copy which includes the most important parts of the „*Corpus Alchimisticum*” was later donated by Dee to Landgrave Maurice of Hessen an ardent supporter of alchemy. Nearly all the pages of the manuscript display detailed marginal notes by John Dee who must have studied the manuscript intensively.²²

The „*Fasciculus Chemicus*” is actually an excerpt from the „*Corpus Alchimisticum*” and thus one of the most important secondary sources of the history of alchemy. It is hard to determine the exact place of the „*Fasciculus Chemicus*” in the history of alchemy. Many of the alchemists abandoned the retort and the melting-pot and turned fully to hermetic philosophy. This was the time when the chemist detached himself from the Hermetist. Chemistry became a natural science. Hermetism, however, lost its empirical ground and even its logical basis, and indulged in speculation, pouring forth shallow allegories. Let us refer here to *C. Gustav Jung* who plains this

²² Goldschmidt, G.: *Zur Sichtung und Erforschung der alchymistischen Handschriften Bas, 1938*. Cfr. Schultheisz, E. – Tardy L.: *A két Dee és Magyarorszáig (The two Dees and Hungary)*. *Orvosi Hetilap*, 1967, 1566.

trend of alchemy in several of his studies.²³ According to these, the imagined property of matter is not necessarily its inherent quality but „*derives from the soul of the alchemist*”. All that is unknown or empty is filled with psychological projection. The properties which the alchemist supposes to see or recognize in matter are his own – mostly subconscious – projections. Even if Jung’s views are in certain respects disputable, they help us to a psychological understanding of the late period of alchemy.

Apart from empiric chemical statements Arthur Dee’s work abounds also in mystic pseudo-philosophical theories. However, one must not by any means conclude from the above facts that also as a doctor Arthur Dee was nothing but a phantast. The history of science proves that even excellent clinicians like *Van Helmont*, *Stahl* or the noted obstetrician from Vienna, *Crato von Crafftheim*, were inclined towards irrational thinking. We also know of the latter that he was a practising alchemist. There are quite a number of similar examples. Dee completed his book which he had begun to write still in England later in Moscow. Since however, there was no Latin printing in Russia at that time, the book was published in Paris. Figurovski refers to the fact that in writing his „*Fasciculus Chemicus*” Arthur Dee made use of books and material collected while still in England. We hold that the *Codex Casselianus*, which once had belonged to his father, served as basis to this work. This conclusion may be drawn also from the divisioning of the book which shows a striking resemblance to that of the „*corpus Alchymisticum*”. It is a matter of course that the author should have used – and he himself refers to the fact in the title – the works of his famous predecessors, from *Aristotle* through *Geber* and *Arnaldus Villanovanus* up to *Riolan*. Dee’s book was translated into English still in his lifetime and was published in London in 1650. This work exerted an influence also on Hungarian alchemists; we intend to treat this subject in a separate paper.²⁴

After his return to England Arthur Dee acted as court physician to *King Charles I*. When the king was executed in 1649 Dr. Arthur Dee thought it better to move to the countryside. He continued his private practice in Norwich but his Father’s passion for alchemy flared up in him: he too started to seek for the philosophers’ stone...²⁵ And just like John Dee had been supported by a Hungarian in his scientific work, the companion of Arthur Dee who could speak Hungarian²⁶ was a Hungarian too, Joannes Banfi Huniades – János Bánfihunyadi – a noted chemist and alchemist living in England. This fact is known from the correspondence between *Sir Thomas Browne* and

²³ Cfr. Jung, C. G.: *Psychologie und Alchemie*. Zürich, 1940; furthermore: *Mysterium Coniunctionis Untersuchung über die Trennung und Zusammensetzung der seelischen Gegensätze in der Alchemie*. Zürich, 1955.

²⁴ Cfr. Schultheisz E. – Tardy L. *op. cit.* 1567.

²⁵ „...Nach dieser Zeit kam er wieder nach England und ward Karls I. Leibarzt, nach dessen Tode er sich zu dem Johannes Hunniades, welcher auch Hans Hunger genannt wurde, gesellte, und mit ihm Gold machen wollte, eine Thorheit, welche ihm noch aus der Schule seines Vaters anklebte.” Adelung, J. Chr.: *Fortsetzung und Ergänzungen zu Christian Gottlieb Jöchers Allg. Gelehrten Lexicon*. Bd. II. Leipzig, 1787, column 643.

