

# Central and Eastern Europe: Benedek Láng (Budapest)

## 1. Introductory considerations on territorial and periodization issues

The first *general* statement on the dissemination of magic texts in Central and Eastern Europe was put forward by David Pingree, who claimed that copies of such texts “found an attentive audience only after about (...) 1400 in Central Europe.”<sup>1</sup> As a matter of fact, scholars *did* find sporadic traces of learned magic from earlier periods (e.g. an illustrated copy of the *Secretum secretorum* was part of the royal library of Angevin Louis the Great, King of Hungary (1342-1382) and Poland (1370-1382)),<sup>2</sup> however, Pingree’s ‘87 claim proved to be largely true. This seemingly belated arrival of the genre of learned magic to the Central and Eastern European area is related to several factors, among which three should be emphasized here: the relatively late institutionalization of universities (the first ones funded in the mid-14<sup>th</sup> century, but reorganized and stabilized only around or after 1400); the late rise of general literacy in the royal courts; and the poor survival rate of earlier medieval codices in the libraries. As a consequence of the phenomenon pointed out by Pingree, in the following chapter by and large one single century, the period between 1400 and 1500 will be covered. Nevertheless, some geographical territories will be missing almost altogether from the survey, Bulgaria, Serbia and Russia for example have become favourite fields of magic scholars, their source material, however, almost completely lacks pre-1500 texts.

By Central and Eastern Europe, we will understand two large areas of Europe: the Central European countries that joined European Christianity around the year 1000, that is the Polish, the Czech, and the Hungarian kingdoms (the last including Croatia in a personal union), and the Eastern European countries belonging to Orthodox Christianity, (sharply differing – both politically and culturally – from the Catholic Slavs), that is, Muscovite Russia, the Kievan Rus, Serbia, Bulgaria, the Moldavian and Wallachian principalities. This very large area is cut into two not only on religious grounds, but also on the basis of the number of survived sources. While 1400 can be well chosen as a starting date for the arrival of magic texts to Poland, Bohemia and Hungary, 1500 would be its equivalent for those countries that are eastern to these three kingdoms.

## 2. Highlights of the Central and Eastern European region

Various major topics related to magic have become popular research fields in the local secondary literature (by such authors as Alexandre Birkenmajer, Jerzy Zatycki, Ryszard Ganszinić, Mieczysław Markowski, Krzysztof Bracha, Benedek Láng) and many of these were able to attract considerable interest on an international level, too (by William Eamon, William Ryan, Jean-Patrice Boudet, Daryn Hayton). Among these “highlights” the following issues are included: the golden age of astronomy and astrology in the university of Krakow; the hermetic interest in the royal court of Matthias, king of Hungary (1458-1490); the astronomical-astrological collection in the library of King Wenceslas IV (king of Bohemia: 1378-1419). To these general issues, particular authors and magician figures can be added, such as the engineer-magician Konrad Kyeser, the crystal-gazer and treasure hunter Henry the Bohemian, and the

---

<sup>1</sup> David Pingree, “The Diffusion of Arabic Magical Texts in Western Europe,” in *La diffusione delle scienze islamiche nel Medio Evo Europeo*, ed. B. Scarcia Amoretti, 57-102. (Rome: Accademia Nazionale dei Lincei, 1987), especially 79. and 59.

<sup>2</sup> Oxford, Bodleian Library, MS Hertford College 2 (E.N. 2.), Pseudo Aristoteles *Secretum secretorum* (1371-1382), 66 fols.

Montpellier trained medical doctor, Nicolaus, who shocked his fellow patients with his bizarre curing methods using snake and frog flesh. Besides the general issues and the magician authors, a few particular – and fairly enigmatic – texts can be listed: the Prayer book of king Wladislas that served for crystal gazing and angel summoning while also incorporating long paragraphs from the *Liber visionum* of John of Morigny; the *Alchemical Mass* of Nicolaus Melchior written again for a king, and merging two remote literary genres, the description of the alchemical transmutation and the text of the Christian Mass; and the beautifully illustrated, colourful handbook of divination and talismanic magic, the Ms Biblioteka Jagiellonska 793 that preserved – among others – the first long surviving version of the *Picatrix*. Let us review briefly these highlights!

## 2.a) Astrology in Krakow

The University of Krakow enjoyed a real golden age in the fifteenth century. Already founded in 1364, and – thanks to royal support – reorganized in 1400, its faculties (Theology, Law, Medicine, and Liberal Arts) provided training for a great number of Polish, German, Bohemian, Hungarian and other students in arts, medicine, philosophy, astronomy and astrology. A specific chair was devoted to masters pursuing mathematical and astronomical studies since the beginning of the 15<sup>th</sup> century, to which another – particularly astrological – chair was added in the middle of the century. The classics of astrology (Ptolemy's *Opus Quadripartitum*, *Centiloquium* and *Almagestum*; Albumasar's *De coniunctionibus maioribus*, Johannes de Sacrobosco's *De sphaera*, and the *Tabulae Alphonsi*) formed the basis of the training. The concentration of astrologers grew quickly in the city (according to some contemporaries: Krakow was “stuffed with astrologers”), many of whom peregrinated to various Central European and Italian political centers to serve as a court astrologer. The intellectual heritage (activity, travels, fame and library) of the Krakow masters and students (Marcin Król de Zurawica, Johannes Glogoviensis, Wojciech de Brudzewo, Marcin Bylica de Olkusz) have become recurrent subjects of the publications of the best historians of science, including Aleksander Birkenmajer<sup>3</sup> and Mieczysław Markowski.<sup>4</sup> For any further research, particularly useful are the catalogues and reference works of the large literary production of the Krakow masters.<sup>5</sup>

## 2.b) The court of Matthias Corvinus

---

<sup>3</sup> Aleksander Birkenmajer, *Études d'histoire des sciences en Pologne*, Studia Copernicana, 4 (Wrocław: Zakład Narodowy im. Ossolińskich, 1972).

<sup>4</sup> Mieczysław Markowski, “Die Mathematischen und Naturwissenschaften an der Krakauer Universität im XV. Jahrhundert,” *Mediaevalia Philosophica Polonorum* 18 (1973): 121-131; idem, “Die Astrologie an der Krakauer Universität in den Jahren 1450-1550,” in *Magia, astrologia e religione nel Rinascimento: convegno polacco-italiano, Varsavia, 25-27 settembre 1972*, ed. Instytut Filozofii i Socjologii (Polska Akademia Nauk) (Wrocław: Zakład Narodowy im. Ossolińskich, 1974), 83-89

<sup>5</sup> Mieczysław Markowski, *Astronomica et astrologica Cracoviensia ante annum 1550* (Florence: L.S. Olschki, 1990); Grazyna Rosińska, ed. *Scientific Writings and Astronomical Tables in Cracow: A Census of Manuscript Sources (XIVth-XVIth Centuries)*, (Studia Copernicana 22.) (Wrocław: Zakład Narodowy im. Ossolińskich, 1984); Zofia Włodek, Jerzy Zathej and Marian Zwiercan, eds. *Catalogus codicum manuseriptorum Medii Aevi Latinorum qui in Bibliotheca Jagellonica Cracoviae asservantur*. 10 vols. (Wrocław: Zakład Narodowy im. Ossolińskich, 1980-2012.)

