

Knowledge in Transition: Scientific Exchanges in Medieval and Early Modern Eurasia, ca. 750-1750

Istanbul, 22 November 2021, Institut Français d'Études Anatoliennes
Organised by Aida Alavi, Francesco Calzolaio, Florence Somer, and Alessia Zubani

09:30-10:00: Introductions

10:00-12:00: Session 1, “Technological Transfers in the Eastern Mediterranean”

- Alessia Zubani (Labex Hastec, EPHE-PSL; AOROC), “From Constantinople through Baghdad to Aachen: Technological Marvels as Diplomatic Gifts in the Medieval Mediterranean (8th-11th centuries)”
- Gaye Danişan (Istanbul Üniversitesi), “A Comparative Study of Ottoman Perpetual Calendars: Şeyh Vefâ's *Râzînâme* and its copies”
- Taha Yasin Arslan (Istanbul Medeniyet Üniversitesi), “Reutilizing the Astronomy in the Islamic World: The Case of John Greaves”

12:00-14:00: Lunch break

14:00-16:00: Session 2, “Learned Traditions from Iran to Anatolia”

- Florence Somer (EPHE-PSL; CERMI), “The astrological-apocalyptic tradition of the predictions of Jāmāsp (*Aḥkām-i Jāmāsp*) from Central Asia to Turkey”
- Selin Altunsoy (EHESS, Université Libre de Bruxelles), “From *Kosrow o Şirîn* to *Ferhat ile Şirin*: Between Permanence of the Iranian Narrative and Innovation of the Ottoman Narrative”
- Aida Alavi (Université de Bordeaux Montaigne, AUSONIUS), “The Sky Beyond Borders: The Visualization of Heaven from Science to Popular Beliefs”

16:00-16:15: Break

16:15-17:30: Session 3, “Western Eurasia and the Wider World”

- Francesco Calzolaio (Università Ca' Foscari Venezia), “Translating China: A Persian Historian in Berlin, an Italian Missionary in Delhi, and the Transmission of Sinological Knowledge in the Global Seventeenth Century”
- Feray Coşkun, (Özyeğin Üniversitesi), “Medieval Cosmography Tradition and Its Impact over Ottoman Worldview”

Abstracts

Session 1, “Technological Transfers in the Eastern Mediterranean”

Alessia ZUBANI, Labex Hastec, École Pratique des Hautes Études-PSL ; AOROC

From Constantinople through Baghdad to Aachen: Technological Marvels as Diplomatic Gifts in the Medieval Mediterranean (8th-11th centuries)

This talk explores the role that ingenious devices, i.e., mechanical contrivances which, through an external stimulus and hidden mechanisms, activated a variety of visual effects, played in diplomatic relations between the Latin West, the Greek East, and the Middle East in the early medieval world. Primary sources report that the Carolingian, Byzantine, and Abbasid courts regularly exchanged ingenious devices such as water clocks and automata as part of their diplomatic practices. By focusing on several accounts of diplomatic activities between these courts, this paper examines the ambassadorial practices leading to the exchange of ingenious devices and explores their political value to frame automata as the product of an international courtly culture. A corollary result of this paper is to show how gift-giving could contribute to the translation and transmission of technological knowledge in the early medieval world.

Gaye DANIŞAN, Istanbul Üniversitesi

A Comparative Study of Ottoman Perpetual Calendars: Şeyh Vefâ's *Rûznâme* and its copies

Ottoman perpetual calendar (*rûznâme*, *takvîm-i dâimî* or *takvîm-i devr-i dâimî*) in the form of codex or scrolls designed for long term use represents the Ottoman contribution to Islamic science. The earliest known Ottoman perpetual calendar was prepared by Mustafa bin Ahmed as-Sadrî al Konevî, known as Şeyh Vefâ (d.1491). His perpetual calendar remained popular throughout the Ottoman era for several centuries, and the other Ottoman scholars followed the method and style in Şeyh Vefâ's perpetual calendar. The preliminary study indicated 54 copies of the perpetual calendar under the title of *Rûznâme-i Şeyh Vefâ*, similar to or partly identical to the oldest one. This paper aims to compare and analyse these copies to help answer the following set of questions regarding the works themselves: What are the content and the structural characteristics of Şeyh Vefâ's perpetual calendar? What was a copier's criteria for including or omitting parts from Şeyh Vefâ's *Rûznâme*? Does a comparison of copies of Şeyh Vefâ's *Rûznâme* give us a clue about a copier's approach? Is it possible to accept the *Rûznâme* as one of the sources of scientific knowledge transmission in the Ottoman world?

Taha Yasin ARSLAN, Istanbul Medeniyet Üniversitesi

Reutilizing the Astronomy in the Islamic World: The Case of John Greaves

Astronomical knowledge produced in the Islamic world between the 9th and 16th centuries were at the epicentre of transition and transmission of knowledge both within the Islamic world and between the East and West. The information embedded in astronomical handbooks (*zīj*es), mathematical textbooks, timekeeping applications, and astronomical instrumentation were disseminated through various mediums such as manuscript copies, traveller accounts, astronomical instruments, and in particular, the personal experiences of roaming scholars. The aim of this paper is to provide an inside to the works of one such scholar, John Greaves, a 17th century English astronomer. He learned Arabic, Persian, and a little bit of Turkish and visited Istanbul, Cairo, and Alexandria, where he conducted astronomical observations. He pursued knowledge on astronomy in the Islamic world and consequently employed it in his core research on topics such as calendars and mapmaking.

