



Séminaire histoire des sciences, histoire du texte

organisé par Karine Chemla et l'ensemble du groupe HSHT

Université Paris Diderot - bâtiment Condorcet - Salle 647A - 9h30 à 17h30

<https://sawerc.hypotheses.org/seminars/hsht-2019-2020>

14 November 2019

Topic: Shaping and reshaping scholarly texts — part 1

Nick Jacobson (SYRTE-Observatoire de Paris, France)

Ordering Language to Order the Heavens:

A View of Alfonsine Astronomical Canons at the Level of the Manuscript

Abstract: From the fourteenth century until the middle of the sixteenth, most practitioners of medieval Latin astronomy relied, at least in part, upon a set of tables composed in Toledo and named after their patron, King Alfonso X of Castile (r. 1252-1284). As these tables circulated, they were often accompanied by a set of rules, known as canons, that instructed the reader in how to perform a variety of operations in positional astronomy. In the contemporary scholarly literature, canons are often treated peripherally as a set of instructions to be mastered by novices, and then set aside. From the perspective of the historical actors, however, the canons were integral to astronomical practice. They provided an organizing structure and hierarchy of language that played a crucial role in imparting practical knowledge. Astronomers who wrote canons frequently commented on the novelty, clarity, or utility of the order (*ordinatio*) and compilation (*compilatio*) of their work. In this presentation, I focus on the authors of two Latin canon texts: Jean de Murs (d. ca. 1355) who worked in a French context, and Nicholas of Aquaeductu (fl. 1410) who was Italian. I argue that Jean de Murs and Nicholas of Aquaeductu adapted the conventions of *ordinatio* and *compilatio*, which were shared across a variety of learned communities in medieval Europe, to the canons. Using these conventions, the authors sought to clarify and synthesize large bodies of material using technical language and manuscript formatting as ordering technologies. In the light of this interpretation, I argue that *ordinatio* and *compilatio* are useful analytical categories even when canon sets express great variation across manuscript witnesses.

WANG Hsien-chun (Ts'ing-hua University, Taiwan)

Preliminary thoughts on the pictorial errors of the Illustrated Treatise on the Marvellous Machines of the Far West (Yuanxi qiqi tushuo) - 1672

Abstract: One of the most fascinating cases in the history of the transmission of scientific and technological knowledge between China and Europe is the book *Qiqi tushuo* (1672). It was co-authored by the Jesuit Johannes Schreck (Terrenz or Terrentius Constantiensis) and the Chinese scholar-official Wang Zheng (1571-1644) on the basis of several European scientific and technological treatises, including Simon Stevin's (1548-1620) *Hypomnemata Mathematica* (1608), Galileo Galilei's *Le Mecaniche* (1600), Agostino Ramelli's *Le Diverse e Artificiose Machine del Capitano* (1588), and Vittorio Zonca's *Novo Teatro di Machine et Edificii* (1607). Historians of science and technology have noticed the discrepancies between the *Qiqi tushuo* illustrations and their European sources, debating on the implications of the errors. Some argue that they are the evidence of lack of visual thinking among Chinese artisans, and hence the proof of China's lack of technological revolution. Yet, it is highly likely that the errors were just common editorial errors because the author Wang Zheng had

never had the chance to correct them before his manuscript was turned into a woodblock-printed book. After its publication in 1672, the book was popular among Chinese literati and was reprinted and hand-copied in the following two centuries. The history of the errors told us more about how the images of novel machines were appreciated in China before modern times than the shaky argument of visual thinking or mental imaging in technological changes.

Jacob Olley (Universität Münster, Germany)

Ottoman Texts on the Science of Music

Abstract: This seminar will explore the ‘science of music’ (‘ilm-i mûsîkî) as manifested in Ottoman Turkish texts written between the sixteenth and nineteenth centuries. I will introduce some of the key Ottoman writings on music, and situate them within the larger context of Islamic approaches to systematic knowledge. I will focus on music treatises as a textual genre, in order to illuminate the literary conventions that shape the Ottoman discourse on music, as well as other devices used to convey musical information, such as tables, diagrams, illustrations, and notation. The seminar will discuss the main theoretical aspects of music treatises, including taxonomy and nomenclature, acoustics and mathematics, cosmology and other extra-musical associations, and the psycho-physical effects of music. At the same time, it will highlight the relationship between theoretical and practical knowledge, and the role of texts in music pedagogy, transmission, and performance. In this way, I will discuss how the multiple functions of musical texts relate to the historical and social environments in which they were produced and consumed.