Just as crucial as the Krakow University for late medieval Polish history, so is the Renaissance court of king Matthias for Hungarian culture. Considered to be the “first renaissance” court north of the Alps, strongly patronizing Platonic and Hermetic philosophy, corresponding with or inviting Italian philosophers and historians, such as Marsilio Ficino, Galeotto Marzio, Antonio Bonfini, and heavily interested in astrology, divination and physiognomy, the court of Matthias have been enjoying constant academic interest both inside Hungary (Jolán Balogh, Csaba Csapodi, Tibor Klaniczay)<sup>6</sup> and outside (Darin Hayton, Valery Rees, Jean-Patrice Boudet).<sup>7</sup> The appreciation of astrology and Platonism was motivated not only by the King’s support, but somewhat preceding this, came from his master, Johannes Vitéz, first bishop of Várad, later archbishop of Esztergom and from Vitéz’ nephew, Janus Pannonius, the “first Hungarian poet”.<sup>8</sup> Another intellectual center for a very short period (1467-1472) was the university founded in Bratislava (Pozsony, Pressburg) by the king and his archbishop, where the quadrivial arts were particularly strong, astronomers and astrologers such as Johannes Regiomontanus (1436-1476), Martin Bylica de Olkusz (1433-1493), Georgius Peurbach (1423-1461), and perhaps even Galeotto Marzio (1427-1497) might have been among the professors – though all this is quite uncertain due to the scarcity of the sources.<sup>9</sup> Astrological symbolism played a central role in the decorations of both Vitéz’ and Matthias’ libraries, and horoscopes were used to determine the right moment for the foundation of the university, and also for certain military actions.<sup>10</sup> As in the case of Krakow, cataloguing the codices has been crucial for any serious scholarship: some of this kind of effort was concentrated around Johannes Vitéz’ books, but most of it around the Corvinian Library – the representative book collection of the king, comprising texts by Ptolemy, Firmicus Maternus, Pseudo Dionysios Areopagita, Chalcidius, Theophrastus, Regiomontanus, Peurbach, and Ficino. Unfortunately,

---

<sup>6</sup> Jolán Balogh, *Mátyás király és a művészet* (King Matthias and the Arts) (Budapest: Magvető, 1985); László Szathmáry, "Az asztrológia, alkémia és misztika Mátyás király udvarában" (Astrology, alchemy and mysticism in King Matthias’ court), in *Mátyás király emlékkönyv* (Memorial book of King Matthias), ed. Imre Lukinich, 415-451. (Budapest: Franklin, 1940); Tibor Klaniczay, and József Jankovics, eds., *Matthias Corvinus and the Humanism in Central Europe* (Budapest: Balassi, 1994);

<sup>7</sup> Valery Rees, “Ad vitam felicitatemque: Marsilio Ficino to his Friends in Hungary,” *Budapest Review of Books* 8 (1998): 57-63; and Marsilio Ficino, *The Letters of Marsilio Ficino* (London: Shephard-Walwyn, 1975); Jean-Patrice Boudet, Darin Hayton, “Matthias Corvin, János Vitéz et l’horoscope de fondation de l’université de Pozsony en 1467,” in *Actes du colloque «Mathias Corvin, les bibliothèques princières et la genèse de l’Etat moderne»* (Budapest: Országos Széchényi Könyvtár, 2009), 205-13; Darin Hayton, “Martin Bylica at the Court of Mathias Corvinus: Astrology and Politics in Renaissance Hungary,” *Centaurus* 49 (2007): 185-198.

<sup>8</sup> Zoltán Nagy, “Ricerche cosmologiche nella corte umanistica di Giovanni Vitéz,” in *Rapporti veneto-ungheresi all’epoca del Rinascimento*, ed. Tibor Klaniczay (Budapest: Akadémiai Kiadó, 1975), 65-93; Tibor Klaniczay, “Das Contubernium des Johannes Vitéz: Die erste ungarische Academie,” in *Forschungen über Siebenbürgen und seine Nachbarn: Festschrift für Attila T. Szabó und Zsigmond Jakó*, ed. Kálmán Benda (Munich: Trofenik, 1988), 241-255.

<sup>9</sup> Leslie S. Domonkos, “The Origins of the University of Pozsony,” *The New Review: A Journal of East-European History* 9 (1969): 270-289; Asztrik Gabriel, *The Medieval Universities of Pécs and Pozsony: Commemoration of the 500<sup>th</sup> and 600<sup>th</sup> anniversary of their foundation, 1367-1467-1967* (Frankfurt am Main: University of Notre Dame, 1969); Tibor Klaniczay, “Egyetem Magyarországon Mátyás korában” (University in Hungary in the age of Matthias), *Irodalomtörténeti Közlemények* 94 (1990): 575-612.

<sup>10</sup> Boudet, Hayton, “Matthias Corvin;” András Végh, „Egy Reneszánsz felirat töredékei és a budai királyi palota csillagképei,” (Fragments of a Renaissance inscription and the celestial signs of the Buda Palace) *Művészettörténeti értesítő*, (2010): 211-232.

only one tenth of the books have actually been identified.<sup>11</sup> Matthias and his court were respected highly in Hermetic intellectual circles, a sign of which appreciation is that Marsilio Ficino dedicated a copy of his Commentary to Plato's *Symposium* to Janus Pannonius,<sup>12</sup> Books III and IV of his collected letters,<sup>13</sup> and the third book of his *De vita libri tres* (*Three Books of Life*), entitled *De vita coelitus comparanda* (*On Obtaining Life from the Heavens*) to the Hungarian king.<sup>14</sup>

#### c) The library of king Wenceslas IV

Significantly scarcer but not less relevant is the survived source material of another representative royal book collection, that of Wenceslas IV, "King of the Romans" and King of Bohemia. As few as eight manuscripts of the library can be identified today. The content and the illuminations of these codices express the high esteem astrology was paid to in the court, and – to a lesser extent – they contain alchemical and magical symbolism in the illuminations, and divinatory and ritual magic texts as well. The emperor's court astrologer, Christian de Prachatitz (1368-1439), was a well-known master and Rector of the University of Prague. Various scientific practitioners of the court (Conrad de Vechta and Albicus de Unicow subsequent Archbishops of Prague) had certain alchemical and even necromantic fame among the contemporaries. Magic as a means of accusation appeared in high politics – at least on the level of rumors.<sup>15</sup>

#### d) The *Bellifortis* of Konrad Kyeser

One of the beautifully illustrated codices that certainly belonged to Wenceslas' library was the famous *Bellifortis*, a curious handbook on military technology in which magical means of aggression are frequent. Combining engineering with astrology and magic was natural rather than exceptional in the late Middle Ages, yet, the extent to which Kyeser merges these fields is noteworthy – and has always been worth of research indeed (Lynn White, William Eamon). Being a representative and highly illustrated handbook offering detailed descriptions on real and imaginary martial instruments and methods (siege ladders, catapults, rockets, arrows, arbalests, scissors, clasps and horseshoes), the *Bellifortis* also contains the description of magical objects (rings and amulets), recipes, astrological symbols and demons. Besides the genre of military handbooks, it is heavily indebted to the medieval "*experimenta*" literature, a crucial type of natural magic texts often attributed to Albert the Great. In spite of its appearance

---

<sup>11</sup> Csaba Csapodi and Klára Csapodiné Gárdonyi, eds., *Bibliotheca Corviniana: The Library of King Matthias Corvinus of Hungary*. (Budapest: Helikon, 1990); Klára Csapodiné Gárdonyi, *Die Bibliothek des Johannes Vitéz*, (Budapest: Akadémiai Kiadó, 1984); Katalin Barlai and Boronkai Ágnes, "Astronomical codices in the Corvinia Library" *Mem. Soc. Astron. Ital.* 65 (1994): 533-546.

