SILVER IS SILVER, BOOKS ARE GOLD.

Scientific manuscripts from Aleppo in the collections of Leiden University Library

*presented by*

Prof. Jan Just Witkam (Leiden University) at the celebration of the fourth centenary of the Consulate of the Netherlands in Aleppo, Syria

Aleppo, 2 November 2007

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Aleppo, 29 October 2007: Dr. Maurits van den Boogert discussing Jacobus Golius and his search for science in Aleppo. Source: drawing by Theo de Feyter, 2007
Aleppo, 1 November 2007: Music Ensemble Camerata Trajectina performing poetry by the Dutch national poet Constantijn Huygens

Source: photograph by Jan Just Witkam, 007
Aleppo, 1 November 2007: Music Ensemble Camerata Trajectina performing poetry by the Dutch national poet Constantijn Huygens

Source: drawing by Theo de Feyter, 2007
‘Rather Turkish (-Muslim) than a follower of the Pope.’
Silver medal of c. 1566, illustrating the general hatred against Roman Catholicism in the Netherlands. In 1568 the revolt against Spain would begin. The war would last eighty years. Source: Utrecht, Geldmuseum, Pe-566.
1628 – 1629. The double victory in the history of The Netherlands (in the words of the national poet Constantijn Huygens)

1628 Admiral Piet Hein captured the Spanish Silver Fleet.

1629 Professor Jacobus Golius came back from Aleppo and Istanbul with a treasure of manuscripts.

- What had Golius been looking for, and why?
- What use did he have for these books, many of which are still unique copies of scientific texts?
- And how have these text been used up till now?

The Spanish silver was used in the war of the Dutch against Spain and was soon exhausted. Golius’ manuscripts form a more lasting treasure.
Dutch fleet commander, admiral Piet Hein (1577-1629), who on 8 September 1628 captured the Spanish Silver Fleet in the battle of Matanzas, off the coast of Cuba.

The enormous booty amounted to the equivalent of half a billion euro in present-day currency. It was welcome money to finance the war against Spain.

Copy of 1629 of a painted portrait by Jan Daemen Cool.
The Leiden professor of Arabic and Mathematics, Jacobus Golius (1596-1667).

Golius came to Aleppo in 1625 in order to collect Islamic manuscripts for the Oriental collections of the Leiden University Library.

19th-century lithograph copy of a painted portrait. (private collection)
Leiden University Library (founded in 1587) in its early years (1610): open access to chained books, arranged according to subject, closed cupboard (right), the library as a meeting place. Location: a confiscated church.

(Source: Hand coloured engraving by W. Swanenburgh after the drawing by J.C. Woudanus, 1610)
Leiden University Library in its new building at Witte Singel. A modern building of 1983, designed by architect Bart van Kasteel. The first building of the Leiden Library which was especially designed as a Library.
Interior of the Leiden Library in its new building at Witte Singel.

Seen from above: the lending desk and the exhibition room.
A history of cultural exchange

Sources for a history of cultural exchange between Aleppo and Leiden are scarce.

There are no chronicles, diaries, travelogues, archives and very few letters which could illustrate significant exchanges on a cultural or scientific level.

The only material which yields some information, and that by implication only, consists of the manuscripts which Jacobus Golius collected while in Aleppo and Istanbul between 1625-1629.

Data are so rare even, that it is impossible now to know with certainty which manuscripts were acquired by Golius where.
Golius’ imperatives

Jacobus Golius was primarily looking for Islamic books (= manuscripts) which could be useful for his research and the academic research imperatives in Renaissance Europe.

This implied that he had a keen eye for works related to Classical Antiquity, more specifically scientific works which were direct translations from Greek into Arabic, or scientific works by Muslim scholars which contained elaborations of Greek works and original contributions by Muslim scholars to fields of science.

In the following a survey is given of some of the manuscripts which Golius collected in the Levant. All manuscripts shown have been preserved in Leiden for almost four centuries, and have been important sources for European research on Oriental languages and cultures.
Whenever Golius was unable to purchase a certain manuscript, he had it copied.

An example is the copy of the Algebra by the mathematician `Umar Khayyam: Maqala fil-Gabr wal-Muqabala.

Probably copied in Aleppo, c. 1625.

Source: MS Leiden, Or. 14, p. 175.
Beginning of the fifth *maqala* of the Arabic translation of the Book on Conic Sections (*Kitab al-Makhrutat*) by Apollonius of Perga (c. 262-190 BC). The Arabic version gave text that was lost in the Greek tradition. Golius had privately acquired a magnificent manuscript of the text. This copy he had made to serve as a working copy. It was copied by a scribe in Aleppo, Derwish Ahmad, the illustrations were drawn by Golius himself.