²⁶ „...One of his papers in Moscow tells us that he »owned German, French, Hungarian, English and Polish«” – Figurovski, N. A. *op. cit.* 42.

Elias Ashmole. Ashmole, who showed an inclination towards occult sciences inquired about Arthur Dee from Sir Thomas Browne. In a letter written in March 1674 Browne mentions that Arthur Dee signed a contract with a man named Huniades in London two years before his death. This Huniades had long since been living in London and when he grew old he wanted to return to Hungary in the company of Arthur Dee.²⁷

The experiments conducted jointly by Dee and Bánfihunyadi proved to be over expensive according to some sources and resulted in diminishing Dee's wealth considerably. The other version according to which the two scientists were in close cooperation right up to Bánfihunyadi's death can be regarded as more authentic.

In our present knowledge John Dee's visits to Hungary did not make any significant influence on this country's scientific life, rather in contrast to Arthur Dee's „Fasciculus Chemicus”, whose influence on Hungarian alchemy is ponderable. But only if we know about John Dee's Hungarian visits can we comprehend why Banfi Huniades, a man of his son's age, went to live in London and why Arthur Dee longed to visit Hungary where he had spent his childhood. And it is also obvious that one of the sources of the Browne family's snarked interest in Hungary of Sir Thomas and Sir Edward, both physicians – must be sought here.

However, we have to touch upon another source of this interest as well, principally on the ground of an excellent paper by *István Gál*.²⁸

*

After having dealt briefly with the activity in Hungary of the British alchemist John Dee and before going on to the life and activity in England of the Hungarian chemist and alchemist Banfi Huniades, we have to mention a Hungarian–English contact from the short period in-between. The central figure of this contact is Sir Philip Sidney who, though having a universal humanist interest, cannot be regarded as a natural scientist. Still, his appearance, in Hungary²⁹ and his friendly relations established here make it indispensable to write about him as well.³⁰

The life of the great poet and humanist is known all too well, so it is quite unnecessary for us to go into its details. On the other hand, few know the fact that in the course of his journeys – 10 years after John Dee's first appearance in Hungary – he too visited what was Hungary's capital at

²⁷ Sherwood Taylor, F. – Josten, C. H.: Johannes Banfi Hunyades 1576–1650. *Ambix*. Vol. 5, 1953, Nos 1–2, 48. Cfr. Róna E. op. cit. 38–39.

²⁸ Gál, I.: Sir Philip Sidney's guidebook to Hungary. *Hungarian Studies in English IV*. Debrecen, 1969, 53–64.

²⁹ „...gieng 1572 auf Reisen, und war zu Paris, als die Blut-Hochzeit allda gehalten wurde. Er gieng darauf nach Deutschland, Ungarn und Italien...” Jöcher, Chr. G.: *Allgemeines Gelehrten Lexicon*. IV. Theil. Leipzig, 1751, column 571.

³⁰ His letters from Hungarian scholars were sold at an auction in Germany and are now in the USA. Their publication is to be expected in the near future as Mr. I. Gál kindly informed us.

that time and made the acquaintance of outstanding Hungarian scholars, the leaders of the time's intellectual life there.