<sup>12</sup> MS Vienna, ÖNB, Cod. 2472, M. C. 38.

<sup>13</sup> MS Wolfenbüttel, Cod. Guelf. 12, Aug. 4<sup>o</sup>.

<sup>14</sup> MS Florence, Bibliotheca Medicea Laurenziana, Plut. 73. Cod. 39.

<sup>15</sup> Krása, *Die Handschriften*, Milena Bartlová, "The Magic of Image: Astrological, Alchemical and Magical Symbolism at the Court of Wenceslas IV," in Blanka Szeghyová, ed., *The Role of Magic in the Past: Learned and Popular Magic, Popular Beliefs and Diversity of Attitudes*, 19-28 (Bratislava: Pro Historia, 2005). Among the eight extant codices written in the last years of the fourteenth century for the emperor, three are devoted specifically to astrology MS ÖNB cod. 2271; MS ÖNB 2352; MS Munich, CLM 826. Divinatory and ritual magic texts can be found in Vienna, ÖNB 2352.

as a handbook, the literary, weird, and fantastic elements (pictures on a female chastity device, a tool for castrating men, the black queen of Sheba, a goose fastened to an anchor, and a few further pictures on how to prepare a bath appropriately) make historians assume that the book served representative and entertaining goals in the court rather than real military practices on the battlefield. The *Bellifortis* might have also served to construct its author's image as an experienced court magician. It sounds fairly plausible, that this magician-image might have been used against Kyeser as a charge when he was finally forced into exile from the court. His book, however, enjoyed considerable success, several early illustrated copies survived from the years following 1400, from the collections of not only Wenceslas IV, but his brother, Sigismund, Holy Roman Emperor and Hungarian king, and a few decades later, from the Corvinian library of king Matthias.<sup>16</sup>

#### e) Henry the Bohemian

Another "magician figure" of the area, named Henricus Bohemus, was active in Krakow in the first half of the fifteenth century. From the documentation of his court case in 1429, an exciting story of ritual magic and treasure hunting emerges. Just as the career of Kyeser, Henry's story is closely related to the royal court: he was a court astrologer under Wladislas Jagiello between 1423 and 1427, he was allowed to be present at the birth of the three sons of the king, and he cast their nativities. Yet, he could not avoid his destiny, when he was finally accused of following the ideas of Hussitism, doing demonic magic in order to find treasure in the earth, and consulting necromantic books. For various reasons, scholars agree that the charges must have been grounded, in all probability Henry did indeed pursue magical practices, performed conjurations, invocations, crystallomancy and treasure hunting with three masters of the university in the royal garden in Krakow. Being a heretic and practicing illicit magic, finally he was probably "saved" by the royal family – i.e. merely imprisoned.<sup>17</sup>

#### f) The prayer book of king Wladislas and crystallomancy

The most enigmatic source of late medieval Poland, Wladislas' Prayer book (*Modlitewnik Wladyslawa*) is surprisingly close to the court case of Henry both thematically and temporally. In the center of this long repetitive text, there is again a crystal, with the help of which the praying king turns to Christ, the Virgin Mary, the Holy Spirit and the angels requesting them to reveal the hidden intentions of his subjects and the past and future secrets. As philological investigations have pointed out, the prayer book incorporates text fragments from such magical genres as the *Ars notoria* and – to a longer extent – the *Liber visionum* of John of Morigny, a derivative of the *Ars notoria* tradition enjoying particular popularity in the Central European

---

<sup>16</sup> Conrad Kyeser, *Bellifortis*, ed. Götz Quarg, 2 vols. (Düsseldorf: Verlag des Vereins Deutscher Ingenieure, 1967); Eamon, "Technology as Magic"; *idem*, *Science and the Secrets of Nature*, 68-71; Lynn White, "Kyeser's 'Bellifortis': The First Technological Treatise of the Fifteenth Century." *Technology and Culture* 10 (1969): 436-441; *idem*, "Medical Astrologers and Late Medieval Technology." *Viator: Medieval and Renaissance Studies* 6 (1975): 295-307. Rainer Leng, *Ars belli: Deutsche taktische und kriegstechnische Bilderhandschriften und Traktate im 15. und 16. Jahrhundert* (Wiesbaden: Reichert Verlag, 2002), 19-21 and 109-149.

<sup>17</sup> Aleksander Birkenmajer, "Sprawa Magistra Henryka Czecha" (The Case of Master Henry the Bohemian), *Collectanea Theologica* 17 (1936): 207-224; *idem*, "Henryk le Bohemien," in *idem*, *Études d'histoire des sciences en Pologne* (Wrocław: Zakład Narodowy im. Ossolińskich, 1972), 497-498. Stanisław Wielgus, "Consilia de Stanislas de Scarbimiria contre l'astrologue Henri Bohemus," *Studia Mediewistyczne* 25 (1988): 145-172; Benedek Láng, "Angels around the Crystal: the Prayer Book of King Wladislas and the Treasure Hunts of Henry the Czech," *Aries: Journal for the Study of Western Esotericism* 5 (2005) p. 1-32.

(Austrian and German) areas. Comparing the content of the prayer book and the details of Henricus Bohemus' court case, it is quite plausible to suppose that the Hussite magician – experienced in crystallo-mancy and in demonic magic – was the author of the text, though it should be emphasized that the identification of the “Wladislas” in the prayer book with that King Wladislas whose birth had been assisted by Henry is far from being certain, other Jagiello kings called Wladislas are also possible contestants.<sup>18</sup>

#### g) Nicholas of Montpellier

An eccentric medical practitioner caused no little shock in southern Poland in the last decades of the thirteenth century: Nicholas of Poland (Nicolaus de Polonia) also named as Nicholas of Montpellier recommended that patients should consume snakes, lizards, and frogs in pulverized form. Two of his writings survived, a more theoretical work, the *Antipocras*, and a rather practical, the *Experimenta*. Nicholas' main argument was that the conventional Hippocratic methods should be rejected, and alternative practices – cures usually involving snake and frog flesh – should be favoured. In spite of the shock of some of the people, others – including a local duke – became enthusiastic about this alternative medicine, and started collecting and consuming reptiles and amphibians. Nicholas was not an untrained charlatan, he studied in the best medical school of his days in Montpellier, and his texts witness good mastery of the Latin idiom. His ideas were by no means mainstream in medieval medicine, however, they were not that unrealistic either as they may seem today: Nicholas' ideas are well rooted in the natural magic of the “experimenta” literature and in the medieval genre of “snake-tracts” (*Schlangentraktate*) that were quite popular in the medical circles at the time. This literature explained the occult virtues of animals in general and of snakes and frogs in particular.<sup>19</sup>

