https://blogs.bl.uk/asian-and-african/2019/07/-125-more-arabic-scientific-manuscripts-in-the-gatar-digital-library.html

## 04 JULY 2019

## 125 More Arabic Scientific Manuscripts in the Qatar Digital Library

The second phase of the British Library/Qatar Foundation Partnership digitisation project has now come to a successful close. You can find lists of the 80 manuscripts digitised during the first phase of the project here and here, and as we enter the project's third phase, we are delighted to present an overview and complete list of the 125 Arabic scientific manuscripts digitised during the second phase.



Diagram from al-Mawşilī's *al-Durr al-naqī fī fann al-mūsīqī* showing the interrelations between the musical modes, the letters of the alphabet, the four elements, the days of the week, the hours of the day, the celestial spheres and the signs of the zodiac (Add MS 23494, f. 6r)

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In this phase of the project, we have continued to digitise such classics of Arabic scientific literature as Ibn Sīnā's *al-Qānūn fī al-tibb* (i.e. Avicenna's *Canon of Medicine*: Or 3343, Or 4946 and Or 6537), Ibn al-Haytham's, *Maqālah fī şūrat al-kusūf* (e.g. Alhazen's, *Epistle on the Image of the Solar Eclipse*: Or 5831), al-Rāzī's, *al-Ḥāwī fī al-tibb* (i.e. Rhazes' *Liber continens or All-containing Book*, Arundel Or 14), Bahā' al-Dīn al-ʿĀmilī's Khulāşat al-ḥisāb (Summa of Arithmetic: Delhi Arabic 1919) and Naşīr al-Dīn al-Ṭūsī's *al-Tadhkirah fī al-hay'ah* (*Memoirs on Cosmology*, Add MS 23394).

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Magic square (*wafq*) of 28 x 28 cells from the *Dīwān al-ʿadad al-wafq* (Delhi Arabic 110, ff. 108v-109r)

We have also digitised manuscripts pertaining to the subsequent commentary traditions inspired by major texts such as those inspired by Ibn Sīnā's *al-Qānūn fī al-țibb* (Or 5931, Or 3654, Or 14154, and IO Islamic 854), al-ʿĀmilī's *Khulāṣat al-ḥisāb* (Delhi Arabic 1896 and IO Islamic 1362) and al-Ṭūsī's *al-Tadhkirah fī al-hay*'ah (IO Islamic 1715, Or 13060, IO Islamic 1715, Delhi Arabic 1934, Add MS 7472, and Add MS 7477).





Title page of al-Qaşrānī's *Kitāb al-masā`il* dated 768/1367, with patron statement of the Mamluk amir Sayf al-Dīn Asandamur al-Nāşirī (d. 769/1368) (Delhi Arabic 1916, vol. 1, f. 1r)

Arabic continued to be a language of fertile scientific discourse well beyond the time period and geographic range traditionally associated with the so-called 'Golden Age of Islam'. In order to illustrate this, we have digitised Arabic scientific manuscripts preserving texts written from the 9th to the 18th

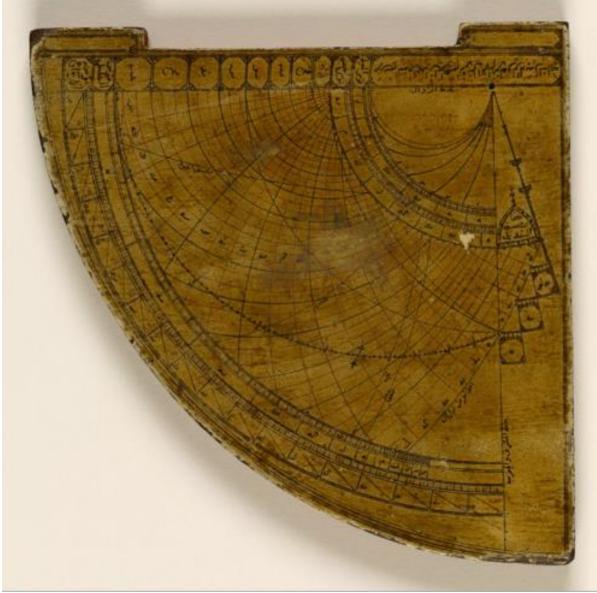
centuries that showcase the scientific endeavours of Islamicate peoples from Islamic Spain, across North Africa, the Arabian Peninsula, the Near East, Anatolia, Iran, Central Asia and India.

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Title page of the Kitāb fī al-shatranj wa-manşūbātihi wa-mulahih on which the seal of the Ottoman

## sultan Bāyezīd II (reg. 1481-1512) can be seen in the lower left corner (Add. MS 7515, f. 1r)

You will find medical, astronomical and mathematical works produced in thirteenth-century Rasūlid Yemen (Or 3738, Or 9116, Delhi Arabic 1897); a commentary on Euclid's *Elements* by al-Kūbanānī, court astronomer and mathematician to the Aq Qoyunlu sultan Abū al-Muẓaffar Ya'qūb ibn Uzun Hasan (reg. 1478-90: Or 1514); Ottoman works such as, a medical text by Ibn Sallūm, personal physician to the Ottoman sultan Mehmet IV (reg. 1648-87), which responds to the 'new (al)chemical medicine' (*al-țibb al-jadīd al-kīmāwī*) of Paracelsus and his followers (Or. 6905) and a book of astronomical tables for Cairo by the eighteenth-century astronomer Ridwān Efendi al-Razzāz (Or 14273); and seventeen manuscripts from the British Library's Delhi collection , which cast light on the collection, copying and production of Arabic scientific literature in Mughal India.



Astrolabe quadrant produced in 1256/1840-1 and signed by its maker, Ahmad ibn Ibrāhīm al-Sharbatlī (Or. 2411/2, Side A)

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We have also expanded the boundaries of what we consider to be 'scientific' literature to include related subjects such as zoology, veterinary medicine and animal husbandry (Delhi Arabic 1949, Add MS 21102, Add MS 23417, Or 15639 and Or 8187) and two works on chess (Add MS 7515 and Or

9227). Hoping to go beyond what is expected from our digitisation project, we have even digitised a scientific instrument: a quadrant we discovered boxed with a earlier manuscript of a user's manual for such a device (Or 2411/2).

Bio-bibliographical note in the rough draft of an Arabic translation of Gnomonices libri octo by

Christophorus Clavius (d. 1537 or 38). The translation is by Rustam Beg al-Hārithī al-Badakhshī ibn Qubād Beg (d. 1705) and the note is by his son, Mīrzā Muḥammad – more on this in our earlier post East-West knowledge transfer in Mughal India (IO Islamic 1308, f. 1v)



Colophon of a copy of Saʿīd ibn Hibat Allāh's *al-Mughnī fī tadbīr al-amrāḍ wa-maʿrifat al-ʿilal wa-al-aʿrāḍ* produced at Baghdad 1172 (IO Islamic 3810, f. 105r)



We are currently finalising the scope of the third phase of the British Library and Qatar Foundation Partnership, which will include such highlights as early copies of the *Rasā'il Ikhwān al-Ṣafā'*, a large and early manual of dream interpretation and the British Library's second oldest Arabic scientific manuscript (click here to see the oldest). Keep your eye on the Qatar Digital Library to see the newest manuscripts as they are digitised and posted.

For a complete list of the 125 manuscripts together with hyperlinks to the images download Qatarscientific-mss-phase-2

Bink Hallum, Arabic Scientific Manuscripts Curator, British Library Qatar Foundation Partnership