Acta Universitatis Carolinae. Mathematica et Physica

René Zandbergen; Rafal T. Prinke The Voynich MS in Prague, from Rudolf II to Johannes Marcus Marci

Acta Universitatis Carolinae. Mathematica et Physica, Vol. 46 (2005), No. Suppl, 141--152

Persistent URL: http://dml.cz/dmlcz/143831

Terms of use:

© Univerzita Karlova v Praze, 2005

Institute of Mathematics of the Academy of Sciences of the Czech Republic provides access to digitized documents strictly for personal use. Each copy of any part of this document must contain these *Terms of use*.



This paper has been digitized, optimized for electronic delivery and stamped with digital signature within the project *DML-CZ*: *The Czech Digital Mathematics Library* http://project.dml.cz

The Voynich MS in Prague, from Rudolf II to Johannes Marcus Marci

RENÉ ZANDBERGEN AND RAFAŁ T. PRINKE

Darmstadt, Poznań

Received 20. October 2004

What is the Voynich MS?

The Voynich MS is named after Wilfrid Voynich, the Polish-born book dealer who bought it in 1912 from a large collection kept by the Jesuits in a Villa just outside Rome. This collection belonged to the Collegium Romanum until 1873, when the college was confiscated by the Italian government. The interest of the 234-page codex lies in the fact that it is written in a script which is not found in any other document, and which, until today, has defied all attempts at interpretation. Most of the MS is decorated with drawings of plants, while other sections contain illustrations of astronomical or cosmological nature, as well as a section with nude females, which is usually referred to as balneological.

Voynich claimed that the MS was by Roger Bacon (1214–1294) and that it was written in cipher. This was apparently confirmed by a letter found inside the MS, written by the Prague scientist Johannes Marcus Marci (Jan Marek Marci z Kronlandu), who sent the MS as a present to his Jesuit friend Athanasius Kircher in Rome, with the request for decryption. Marci quotes Dr. Raphael Mišovský, tutor in the Bohemian language to (then archduke) Ferdinand III, who says that the MS was once bought by Rudolf II for the sum of 600 ducats, and that he believed that the MS was from Bacon.

European Space Operations Centre, Robert-Bosch Str. 5, D-64293, Darmstadt, Germany Akademia Wychowania Fizycznego, Wydział Turystyki i Rekreacji, Zakład Informatyki, ul. Rybaki 19, PL – 61-884 Poznań, Poland

Study of the Voynich MS

The Voynich MS receives little attention from scholars, partly because it does not really fit in any particular discipline. There is no indication of its origin (date or place), no name of author, and the text cannot be read. The suspicion that it could be a meaningless document, or even a hoax to dupe the emperor, does little to help. More than half the volume is laid out like a standard manuscript herbal, but the drawings are unique, if not unusual, and cannot be traced to any known herbal tradition. The MS has been studied in the 1990's by an Italian expert in medieval herbals¹ and according to his interpretation, the MS should be dated around 1470, with an origin in Northern Italy. Some decades earlier, E. Panofsky estimated the same date, but suggested that the MS originates from Central Europe. Nowadays, the authorship of Roger Bacon is no longer supported.

The script and text of the MS have been studied intensively for almost a century, also with the aid of computer-based statistical analyses, and while some interesting features of the code or language have been discovered (for which there is unfortunately no room here to go into any detail), even today not a single word of the text can be deciphered. It has been demonstrated, however, that the text is not simply one of the known European languages written in different characters.

With so little hard evidence to go by, all possible leads that could help to identify the origin of the MS will be of value. Two aspects will be highlighted here. For one, the MS includes a number of astronomical or astrological drawings, which, like the herbal drawings, are somewhat peculiar. They have not received much attention in the relevant literature, but perhaps they can be traced to some astronomical or astrological tradition. As the MS has recently been reproduced in high-resolution digital colour scans, a number of these illustrations can be shown here. Secondly, the earliest trace of the MS is Rudolphine Prague, and for a span of 60 years it was in the hands of a number of prominent people in Prague, who were clearly intrigued by the MS and had evidently discussed it with each other. Perhaps some further trace of the origin of the MS can still be found. We will look at this topic first.