#### h) The Alchemical Mass

Nicolaus Melchior's early sixteenth-century alchemical text, the *Processus sub forma missae* (Process in the Form of the Mass), dedicated to Wladislas, King of Hungary and Bohemia, has been enjoying particular attention in the early modern and modern times, being – among others – a favourite example of Carl Gustav Jung when elaborating on his analogy between the *lapis philosophorum* and Jesus Christ. The alchemical mass incorporates the stages and materials of the alchemical process (vitriol, saltpeter, the philosopher's stone, the sperm of philosophers, etc.) in the framework of the Holy Mass (*Introitus Missae, Kyrie, Graduale, Versus, Offertorium, Secretum*, and so on). The text equilibrates between being a practical alchemical text and a prayer rich in alchemical symbolism. Both the circumstances of the birth of this text and the life of its author are enigmatic. Melchior has not left much further trace in historical documents, it has long been supposed that the author was an otherwise known actor of the time (e.g. Nicolaus Olah (1493–1568), Archbishop of Esztergom, counsellor of Queen Mary of Habsburg) hidden under a pseudonym. Although not necessarily the Archbishop himself,

---

<sup>18</sup> Oxford, Bodleian Library, MS Rawlinson liturg. d. 6. Ryszard Ganszyniec, and Ludwik Bernacki, eds. *Modlitewnik Władysława Warneńczyka w zbiorach Biblioteki Bodlejańskiej* (Wladislaw Warnencyk's Prayer Book Kept in the Bodleian Library) (Krakow: Anczyc i Spółka, 1928.), see also Ryszard Ganszyniec, “Kryształomancja” (Crystallo-mancy). *Lud* 41 (1954): 256-339.

<sup>19</sup> Ryszard Ganszyniec, *Brata Mikołaja z Polski pisma lekarskie* (The Medical Writings of Brother Nicholas of Poland), (Poznań: Czcionkami Drukarni Zjednoczenia, 1920); William Eamon and Gundolf Keil, “*Plebs amat empirica*: Nicholas of Poland and His Critique of the Medieval Medical Establishment,” *Sudhoffs Archiv* 71 (1987): 180-196; Eamon, *Science and the Secrets of Nature*, 76-79.

Nicolaus Melchior Cibiniensis was probably an intellectual born from Cibinium (Nagyszeben, Hermannstadt, Sibiu, today in Romania) who played some undefined role in Hungarian royal court in the first decades of the sixteenth century.<sup>20</sup>

#### i) The Ms BJ 793 and the *Picatrix*

The most focused handbook of talismanic magic and divination from the area is probably the beautifully illustrated manuscript once belonging to the Polish astronomer-astrologer-physician, three times rector of the University, Petrus Gzowski (before 1430-1474): the Ms Biblioteka Jagiellonska 793. Besides a representative selection of scientific (mostly astrological and medical) texts of Polish interest, it contains a richly cross-referenced and practically oriented anthology of geomantic divination (methods of answering everyday questions with the help of a partially random, partially algorithmic procedure). The number of multi-coloured full page charts, point diagrams, squares and combinatorial wheel systems helping the user follow the divinatory practices is also exceptional. Besides divination, talismanic magic is the main other focus of the handbook, including the famous talismans of the seven magic squares (also appearing in Agrippa, Cardano and even on Dürer's engraving, the 'Melancholia I') the practices of which involved -suffumigations and other ritual magic elements. Besides that, the codex comprises such "classics" as Thebit ibn Qurra's popular *De imaginibus* (On talismans), Pseudo-Ptolemy's *Opus imaginum*, quite similar in nature to the previous text, Pseudo-Albertus Magnus' *Secretum de sigillo Leonis*, and several shorter texts belonging to the medieval Hermetic tradition. The anthology finishes with the first survived – and only illustrated – long version of the Latin *Picatrix*, more precisely its first two books. From external evidence (descriptions of 16<sup>th</sup>-century travellers) it seems that the zoomorphic decanic and planetary illustrations of the codex were copied on the walls of the royal palace of Krakow, the Wawel – a telling sign of the direct cultural impact of the codex.

### 3. Dissemination of manuscripts

Though the evidence is both geographically and temporally scattered, the overall number of magic texts survived in East and Central European libraries from the fifteenth century is not negligible. Among these libraries, university book collections dominate, however, royal collections (as we have seen above), and to a smaller extent, monastic libraries also played considerable role in the survival of magic texts. As a consequence of this particular pattern, namely that books belonging to professorial libraries enjoyed the highest survival rate, the codicological context of the major part of the texts is scientific: astronomical-astrological or medical.

Many classic texts, widespread and popular in the region, were simple imports, widespread and popular in the west as well. Most of these belonged to the field of natural magic, the Pseudo-Aristotelian *Secretum secretorum*, the Pseudo-Albertian *Experimenta*, the *Kyranides* and some lesser known magico-therapeutic *herbaria* and *lapidaria* – that explained the occult properties and hidden virtues of animals, vegetables and other items. The textual import from the West took place almost exclusively in Latin, for the emergence of vernacular versions we have to wait for the sixteenth century, however and most interestingly, the *Secretum secretorum* had a

---

<sup>20</sup> "Processus Sub Forma Missae a Nicolao Melchiori Cibinensi Transilvano, ad Ladislaum Ungariae et Bohemiae Regem olim missum," *Theatrum Chemicum*, vol. III (Ursel: Lazarus Zetzner, 1602), 758-761; Carl Gustav Jung, *Psychology and Alchemy* (London: Routledge, 1968), 397; Gábor Farkas Kiss, Benedek Láng, and Cosmin Popa-Gorjanu, "The Alchemical Mass of Nicolaus Melchior Cibinensis: Text, Identity and Speculations," *Ambix* 53 (2006): 143-159.

Russian translation (from Hebrew) already in the late fifteenth – early sixteenth century,<sup>21</sup> and – probably as a result of the peculiarities of the politico-cultural history of Bohemia and the rise of Hussitism – vernacularization was more advanced in this region and natural magic recipes survived in Czech as well. A local peculiarity is that an interesting lapidary on the magical properties of the stones and talismans was claimed to have been composed in honour of Wenceslas II, King of Bohemia (1278-1305).<sup>22</sup>

Many such texts found a natural place thematically in the medical context of the codices in which they survived (texts by or attributed to Hippocrates, Galenus, Philaretus, and Arnaldus de Villanova, as well as anonymous works on the inspection of urine, on the pulse, on the interpretation of dreams, on human anatomy, on the therapeutic properties and the astrological correspondences of specific plants etc.). But astrology and divination were also frequent materials surrounding natural magic texts.

The latter category, that is divinatory texts, were rather common in medieval manuscripts both in the Western part of Europe and in the Eastern part. Geomancy (future telling on the basis of randomly marked dots in the earth) and the onomantic device, called the *Rota Pythagorae*, were probably the most widespread, manuscript catalogues do not even mention them because of their relative shortness and high diffusion. The overall availability of such divinatory texts explains why theologians kept worrying and prohibiting divination – as an abuse of the divinatory privilege not shared with the human kind. Chiromancy (palmistry) also appeared in the manuscripts but to a much smaller extent, while treasure hunting – the bestseller of 16<sup>th</sup>-17<sup>th</sup> century magic – was rare in the 15<sup>th</sup> century.