Having witnessed in Paris the Massacre of St. Bartholomew, Sir Philip Sidney continued his studies on the Continent. He made the acquaintance of *Hubert Languet*,³¹ enlightened political writer of the age in Frankfurt am Main. „They were together at Frankfurt for three months or more. At that time Languet was the representative of the Elector of Saxony. In the spring of 1573 he was ordered to proceed to the Emperor's court in Vienna.”³² Sir Philip Sidney followed the outstanding French humanist to Vienna and they both became close friends of the reputed Hungarian physician and historian, *János Zsámboky*, by his humanist name *Joanes Sambucus*,³³ and of his humanist circle.³⁴ Meeting at Sambucus's house in Singer Strasse were not only the most important Hungarian humanists of the age: *Verancsics*, *Liszthy*, *Dudits*, *Istvánffy* and *Purkircher*; but also the representatives of the international scientific world: *Crato*, *Clusius*, *Busbecq*, *Blotius*, *Lipsius* and others. It was this humanist group, maintaining international contacts, that the young Sidney entered on the side of Languet. Through the persons of Sambucus and his Hungarian friends Sir Philip Sidney became naturally interested in Hungary. When Carolus Clusius, the greatest botanist of his age, director of the botanic gardens of the Emperor in Vienna, who belonged to Sambucus's friends,³⁵ left for Hungary, Sir Philip Sidney accompanied him. „*John Buxton believes that Languet had known Sidney's intention to accompany Carolus Clusius to Hungary, imagining he would not stay longer there than three days, but he stayed at least a month.*”³⁶

The correspondence of Languet and Sidney was published in 1633 in book form too;³⁷ in the first letter Languet thanks for the letter Sidney wrote from Pozsony and expresses his pleasure that at his recommendation Sidney was so warmly received by Georgius Purkircher, doctor medicinae. Dated 22 September 1573 this letter proves that these relations were rather extensive, and also lasting.³⁸ *Mona Wilson* refers to this when she remarks that a few years later Clusius and Purkircher told Languet that they had been drinking Sidney's health in Austrian wine and hoped shortly to do it in Hungarian in memory of the merry days spent together.³⁹ Sorrow is expressed in Languet's letter

³¹ Jöcher, Chr. G. op. cit. II. Theil, 2268 column; *Fortsetzung und Ergänzungen zu Chr. G. Jöchers Allg. Gelehrten Lexikon*. Bd. III. Hildesheim, 1961, column 1274.

³² Róna, É.: Sir Philip Sidney and Hungary. *Annales Universitatis Scientiarum Budapestiensis de Rolando Eötvös nominatae*. Sectio Philologica, 1959.

³³ Gerstinger, H.: *Die Briefe des Johannes Sambucus*. Wien, 1968, 152–153.

³⁴ Bálint-Nagy I.: Purkircher György (1530–1578) pozsonyi orvos élete (The Life of Gy. Purkircher Physician in Pressburg (1530–1578). *Orvosi Hetilap* 1930, 556.

³⁵ Gerstinger, H. op. cit. 16, 22, 150, 161, 162, 206, 231, 232, 279, 280.

³⁶ Buxton, J.: *Sir Philip Sidney and the English Renaissance*. London, 1954, 61.

³⁷ Huberti Langveti, viri clarissimi epistolae politicae et historicae, scriptae quondam ad illustrem et generosum dominum Philippum Sydnaeum etc. Francofurti, 1633.

³⁸ „Habeo tibi gratiam, quod literas ad me Posonio dederis testes tuae erga me benevolentiae et gaudeo meas commendationes tantum ponderis apud Doct. Purkircherum habuisse, ut tibi ea humanitate officia praestiterit, quae tuae virtuti, ac morum suavitati debentur” etc. Ibid. 1–2.

³⁹ Wilson, M.: *Sir Philip Sidney*. London, 1931, 53.

written from Frankfurt on 8 November 1577 in which he reports the death of Georgius Purkircher.⁴⁰

Georgius Purkircher was an outstanding Hungarian physician and botanist of the age; he built the first botanical garden in Pozsony, the town in which he had been born in 1530. He studied in Padova between 1561 and 1563, where he got his medical diploma and from here he went on to Paris. Then dealt with botany in Wittenberg. From 1566 onwards he lived again in his native town and was active as a physician of high repute and a passionate botanist, and became one of the central figures of the Hungarian world of scholarship. There is no doubt that behind the great interest in Hungary of Sir Philip Sidney – which interest we can also find in his poetry⁴¹ – there stood his close ties of friendship with Georgius Purkircher and other personalities belonging to this Hungarian humanist circle.

Eva Róna, the outstanding researcher of English–Hungarian literary relations states that „*Sidney and Dee both often present at court had known each other. Was it before or after Sidney’s visit to Hungary that they discussed the country? It is hard to see, though Dee does not fail to speak boastingly of Sidney’s many visits to his house at Mortlake.*”⁴² In the light of this statement, we can be sure that Sir Philip Sidney’s interest in Hungary sprang from both Hungarian and English sources.