Session 2, “Learned Traditions from Iran to Anatolia”

Florence SOMER, École Pratique des Hautes Études-PSL ; CERMI

The astrological-apocalyptic tradition of the predictions of Jāmāsp (*Aḥkām-ī Jāmāsp*) from Central Asia to Turkey

Stemming from an apocalyptic tradition elaborated since antiquity in a Zoroastrian Sassanid milieu, known and still experienced by Zoroastrians today, the textual tradition of the *Aḥkām ī Jāmāsp*, 'Prophecies of Jāmāsp', remains enigmatic both in terms of its elaboration and its eventual development in Middle Persian before its tradition in Persian, Arabic and its Turkish adaptation in various Shi‘ite and Sunni cultural milieux. Although some copyists assure us that they have an original in Middle Persian, we have no trace of it at the moment. Two factors make this acceptance delicate: On the one hand, the scarcity of Iranian sources in Middle Persian and the loss of materials written in this language compared to those from Greece or India. On the other hand, the difficulty of deciphering this archaic script means that half of the few sources that have come down to us remain unpublished to this day. We will therefore focus this presentation on the Arab and Persian context and the development of this textual tradition in two particular periods: during the emergence of Ismaili and Qarmati power in the tenth century and shortly before the Mongol invasions of the thirteenth century. We will also discuss the circumstances of the passage of this tradition into Turkish circles and the various borrowings from which it was subjected.

Selin ALTUNSOY, École des Hautes Études en Sciences Sociales ; Université Libre de Bruxelles

From *Kosrow o Šīrīn* to *Ferhat ile Šīrīn*: Between Permanence of the Iranian Narrative and Innovation of the Ottoman Narrative

The well-known *bikāye* of *Kosrow o Šīrīn* written in 1180 by Neẓāmi Ganjavi has been reappropriated initially by Iranian poets throughout the 13th century and has then become popular in Ottoman history, among Ottoman writers and court poets. It has first been translated into Kipchak dialect in the 14th century by Kutub. It is however from the 15th century with Nawāʾī's pen that the *bikāye* experiences a turning point as the title changes for *Farhad va Šīrīn* and stresses the narration on these two characters instead of the Sassanian Prince. We shall therefore analyse the reasons to these changes and how they occurred from Neẓāmi's poem to the early popular narratives that we possess.

Aida ALAVI, Université de Bordeaux Montaigne, AUSONIUS

The Sky Beyond Borders: The Visualization of Heaven from Science to Popular Beliefs

The purpose of depicting Heaven in Safavid art contains two major meanings. On the one hand, it represents the heavenly legitimacy of Shiite doctrines as well as this new dynasty founded by a Sufi order of sovereignty; a subject that has previously been explored, particularly in the case of *Falnama*, or the Book of Omens, in both Safavid and Ottoman contexts. On the other hand, it is characterized by a powerful explanation of how astral bodies manifest through visualization based on Sufi doctrines and supernatural beliefs. According to this concept, the representation of astral bodies in art is an earthly manifestation that affects the celestial destiny either by increasing or decreasing it on earth. In this presentation, these types of visualizations based on the scientific origins which are more clearly seen in public entertainments by both Safavid and Ottoman dynasties will be discussed.

Session 3, “Western Eurasia and the Wider World”

Francesco CALZOLAIO, Università Ca' Foscari Venezia

Translating China: A Persian Historian in Berlin, an Italian Missionary in Delhi, and the Transmission of Sinological Knowledge in the Global Seventeenth Century

In many respects, the seventeenth century marks a golden era in the early European study of China, eliciting questions on subjects as diverse as its territory, populations, government, language, history, and culture. This development, however, is not unique in the history of early modern Western Eurasia. Starting with the late thirteenth century, a similar fascination with China indeed grips Persian intellectuals, leading to the emergence of a veritable “Persian proto-sinology” whose contours remain largely unexplored. This paper explores the connection between these two intellectual trends by discussing as many cases of Persian to Latin and Latin to Persian transmission of books about China. Besides providing us with two fascinating vignettes of early modern connected history, these case studies offer a stark empirical proof of how the history of European and Persian proto-sinology could intertwine and inform one another. In the process, they show how early modern European

and Persian intellectuals inhabited an expanded “republic of letters” whose immediate contours market it as “Latinated” or “Persianated”, but whose horizon receded as far as Eurasia, and even beyond.

Feray COŞKUN, Özyeğin Üniversitesi

Medieval Cosmography Tradition and Its Impact over Ottoman Worldview

Ottoman translations of medieval cosmographies, particularly Wonders of Creation and Oddities of Existence (*Ajā'ib al-Makblūqāt wa Gharā'ib al-Manjūdāt*) by at-Tūsī and al-Qazwīnī were widely read in the Ottoman world and inspired Ottoman literati to compose similar works. Reminding one of natural encyclopedias, the cosmographies described terrestrial and heavenly realms, and offered explanations for natural phenomena (i.e., the ebb and flow, earthquakes) in the light of various ancient scientific, philosophical and religious traditions. Although the Ottoman understanding of the cosmos underwent revisions in time in favour of the modern Western geographical and cosmological worldview, the early Ottoman cosmographies continued to be copied and read through to the nineteenth century. This paper explores the view of cosmos offered by medieval cosmographies and scrutinize its potential impact over Ottoman Weltanschauung.