Divination is the category where the Southern and Eastern Slavs proved to be the most interested. Primarily importing from Greek but also recombining and re-contextualizing the translated materials, Bulgarians, Serbians, and Russians took over a wide range of Byzantine methods. These included prognostications on the basis of meteorology (Gromnik, that is thunder divination), on the basis of the calendar (Koliadnik) and other methods involving geomancy (Raflī) and scapulimancy (Lopatochnik: divination from the signs on a sheep's shoulder blade), as well as astrological almanacs based on the theory of lucky and unlucky days. Particularly interesting is the early 16<sup>th</sup> century Raflī (geomancy) attributed to the Russian of Ivan Rykov (probably a cleric from the court of Ivan IV), which is in fact a long and elaborated text on geomancy, an originally Byzantine but in many ways rewritten material for Russian Christians.<sup>23</sup>

Besides divination, the usually short talismanic magic texts were also popular in the codices of Central European university masters, court intellectuals and monks. The classics of Thebit ibn Qurra and Ptolemy (*De imaginibus* and *Opus imaginum*), the *Picatrix*, the *Seven magic squares* of the planets and some Hermetic texts have already been mentioned. The emergence of this genre seems to be almost exclusively western import in the region, with one

---

<sup>21</sup> William Francis Ryan, "Magic and Divination: Old Russian Sources," in Bernice Glatzer Rosenthal, ed., *The Occult in Russian and Soviet Culture* (Ithaca and London: Cornell University Press, 1997), 35-58.

<sup>22</sup> MS BJ 778, f. 200r-209r. Maria Kowalczyk, "Wróżby, czary i zabobony w średniowiecznych rękopisach Biblioteki Jagiellońskiej" (Divinations, Superstitions and Sortileges in the Medieval Manuscripts in the Jagiellonian Library), *Biuletyn Biblioteki Jagiellońskiej* 29 (1979): 5-18, especially 16-17.

<sup>23</sup> William Francis Ryan, *The Bathhouse at Midnight: An Historical Survey of Magic and Divination in Russia* (Stroud: Sutton, 1999), *idem*, "Magic and Divination: Old Russian Sources;" Ihor Ševčenko, "Remarks on the Diffusion of Byzantine Scientific and Pseudo-Scientific Literature among the Orthodox Slavs," *Slavonic and East European Review* 59 (1981): 321-45; Mirko Dražen Grmek, *Les sciences dans les manuscrits slaves orientaux du Moyen Âge* (Paris: Université de Paris, 1959); Robert Mathiesen, "Magic in Slavia Orthodoxa: The Written Tradition", *Byzantine Magic*, ed. Henry Maguire (Dumbarton Oaks, 1955): 155-177.



possible exception: two of the four surviving *Libri runarum* (a particular text combining hermetic talismanic magic with Scandinavian runes) have come to us from the Krakow region. A considerable number of survived talismanic objects testifies that the methods put forward in these texts were not only consulted but also followed and taken seriously.

In contrast to divination, natural magic and talismanic magic, alchemy proved to provide a territory for the authors of the region where they could prove their originality. While copying western texts (theoretical works by John of Rupescissa and Arnold of Villanova as well as recipes attributed to Albert the Great, Raymund Lull, Roger Bacon, and others), this is the genre in which the most numerous texts of local origin were produced. The Alchemical Mass of Nicolaus Melchior is certainly the most exceptional among them, to which one can add the first genuine alchemical tract from Bohemian territories, the *Processus de lapide philosophorum* (*On the Philosophers' Stone*) and the *Aenigma de lapide* (*Enigma on the Stone*) both written by a monk, called Johannes Ticinensis (Jan Těšínský),<sup>24</sup> and another treatise written in the vernacular in 1457, entitled *Cesta spravedlivá*, that is, “The Rightful Way,” attributed later to a certain Bohemian alchemist, Johannes Lasnioro (John of Laz). These sources show that interest in alchemy exceeded the circle of those who were able to read Latin. Archeologic evidence, e.g. the retorts, vessels, trays, alembics, phials, and other glass, wooden, and metal objects excavated from the alchemical-metallurgical laboratory of Oberstockstall (forty miles north-west from Vienna, not far from the Bohemian lands), testify that this interest was not only theoretical.<sup>25</sup> It is hard to tell how many laboratories functioned in monasteries and aristocratic courts in the fifteenth century. Oberstockstall was active in the mid-sixteenth century and the real boom of such practices took place around the end of the 16th century in the region – not unrelated to the court of Rudolf II. Nevertheless, one can plausibly suppose that they were not born out of nothing. The southern frontier of the Central European region, the town of Pula gave birth to the famous alchemical text, the *Pretiosa margarita novella* by Petrus Bonus, a native of Ferrara.<sup>26</sup>

The situation is not much different in ritual magic: besides a few – not too numerous – textual borrowings from the West (mainly shorter *Ars notoria* texts), a few original re-contextualizations of classic ritual magic texts (the author's familiarity with the *Ars notoria* is obvious in the *Bellifortis* and the *Liber visionum* is extensively used in the Prayer book of king Wladislas) took place in the region.

## 5. Further directions

Exploration and analysis of the Eastern and Central European magical source material has just begun in the past decades, more research will probably follow in the next decades.

One of the starting points of any further investigations is certainly a more accurate cataloguing of the sources. The catalogue series of the Biblioteca Jagiellonska is exemplary; it

---

<sup>24</sup> These two texts have not survived in their original copies, nor in their sixteenth-century Czech translation; they have come to us in a seventeenth-century German version. *Drei vortreffliche chymische Bücher des Johann Ticinensis, eines böhmischen Priesters* (Hamburg, 1670).

<sup>25</sup> Sigrid von Osten, *Das Alchemistenlaboratorium Oberstockstall: Ein Fundkomplex des 16. Jahrhunderts aus Niederösterreich* (Innsbruck: Universitätsverlag Wagner, 1998); Rudolf Werner Soukup and Helmut Mayer, *Alchemistisches Gold – Paracelsistische Pharmaka: Laboratoriumstechnik im 16. Jahrhundert* (Vienna-Köln-Weimar: Böhlau, 1997).

<sup>26</sup> Chiara Crisciani, “The Conception of Alchemy as Expressed in the *Pretiosa Margarita Novella* of Petrus Bonus of Ferrara,” *Ambix* 20, 1973.

should be a model for other libraries as well. Those manuscripts, which fell in the scope of this series are adequately described including their shortest contents, owner, provenience, etc.<sup>27</sup> Several indices have been edited helping the historian of science, astrology and magic,<sup>28</sup> and many smaller ecclesiastical libraries also possess sufficiently reliable catalogues, but a few larger libraries, however rich their collections might be, have obtained their last descriptions a century ago.<sup>29</sup> The longer texts contained in the codices are more or less identified, but many shorter pieces will be explored in the future when professional interest will turn to these manuscripts. A particularly useful – but very slow – process is the cataloguing of manuscript fragments. In Hungary, for example, the major part of the ever written source material has perished, but small fragments survived in manuscript bindings. Taking them from their preserving books, identifying their contents and origin adds a lot to our understanding of the history of the region.<sup>30</sup>

On the basis of the appropriately identified and described source material, three fields seem to me deserve particular attention in the future – all three are connected in one way or another to the issue of knowledge transfer. One is the relationship of “learned” that is textual magic and “popular” magic, folk practices. “Learned” or textual magic survived in the libraries in the manuscripts once copied by university magistri. Folk practices, in contrast are often reconstructed indirectly, on the basis of the usually condemnatory and – only partially reliable – sermons of preachers, episcopal visitation documentations, confessor manuals and tracts of theologians (e.g. the theologian Stanislas de Skarbimierz in Poland, the preacher Jan Milicz in Bohemia, the confessor Rudolf in the 13<sup>th</sup> century Silesia. These texts often describe the “popular superstitions and divinations,” the practices of the *vetulae* and the *incantatrices*, folk curing habits and inscriptions, and the “pagan rites” of the peasants.<sup>31</sup> Mapping the mutual influences of these fields exercised on each other – or the lack of such influences – is one of the fields where scholarship has new perspectives.