In Hungary, constantly inflicted by the Turkish wars and isolated from foreign scientific relations, the appearance of Englishmen being in close friendship with Hungarian scientists caused considerable stir. Small wonder it is that János Bánfihunyadi – or as the English called him, Johannes Banfi Hunyades, or also Hans Hungar – felt strongly attracted to England and found his second home in the Island.

From the 16th century onwards, dealing with chemical substances had become more and more associated with physicians. It was Paracelsus who put it into words when he stated that the true aim of alchemy was not the making of gold but the preparing of medicines. „*In der Alchemie, da finden wir den Grund der Medizin und Alles was not ist... Ich weise euch auch zu nichts anderem in die Alchemie als allein zur Bereitung der Arznei.*”⁴³ Apart from philosophy and astronomy – which, however, must not be thought of in today’s terms – the third pillar on which Paracelsus’s

⁴⁰ Epistolae Langveti op. cit. 226. – It was, however, a false report, in reality he died a year later.

⁴¹ Róna, É.: Sir Philip Sidney op. cit. 48.

⁴² Ibid. 46. – *On the London period of their relation Deacon remarks: „The fact that Dee »received slautation« from Laski on his arrival in England suggests that Laski had already heard of him. It may have been that he asked the Queen to be introduced to Dee, or that Dee sought an interview. What is abundantly clear is that the Queen was anxious for the two men to meet and that she gave Dee money through the Earl of Leicester for the purpose of entertaining Laski. On 13 May Dee wrote: »I became acquainted with Albertus Laski in the Earle of Leicester his chamber in the Court of Greenwich. This day was my lease of Devonshire mynes sealed at Sir Leonnell bucket’s howse.« Five days later Dee recorded that Laski came to see him at Mortlake. In June Laski visited Oxford and by order of the Queen was entertained in the most regal fashion with banquets, plays, pageantry and public disputations. From Dee’s diary it would seem that Sir Philip Sidney accompanied Laski to Oxford, for immediately after this visit Sidney brought Laski to see again at Mortlake.» Cf. Deacon, R. op. cit. 70, 91, 176.*

⁴³ Die grosse Wundarznei. 1536. Sudhoff’s ed. 10, 363.

therapeutics is based is alchemy. With its help man moulds substances given by nature in a form best suiting his own needs. Thus with Paracelsus alchemy does not mean goldmaking, or anything of the kind.

Alchemy must not be regarded solely as the predecessor of chemistry, putting aside all that does not expressly concern chemistry as mysticism and superstition; however, it is also wrong to see in alchemist writings nothing but data to the history of ideas, and to neglect all the chemistry treated within it as revealer of secret traditions. All the more so, since in the world of alchemist thinking practical chemistry was inseparably intertwined with philosophic and religious ideas. Seen in this light, it is easy to understand that chemists and physicians, bearing importance from the aspect of exact sciences, could be natural scientists and mystics all at the same time.

This duality characterises also the figure of Banfi Huniades. Though we have no certain knowledge of his having been a doctor of medicine, we can still regard it as highly justified that *István Weszprémi* mentioned him among the distinguished physicians of Hungary and Transylvania in his above-mentioned collection of biographies – and right in the first volume. A medical historian of later times, *Gyula Magyary-Kossa* also refers to the fact that Banfi Huniades is mentioned in certain early writings as a doctor, though he cannot prove anything for certain either. According to Weszprémi he descended from an ancient Hungarian dynasty, the Bánffy family of Hunyad. This supposition, however, is not based on proofs of full value.

Johannes Banfi Huniades's biography and his career in England were described by two excellent British authors⁴⁴ in full detail and with great reliability. We have complemented their findings with some Hungarian data⁴⁵ in one of our earlier works, therefore, we do not intend to go into details here.

The study by *Sherwood-Taylor* and *Josten*, referred to above, mentions Bánfihunyadi's activities which were important from the aspect of medical history, several times: „*Besides being a professor at Gresham College was interested in or concerned with the technical side of chemistry, manufactures and medicines or materials for such*”.