The Voynich MS in Prague

Documentary evidence about the Voynich MS is extremely scarce. In works about Marci or Rudolfine Prague it is occasionally mentioned as a 'Cabbalistic book by R. Bacon'² but the MS is neither Cabbalistic nor from the hand of

¹TORESELLA SERGIO, Gli erbari degli alchmisti, in: L. Saginati (ed.), Arte farmaceutica e piante medicinali; erbari, vasi, strumenti e testi dalle raccolte liguri, Pisa, 1996.

²For example: Nový L. and Folta J. (eds.), Acta historiae rerum naturalium necnon technicarum. Special issue 3, Prague, 1967; R. J. W. Evans, Rudolf II and his world, a study in intellectual history 1576–1612. Oxford University Press, 1973.

Bacon³. Beside the above-mentioned letter from Marci to Kircher, an erased signature has been found on the first folio of the MS, giving the name "Jacobus de Tepenec", i.e. Jakub Horčický z Tepence (also known as Sinapius), a well-known botanist and alchemist close to Rudolf, who could have used this version of his name only between 1608 and 1622. Finally, in 2000 the correspondence of Kircher became available for study, and a few letters referring to the Voynich MS have been found there. It is convenient to present the known facts and some key questions in reverse chronological order.

Marci and his friends

In Marci's letter from 1666 he writes that he inherited the MS from a close friend, who had already consulted Kircher about it, and spent the last years of his life in vain trying to decipher it. In January 1667, G. A. Kinner writes on Marci's behalf, asking Kircher if he has made any progress in translating the book Marci sent him. This was a few months before Marci's death and Marci was perhaps no longer capable of writing personally. At least Kinner was one of the people who were aware of the existence of this mysterious book.

The friend of Marci who was previous owner of the MS was not identified until recently, when his 1639 letter surfaced in Kircher's correspondence. His name is Georgius Barschius (presumably Georg Baresch or Jiří Bareš). Apart from this letter, he is mentioned in Marci's "Philosophia Vetus Restituta" and what little we know about him is that he was born in Žinkovy, received his doctor's degree from the Clementinum in 16035, started studies at the Sapienza in Rome in 1605, died before 1662 at the age of about 70, and he had been Marci's close friend for some 40 years. He wrote from Prague but he did not own a house there⁶. He had left

³The main source usually quoted is Newbold William Romaine, *The Cipher of Roger Bacon*. Edited with foreword and notes by Roland Grubb Kent. Philadelphia: University of Pennsylvania Press, 1928. The supposed cabbalistic nature of the book relates to his translation of the MS, which has been shown to be incorrect.

⁴Quoted in Servít Zdeněk, Jan Marek Marci z Kronlandu, Zapomenutý zakladatel novověké fysiologie a medicíny, Bratislava: Veda, 1989.

⁵The authors are indebted to Josef Smolka for this information. Album Academiae Pragensis Societatis Iesu (1565–1624) ed. M. Truc, Universita Karlova Praha, 1968, p. 22 and 23: f. 31b Anno 1602, 9. die Maii rectore R. P. Jacobo Gerano a P. Joanne Mamburgo, studiorum praefecto, liberalium artium ac philosophiae baccalaurei renunciati sunt: Georgius Barschius, Sincoviensis Boem., p. 23: f. 32a Anno insequenti 1603 14. Maii post defensas diversis diebus philosophiae positiones acceptaque pridie licentia renunciati sunt artium liberalium et philosophiae magistri: Georgius Barscheus, Synkoviensis, Boh.

⁶He is not listed in 'Berní rula' for Prague. The recently published full index for Bohemia has not yet been consulted.

Marci his alchemical library and collection. He had written to Kircher in 1637 but that letter is lost. Barschius also mentions that he had discussed this letter with the famous mathematician Theodor Moretus S. J. Furthermore, notes and transcriptions of the Voynich MS had been sent to Kircher several times but these cannot now be found. Whatever Barschius may have known about the origin of the MS was lost with his death and the dispersion of his library together with Marci's own.