The second knowledge transfer issue concerns the direction of the import of learned magic in the area. Scholars have relatively rich picture on the reception of Western Latin

---

<sup>27</sup> Włodek, Zathey and Zwiercan, eds. *Catalogus codicum*, 10 vols.

<sup>28</sup> Markowski, *Astronomica et astrologica*; Rosińska, *Scientific Writings*.

<sup>29</sup> Josef Truhlář, ed. *Catalogus codicum manu scriptorum latinorum, qui in c. r. bibliotheca publica atque universitatis Pragensis asservantur*. 2 vols. (Prague: Regia Societas Scientiarum, 1905-1906.), Antonín Podlaha, ed. *Soupis rukopisů knihovny metropolitní kapituly pražské* (Catalogue of Manuscripts of the Metropolitan Chapter Library of Prague), (Prague: Česká akademie věd, 1922.)

<sup>30</sup> See, the *Fragmenta et codices in bibliothecis Hungariae* series (1983-) edited by Edit Madas.

<sup>31</sup> Stanisław Bylina, “La Prédication, les croyances et les pratiques traditionnelles en Pologne au Bas Moyen Age,” in *L'Église et le peuple Chrétien dans les pays de l'Europe du Centre-Est et du Nord (XIVe-XVe siècles)* (Rome: École Française de Rome, 1990), 301-313; *idem*, “Magie, sorcellerie et culture populaire en Pologne aux XVe et XVIe siècles,” *Acta Ethnographica, A periodical of the Hungarian Academy of Sciences* 37 (1991): 173-190; Beata Wojciechowska, “Magic in Annual Rites in Late Medieval Poland,” in Thomas Wunsch, ed. *Religion und Magie in Ostmitteleuropa (Spielräume theologischer Normierungsprozesse in Spätmittelalter und Frühe Neuzeit)*, 225-238, (Berlin: LIT Verlag, 2006); Ryan, *The Bathhouse at Midnight*, Ch 2 and 4; Kowalczykówna, “Wróżby, czary i zabobony”; Bracha, “Magie und Aberglaubenskritik in den Predigten des Spätmittelalters in Polen,” in Thomas Wunsch, ed. *Religion und Magie in Ostmitteleuropa (Spielräume theologischer Normierungsprozesse in Spätmittelalter und Frühe Neuzeit)*, 197-215, (Berlin: LIT Verlag, 2006); *idem*, “Katalog magii Rudolfa” in *Cystersi w społeczeństwie Europy Środkowej*. (Poznan: Wydawnictwo Poznańskie, 2000), 806-820; *idem*, *Teolog, diabeł i zabobony: świadectwo traktatu Mikołaja Magni z Jawora De superstitionibus* (The Theologian, the Devil and the Superstitions: The Testimony of the Treatise of Nicolaus Jawor, *De superstitionibus*) (Warsaw: Instytut Historii PAN, 1999).

magical manuscripts in the Central and Eastern European region. Somewhat less rich, but still detailed is the picture on the reception of non-literary Greek texts among the Eastern Slavs including the translation activity in Bulgaria (10<sup>th</sup> century) or Serbia (14<sup>th</sup>-15<sup>th</sup> centuries). Studies have been written on how stronger the influence of Byzantium was – as compared to Islam or Western Christianity – until the 16<sup>th</sup> century on the Orthodox Slavs, but the relative scarcity of Slavonic translations in the field of scientific, technical, philosophical and magical texts in this knowledge transfer channel has also been pointed out.<sup>32</sup> Much less is known about the import and source of Jewish and Turkish magic texts, even though the Eastern and Central European region was a frontier zone between the Latin and the Ottoman cultures already in the 15<sup>th</sup> century, where large Jewish populations were active intellectually. While it is possible that there was neither need nor room in the sharp military situation for an appropriation of Arabic-Turkish magic, it is much harder to imagine that Jewish magic played only a minor role in the region. This question deserves much more accurate research in the future.<sup>33</sup>

Finally, I would see particularly fruitful any systematic analysis of how science and magic interacted. A lot has been written on the relationship of late medieval astrology, astronomy and philosophy.<sup>34</sup> To a smaller extent the scientific embeddedness of learned magic has also been explored.<sup>35</sup> However, this is a vast field and much remained to clarify. As was emphasized above, the primary context of fifteenth century magic – at least as far as we can reconstruct it on the basis of the survived sources – was the university. The codicological context of magic texts was astrological, astronomical, medical, and other fields of science while philosophy was rare, theology even rarer. It is reasonable to suppose – and easy to confirm – that medicine exercised impact on natural magic, that astronomy and astrology influenced talismanic magic, however, little is known about the opposite direction: whether the frequently copied, read and to a certain extent certainly practiced magic texts exercised any impact on science in the region and in the century so close to Copernicus.

How exactly talismans, geomantic divination and charms found their place on the scientific bookshelves, and in the brains of the university masters is a question that requires careful and complex analysis.

## Bibliography

Balogh, Jolán, ed. *A művészet Mátyás király udvarában: Adattár* (Art in the Court of Matthias: Database). Budapest: Akadémiai Kiadó, 1966.

\_\_\_\_\_. *Mátyás király és a művészet* (King Matthias and the Arts). Budapest: Magvető, 1985.

---

<sup>32</sup> Ševčenko, “Remarks on the Diffusion.”

<sup>33</sup> František Šmahel, “Stärker als der Glaube: Magie, Aberglaube und Zauber in der Epoche des Hussitismus,” *Bohemia: Zeitschrift für Geschichte und Kultur der böhmischen Länder* 32 (1991): 316-337; Ryan “Magic and Divination: Old Russian Sources;” 57; *idem*, *The Bathhouse at Midnight*, 16 and 394.

<sup>34</sup> Markowski. “Astronomie und der Krakauer Universität im XV. Jahrhundert,” in Jozef Ijswijn and Jacques Paquet, eds., *Les universités à la fin du Moyen Age, Actes du congrès international du Louvain (26-30 mai, 1975)*, 256-275. (Leuven: Leuven University Press, 1978.), *idem*, “Die Astrologie an der Krakauer Universität in den Jahren 1450-1550,” in Lech Szczucki, ed., *Magia, astrologia e religione*, 83-89.

<sup>35</sup> Benedek Láng, *Unlocked Books, Manuscripts of Learned Magic in the Medieval Libraries of Central Europe*, (University Park, PA: Penn State University Press, 2008.)