Source: MS Leiden, Or. 14, p. 1.
The final page of the Arabic translation of the Book on Conic Sections (Kitab al-Makhrutat) by Apollonius of Perga, in the manuscript commissioned by Golius.

Copied in 1036/1627 from a manuscript copied in al-Maragha in 702/1303.

Source: MS Leiden, Or. 14, p. 163.
A page from a recently identified part of the *Kitab al-Istikmal* (‘The search for perfection’), the large compilation on geometry by the prince of Saragossa (al-Andalus), al-Mu’taman b. Hud (c. 478/1085). This work had been considered lost for a long time. Prof. Jan Hogendijk (Utrecht University) was able to identify this and a few other fragments of the work.

Source: MS Leiden, Or. 123, f. 2a.

Al-Gazari described a great number of such machines, but it is doubtful whether they ever came beyond the stage of a prototype.

Source: MS Leiden, Or. 117, p. 18.
An automaton of a moving bird, from an older collection of designs. From an anonymous treatise in a collective volume with mechanical and mathematical treatises.

To judge from the script the treatise must be somewhat earlier than the work of al-Gazari.

Source: MS Leiden, Or. 168, f. 70a.
Arabic translation of the Barulcus by Heron of Alexandria, the treatise on how to move heavy objects with a minimum of effort.

Source: MS Leiden, Or. 51, pp. 60-61.
Arabic translation (ascribed to Ibn al-Bitriq) of part of the Aristotelian zoology.

Source: MS Leiden, Or. 166, ff. 2b-3a.
A collective volume with texts on physiognomy (firasa), dated Damascus 757/1356.

The text by al-Gahiz is unique. Of the text by Aflimun (Polemon) one more manuscript exists, but the original Greek text has not been preserved.

Source: MS Leiden, Or. 198, f. 2a.
Colophon of the work on physiognomy (firasa) by Aflimun (the Hellenistic author Polemon), dated Damascus 757/1356.

Source: MS Leiden, Or. 198, ff. 75b-76a.
Fraudulent practices by scientific tricksters are described by al-Gawbari (d. 620/1223). Manuscript dated 715/1315. Images of vessels that pour out two different fluids.

Source: MS Leiden, Or. 191, ff. 79b-80a.
Hall Mushkilat al-Isharat, the commentary by Nasir al-Din al-Tusi (d. 672/1273) on al-Isharat wal-Tanbihat fil-Mantiq wal-Hikma by Ibn Sina (d. 428/1037).

Colophon dated beginning Dhu al-Qa`da 672 (1274), copied from the autograph, after a reading with the author (al-Tusi), by the copyist Muhammad b. `Ali b. al-Hakim al-Bayhaqi, in Dar al-Zarqa, in Madinat al-Salam (Baghdad).

Source: MS Leiden, Or. 95, f. 310a
Reading protocols (qira’at) at the end of the manuscript of *Hall Mushkilat al-Isharat*, the commentary by Nasir al-Din al-Tusi (d. 672/1273) on *al-Isharat wal-Tanbihat fil-Mantiq wal-Hikma* by Ibn Sina (d. 428/1037).

Readers’notes by Jewish and Christian scholars in Mosul, some with dates:

Source: MS Leiden, Or. 95, f. 310b
Readers’ note in Arabic at the end of a Persian translation of the Arabisch translation of Nasir al-Din al-Tusi (d. 672/1273) of the Book Karpos ascribed Ptolemy.

Reader’s note by Muhammad b. Sartan (?) b. Chuban (Huban?) al-Maraghi, dated Ragab 725 (1325) in Niksar al-Mahrusa (Neo-Caesarea, in Bythinia).

Source: MS Leiden, Or. 96, f. 19a
Important provenances

The example of Taqi al-Din Ibn Ma`ruf, court astronomer of the Ottoman Sultan Sulayman the Magnificent.

From top to bottom, taken from title-pages of *al-Muqaddima* by Ibn Khaldun; *al-Zig al-Kabir al-Hakimi*, by Ibn Yunus; collective volume with texts on mechanics and mathematics. Sources respectively: MS Leiden, Or. 48, f. 1a, detail; Or. 143, detail title-page; Or. 168, f. 1a, detail.
Letter from the Aleppo poet Muhammad al-`Urdi al-Halabi to Jacobus Golius. Undated, possibly from the 1650’s and possibly sent from Istanbul.

The poet Muhammad al-`Urdi (died in Aleppo in 1071/1660) had come from Aleppo to Istanbul. His merry life in the Ottoman capital has found a reflection in his poetry, some of which has been preserved in al-Muhibbi’s *Khulasat al-Athar*. Later he become a Shafi’ite judge in Aleppo.

Source: MS Leiden, Or. 1228, No. 65.