It is his writings on pharmacochemistry and pharmacology that make Bánfihunyadi's natural scientific work so important for medical science. It is no mere chance that in the manuscript of *Jonathan Goddard* (1617–1674), treating the *materia medica* (pharmacology in today's terms), we meet a number of Bánfihunyadi's recipes hitherto unknown by the literature.⁴⁶

However interesting these recipes of Bánfihunyadi may be – the manuscript mentions their author once as Dr. Huniades, then again as John Hunyades – it is outside our scope to go into their

⁴⁴ Sherwood Taylor, F. – Josten, C. H. op. cit. 44–52.; the same authors op. cit. Vol. 5, Nos 3–4, 1956, 115.

⁴⁵ Schultheisz E. – Tardy L.: Bánfihunyadi János az újabb adatok tükrében (J. Bánfihunyadi in the Light of Newer Data). *Orvosi Hetilap* 1969, pp. 2349–2352.

⁴⁶ Ambix, Vol. 5, 50.

details. However, we consider it important to mention that the text, or rather the collection of recipes in the manuscript, are so far from being of an alchemist character, that they are not even reminiscent of the „Corpus Alchemisticum” which is the basis of all the alchemist writings dealing with gold-making and searching for the philosophers’ stone. The ingredients of the prescriptions, the chemical techniques applied, the methods of preparation all doubtlessly prove that Bánfihunyadi must have been a true chemist.

It is interesting to notice that as early as in 1641 he already made use of the alcohol-thermometer in certain distilling procedures. The majority of drugs and mineral substances mentioned in the recipes had been used as medicines in the 17th century. What is new here is the method of their preparation. All the recipes described in the manuscript were meant for therapeutic use and no trace can be found in them of any „classical” alchemist objective, as the formula of the *lapis philosophorum* or gold-making. If the work has any connection with alchemy then it is the use of alchemist symbols. By this we do not intend to say that Bánfihunyadi was not an alchemist for he was one. It is, however, obvious that his work as a chemist-pharmacologist proceeded in the direction of natural science, it was of an experimental character and clearly distinguishable from alchemy.

At the present state of our knowledge, we have a great number of *indirect* data on his having been an alchemist, whereas we have *direct proof* of his chemical activities.

An excellent Hungarian source⁴⁷ completes our picture of Bánfihunyadi with interesting biographical data. The Hungarian scholar who settled in London maintained close connections with his native country, he spoke in his mother-tongue with Hungarians living abroad and with those who were about to travel home, also his letters written home are Hungarian. He supported Hungarian students studying in England both financially and morally.

A much more significant fact found is that when *György Rákóczi* I, Prince of Transylvania, made an attempt to establish an academy in the capital of his country, Kolozsvár, he intended to appoint Bánfihunyadi to its leader as a man with excellent knowledge of the English academic organization and life. Our source recalls this circumstance as follows: „...*György Rákóczi called János Bánfihunyadi home in 1633 in order to organize a body of professors, here (in Kolozsvár), which would consist only of Hungarians. There cannot be any doubt about the authenticity of this letter of invitation since it was seen by Adam Frank himself in London.*”⁴⁸

In 1646 he was about to leave for Hungary with his wife, four children and his friend Dr. Arthur Dee, but death prevented him from realizing his plan.⁴⁹ Neither did the other member of the

⁴⁷ Keserű B. (ed.): *Adattár XVII. századi szellemi mozgalmaink történetéhez* (Collected Data to the History of Intellectual Trends in the 17th Century). Vol. 2. Budapest – Szeged, 1966, 294–296, 369.

⁴⁸ Ibid. Vol. I. 289 p. Cfr. *op. cit.* 116, 287–290, 375, 384.

⁴⁹ „... *Als er in Alter mit dem Arthur Dee, seinem vertrauten Freunde und Sohne des Johannis Dee in sein Vaterland zurückreisen wollte, starb er zu Amsterdam, nach 1650.*” Adelung, J. Chr. *op. cit.* Vol. I., column 1397.

English–Hungarian scientist team survive him long: Arthur Dee died in September 1651.

The history of Hungarian–English medical relations continues with the role of the two Doctor Brownes.