- Barlai, Katalin and Ágnes Boronkai. "Astronomical Codices in the Corvinian Library." *Memorie della Societa Astronomica Italiana* 65 (1994): 533-546.
- Bartlová, Milena. "The Magic of Image: Astrological, Alchemical and Magical Symbolism at the Court of Wenceslas IV." In Blanka Szeghyová, ed., *The Role of Magic in the Past: Learned and Popular Magic, Popular Beliefs and Diversity of Attitudes*, 19-28. Bratislava: Pro Historia, 2005.
- Birkenmajer, Aleksander. *Études d'histoire des sciences en Pologne*. Studia Copernicana 4. Wrocław: Zakład Narodowy Imienia Ossolińskich, 1972.
- \_\_\_\_\_. "Henryk le Bohemien." In *idem*, *Études d'histoire des sciences en Pologne*, 497-498. Studia Copernicana 4. Wrocław: Zakład Narodowy Imienia Ossolińskich, 1972.
- \_\_\_\_\_. "Sprawa Magistra Henryka Czecha" (The Case of Master Henry the Czech). *Collectanea Theologica* 17 (1936): 207-224.
- Boudet, Jean-Patrice and Hayton, Darin. "Matthias Corvin, János Vitéz, et l'Horoscope de Fondation de l'Université de Pozsony en 1467." In *Actes du colloque «Mathias Corvin, les bibliothèques princières et la genèse de l'Etat modern.»* Budapest: Országos Széchényi Könyvtár, 2009.
- Bracha, Krzysztof. "Magie und Aberglaubenskritik in den Predigten des Spätmittelalters in Polen." In Thomas Wunsch, ed. *Religion und Magie in Ostmitteleuropa (Spielräume theologischer Normierungsprozesse in Spätmittelalter und Frühe Neuzeit)*, 197-215. Berlin: LIT Verlag, 2006.
- \_\_\_\_\_. "Katalog magii Rudolfa." In *Cystersi w społeczeństwie Europy Środkowej*. (Poznan: Wydawnictwo Poznańskie, 2000), 806-820.
- \_\_\_\_\_. *Teolog, diabeł i zabobony: świadectwo traktatu Mikołaja Magni z Jawora De superstitionibus* (The Theologian, the Devil and the Superstitions: The Testimony of the Treatise of Nicolaus Jawor, *De superstitionibus*). Warsaw: Instytut Historii PAN, 1999.
- Bylina, Stanisław. "La prédication, les croyances et les pratiques traditionnelles en Pologne au bas Moyen Age." In *L'Église et le peuple chrétien dans les pays de l'Europe du Centre-Est et du Nord (XIVe-XVe siècles)*, 301-313. Rome: École française de Rome, 1990.
- \_\_\_\_\_. "Magie, sorcellerie et culture populaire en Pologne aux XVe et XVIe siècles." *Acta ethnographica, A Periodical of the Hungarian Academy of Sciences* 37 (1991): 173-190.
- Conrad Kyeser. *Bellifortis*. Ed. Götz Quarg. 2 vols. Düsseldorf: Verlag des Vereins Deutscher Ingenieurie, 1967.
- Csapodi, Csaba and Klára Csapodiné Gárdonyi, eds. *Bibliotheca Corviniana: The Library of King Matthias Corvinus of Hungary*. Budapest: Helikon, 1990.
- Csapodiné Gárdonyi, Klára. *Die Bibliothek des Johannes Vitéz*. Budapest: Akadémiai Kiadó, 1984.
- Eamon, William and Gundolf Keil. "Plebs amat empirica: Nicholas of Poland and His Critique of the Medieval Medical Establishment." *Sudhoffs Archiv* 71 (1987): 180-196.
- Ganszyniec, Ryszard. ed. *Brata Mikołaja z Polski Pisma Lekarskie* (The Medical Writings of Brother Nicolaus of Poland). Poznań: Czcionkami Drukarni Zjednoczenia, 1920.

- \_\_\_\_\_. "Krystalomancja" (Crystallomancy). *Lud* 41 (1954): 256-339.
- Ganszyniec, Ryszard, and Ludwik Bernacki, eds. *Modlitewnik Władysława Warneńczyka w zbiorach Biblioteki Bodlejańskiej* (Wladislaw Warnencyk's Prayer Book Kept in the Bodleian Library). Krakow: Anczyc i Sjólka, 1928.
- Grmek, Mirko Dražen. "La lettre sur la magie noire et les autres manuscrits d'Arnaud de Villeneuve dans les bibliothèques yougoslaves." *Archives Internationales d'Histoire des Sciences* 42 (1958): 21-26.
- Ficino, Marsilio. *Three Books on Life*. Eds. Carol V. Kaske and John R. Clark. Binghamton, NY: Renaissance Society of America, 1989.
- Hayton, Darin. "Martin Bylica at the Court of Mathias Corvinus: Astrology and Politics in Renaissance Hungary." *Centaurus* 49 (2007): 185-198.
- Keil, Gundolf. "Virtus occulta: Der Begriff des 'empiricum' bei Nikolaus von Polen." In August Buck, ed., *Die okkulten Wissenschaften in der Renaissance*, 159-196. Wolfenbütteler Abhandlungen zur Renaissanceforschung 12. Wiesbaden: Otto Harrassowitz, 1992.
- Kiss, Gábor Farkas, Benedek Láng, and Cosmin Popa-Gorjanu. "The Alchemical Mass of Nicolaus Melchior Cibinensis: Text, Identity and Speculations." *Ambix* 53 (2006): 143-159.
- Klaniczay, Tibor. "Das Contubernium des Johannes Vitéz: Die erste ungarische Academie." In Kálmán Benda, ed., *Forschungen über Siebenbürgen und seine Nachbarn: Festschrift für Attila T. Szabó und Zsigmond Jakó*, 241-255. Munich: Trofenik, 1988.
- \_\_\_\_\_. "Celtis und die Sodalitas Litteraria per Germaniam." In August Buck, ed. *Respublica Guelpherbytana: Wolfenbütteler Beiträge zur Renaissance- und Barockforschung. Festschrift für Paul Raabe*, 79-105. Amsterdam: Rodopi, 1987.
- \_\_\_\_\_, ed. *Rapporti veneto-ungheresi all'epoca del Rinascimento*. Budapest: Akadémiai Kiadó, 1975.
- \_\_\_\_\_, and József Jankovics. *Matthias Corvinus and the Humanism in Central Europe*. *Studia Humanitatis* 10. Budapest: Balassi Kiadó, 1994.
- Krásá, Josef. "Astrologické rukopisy Václava IV" (Astrological Manuscripts of King Wenceslas IV). *Umění* 12 (1964): 466-486.
- \_\_\_\_\_. *Die Handschriften König Wencels IV*. Vienna: Forum, 1971.
- Láng, Benedek. *Unlocked Books, Manuscripts of Learned Magic in the Medieval Libraries of Central Europe*, University Park, PA: Penn State University Press, 2008.
- Markowski, Mieczysław. "Astronomie und der Krakauer Universität im XV. Jahrhundert." In Jozef Ijswijn and Jacques Paquet, eds., *Les universités à la fin du Moyen Age, Actes du congrès international du Louvain (26-30 mai, 1975)*, 256-275. Leuven: Leuven University Press, 1978.
- \_\_\_\_\_. "Die Astrologie an der Krakauer Universität in den Jahren 1450-1550." In Lech Szczucki, ed., *Magia, astrologia e religione*, 83-89.
- \_\_\_\_\_. ed. *Astronomica et astrologica Cracoviensia ante annum 1550*. *Studi e testi/Istituto nazionale di studi sul Rinascimento* 20. Florence: L. S. Olschki, 1990.