The MS at Rudolf's court

Marci must have discussed the Voynich MS with Dr. Raphael Soběhrd Mišovský ze Sebuzina a Heršteina, the lawyer and poet who died in 1644. Mišovský was a high court official, and interested in secret writing, having himself written a code book in the style of Trithemius, which is now kept in Uppsala in Sweden. He is the source for information about Rudolf's purchase of the Voynich MS, but how reliable is this information, and how did he obtain it? No traces of the purchase have been reported, but they may still exist. The MS is not mentioned in the catalogue of Rudolf's Kunstkammer, written between 1607 and 1611⁷. The key questions are who sold the Voynich MS to Rudolf (if he really owned it), and how Horčický z Tepence was involved with it. Did he obtain it from Rudolf in order to make as good use of it as possible, or did he actually sell the book to the emperor? His biography is given by Schmidl⁸, who also refers to Balbín⁹. The latter has not yet been consulted for any details that may have been left out by Schmidl. The MS furthermore contains a number of marginalia that might be from the hand of Horčický z Tepence, or an earlier owner, or in fact from its original author. It is worth mentioning that the usual story that the MS was sold to Rudolf II by John Dee or Edward Kelly derives from W. Voynich's search for a link to Roger Bacon, and is not at all confirmed.

Summary

For most old books and manuscripts, it is a matter of interest who may have owned it and where it has been. For the Voynich MS, however, this information is crucial and may help our understanding of its origin and contents. It is entirely

⁷The catalogue by Fröschl is described in Bauer and Haupt, *Jahrbuch der Kunsthistorischen Sammlungen des Museum in Wien*, Vol. 27, 1976. None of the entries for books appear to describe the Voynich MS.

⁸SCHMIDL S. J. JOHANNES, Historiae Societatis Jesu Provinciae Bohemiae, pars III, ab anno Christi MDCXVI ad annum MDCXXXII, Pragae, 1754.

⁹The reference is to Balbín, Miscellanea Historica Regni Bohemiae.

possible that single references to the Voynich MS still exist in Rudolfine archives, in the catalogues of book collectors around Rudolf, in the works of Balbín (who wrote extensively both about Marci and Horčický z Tepence and may have known Barschius) or in correspondence of other Prague scientists, their relative importance not having been realised.

More complete information about the history summarised above has been collected by the authors on their internet web sites about the Voynich MS¹⁰.

Astronomical illustrations in the Voynich MS

The astronomical illustration in the Voynich MS cover folios 67–73, 85 and 86 of the MS, which include a number of foldout folios containing several 'pages' each. They consist of a nearly complete set of signs of the zodiac, a number of circular diagrams depicting Sun, Moon and stars, and some more abstract illustration which have come to be called 'cosmological'. The zodiac unusually starts with Pisces, and shows, for each sign, 30 feminine figures holding a star and being accompanied by a single word in the mysterious script. Aries and Taurus are represented as 2 separate diagrams of 15 stars each. The leaf that should have shown Capricornus and Aquarius is missing from the MS. In the centre of each diagram one finds a somewhat unusual drawing of the zodiac sign and the name of the month. It is believed that these month names were written at a later, but equally early, date. The authors hold the belief that each figure represents one degree of the zodiac, and the particular pose of each figure and the shape of the star has some meaning for this degree. No type of match of these figures with known lists of paranatellonta has yet been found. The only known example of astrological iconography somewhat similar to the feminine figures in these drawings are the figurines in the famous Helios miniature of the Vatican copy of Ptolemy's handy tables (Vat. Gr. 1291).

One illustration in the Voynich MS evidently shows the Pleiades, with the name written in the mysterious script, but otherwise this illustration also remains not understood. The largest illustration in the MS, a foldout leaf six times the size of a normal page, covering folios 85 and 86, shows a complex cosmological diagram including astronomical elements, a T-O map, and some buildings, one of which is apparently an italian castle. Also this diagram still defies interpretation.

¹⁰By PRINKE R. T.: http://hum.amu.edu.pl/~rafalp/HERM/VMS/vms.htm. By ZANDBERGEN R.: http://www.voynich.nu and for the history see: http://www.voynich.nu/history.html



Fig. 1 One of several circular illustrations including Moon and stars (f67r1).