- Nagy, Zoltán. "Ricerche cosmologiche nella corte umanistica di Giovanni Vitéz." In Tibor Klaniczay, ed., *Rapporti veneto-ungheresi all'epoca del Rinascimento*, 65-93. Budapest: Akadémiai Kiadó, 1975.
- Nicolaus de Polonia. *Antipocras*. In Karl Sudhoff, "Antipocras, Streitschrift für mystische Heilkunde in Versen." *Archiv* 9 (1916): 31-52.
- Podlacha, Władisław. "Minjatury modlitewnika Warneńczyka" (On the Miniatures of the Prayer Book). In Ryszard Ganszynieć and Ludwik Bernacki, eds., *Modlitewnik Władysława Warneńczyka*, 93-141.
- Rees, Valery. "Ad vitam felicitatemque: Marsilio Ficino to His Friends in Hungary." *Budapest Review of Books* 8 (1998): 57-63.
- Rosińska, Grażyna, ed. *Scientific Writings and Astronomical Tables in Cracow: A Census of Manuscript Sources (XIVth-XVIth Centuries)*. Studia Copernicana 22. Wrocław: Zakład Narodowy Imienia Ossolińskich, 1984.
- Ryan, William Francis. "Magic and Divination: Old Russian Sources." In Bernice Glatzer Rosenthal, ed., *The in Russian and Soviet Culture*, 35-58. Ithaca and London: Cornell University Press, 1997.
- \_\_\_\_\_. *The Bathhouse at Midnight: A Historical Survey of Magic and Divination in Russia*. Stroud: Sutton, 1999.
- Ševčenko, Ihor. "Remarks on the Diffusion of Byzantine Scientific and Pseudo-Scientific Literature among the Orthodox Slavs." *Slavonic and East European Review* 59 (1981): 321-45.
- Šmahel, František. "Stärker als der Glaube: Magie, Aberglaube und Zauber in der Epoche des Hussitismus." *Bohemia: Zeitschrift für Geschichte und Kultur der böhmischen Länder* 32 (1991): 316-337.
- White, Lynn. "Kyeser's 'Bellifortis': The First Technological Treatise of the Fifteenth Century." *Technology and Culture* 10 (1969): 436-441.
- \_\_\_\_\_. "Medical Astrologers and Late Medieval Technology." *Viator: Medieval and Renaissance Studies* 6 (1975): 295-307.
- Wielgus, Stanisław. "Consilia de Stanislas de Scarbimiria contre l'astrologue Henri Bohemus." *Studia Mediewistyczne* 25 (1988): 145-172.
- Włodek, Zofia, Jerzy Zathę and Marian Zwiercan, eds. *Catalogus codicum manuscriptorum Medii Aevi Latinorum qui in Bibliotheca Jagellonica Cracoviae asservantur*. 10 vols. Wrocław: Zakład Narodowy Imienia Ossolińskich, 1980-2012.
- Zathę, Jerzy. "Per la storia dell'ambiente magico-astrologico a Cracovia nel Quattrocento." In Lech Szczucki, *Magia, astrologia e religione nel Rinascimento: convegno polacco-italiano, Varsavia, 25-27 settembre 1972*. (Wrocław: Zakład Narodowy im. Ossolińskich, 1974), 99-109.

### **Biographical sketch:**

Benedek Lang is a historian (MA, Eotvos Lorand University, Budapest, 1998) and a medievalist (PhD, Central European University, Medieval Studies Department, 2003). At present, he works

as a professor and head of department at the Budapest University of Technology and Economics (Philosophy and History of Science Dept.). In 2012-13, he was a research fellow in the Collegium de Lyon. He is a historian of science, specialized in two major topics: late medieval manuscripts of learned magic, and early modern secret communication (artificial languages and cipher systems). His monograph, entitled *Unlocked Books, Manuscripts of Learned Magic in the Medieval Libraries of Central Europe*, was published by Penn State University Press in 2008, and two of his later articles (“Why don’t we decipher an outdated cipher system? The Codex of Rohonc” and “People’s secrets: Towards a social history of Early Modern cryptography”) appeared in *Cryptologia* (2010), and in *The Sixteenth Century Journal* (2014).

## Select Bibliography

- Birkenmajer, Aleksander. *Études d’histoire des sciences en Pologne*. Studia Copernicana 4. Wrocław: Zakład Narodowy Imienia Ossolińskich, 1972.
- Bracha, Krzysztof. “Magie und Aberglaubenskritik in den Predigten des Spätmittelalters in Polen.” In Thomas Wunsch, ed. *Religion und Magie in Ostmitteleuropa (Spielräume theologischer Normierungsprozesse in Spätmittelalter und Frühe Neuzeit)*, 197-215. Berlin: LIT Verlag, 2006.
- Csapodi, Csaba and Klára Csapodiné Gárdonyi, eds. *Bibliotheca Corviniana: The Library of King Matthias Corvinus of Hungary*. Budapest: Helikon, 1990.
- Ganszyniec, Ryszard, and Ludwik Bernacki, eds. *Modlitewnik Władysława Warneńczyka w zbiorach Biblioteki Bodlejańskiej (Wladislaw Warnenczyk’s Prayer Book Kept in the Bodleian Library)*. Krakow: Anczyc i Sjólka, 1928.
- Klaniczay, Tibor and József Jankovics. *Matthias Corvinus and the Humanism in Central Europe*. Studia Humanitatis 10. Budapest: Balassi Kiadó, 1994.
- Láng, Benedek. *Unlocked Books, Manuscripts of Learned Magic in the Medieval Libraries of Central Europe*, University Park, PA: Penn State University Press, 2008.
- Markowski, Mieczysław. ed. *Astronomica et astrologica Cracoviensia ante annum 1550*. Studi e testi/Istituto nazionale di studi sul Rinascimento 20. Florence: L. S. Olschki, 1990.
- Rosińska, Grażyna, ed. *Scientific Writings and Astronomical Tables in Cracow: A Census of Manuscript Sources (XIVth-XVIth Centuries)*. Studia Copernicana 22. Wrocław: Zakład Narodowy Imienia Ossolińskich, 1984.
- Ryan, William Francis. *The Bathhouse at Midnight: A Historical Survey of Magic and Divination in Russia*. Stroud: Sutton, 1999.
- Ševčenko, Ihor. “Remarks on the Diffusion of Byzantine Scientific and Pseudo-Scientific Literature among the Orthodox Slavs.” *Slavonic and East European Review* 59 (1981): 321-45.
- Zathey, Jerzy. “Per la storia dell’ambiente magico-astrologico a Cracovia nel Quattrocento.” In Lech Szczucki, *Magia, astrologia e religione nel Rinascimento: convegno polacco-italiano, Varsavia, 25-27 settembre 1972*. (Wrocław: Zakład Narodowy im. Ossolińskich, 1974), 99-109.