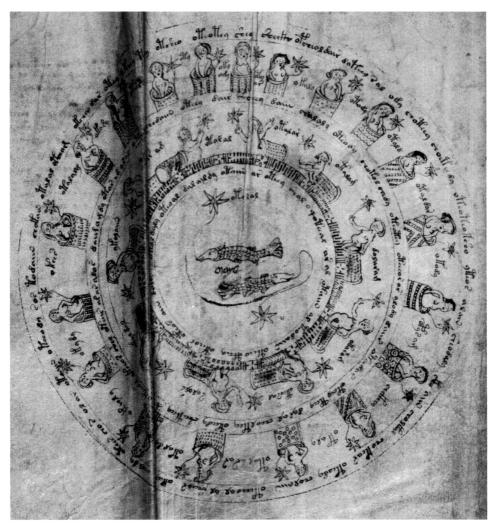


Fig. 2 The zodiac in the Voynich MS starts with Pisces (f70v2). There are 30 labelled star symbols. One is in the centre and the other 29 are held by 'nymphs' in containers.

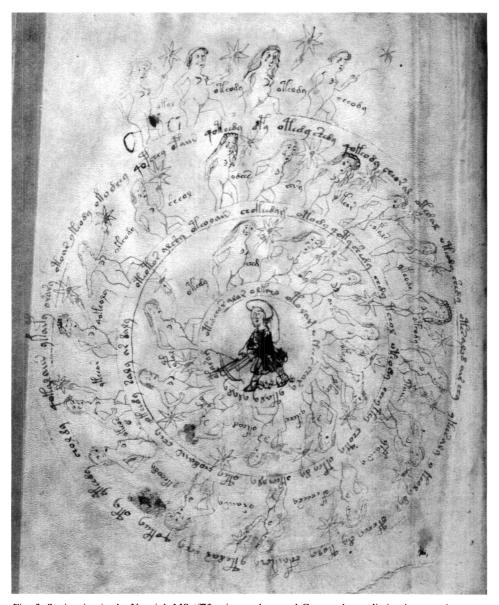


Fig. 3 Sagittarius in the Voynich MS (f73v) is not the usual Centaur but a distinctive crossbowman with no known precedence in astrological iconography.



Fig. 4 A 'balneological' page of the Voynich MS (f83v).

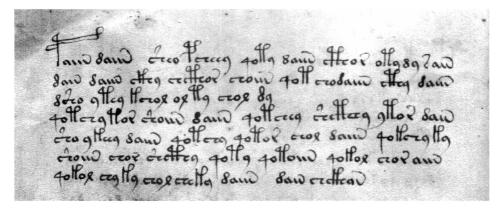


Fig. 5 A sample of the script used in the Voynich MS (f10v).

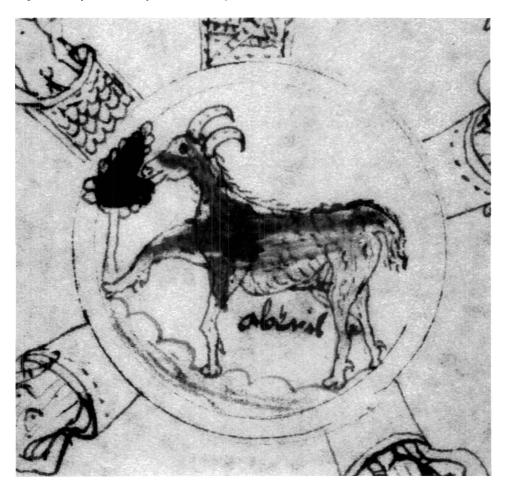


Fig. 6a



Fig. 6b



Fig. 6c

Fig. 6 Further examples of unusual zodiac images in the Voynich MS: (a) Aries, (b) Gemini, (c) an almost unrecognisable Scorpius.

Acknowledgements

The Voynich MS is preserved at the Beinecke Rare Book and Manuscript Library of the Yale University, New Haven, USA. The images of the MS are shown here with the kind permission of the library.

The authors are indebted to a number of people who have made important contributions to the study of the Voynich MS history, and wish to name specifically Michael John Gorman, Jan Hurych, Jorge Stolfi, Gabriel Landini and Philip Neal.