

OBSERVING NATURE, INTERPRETING SIGNS: SCIENTIFIC KNOWLEDGE PRODUCTION IN THE ANCIENT WORLD

SCIPAP CONFERENCE 2024, UNIVERSITY OF TÜBINGEN, SEPT. 30TH–OCT. 1ST

LIST OF SPEAKERS AND PAPER TOPICS

1) Troels Pank Arbøll, Assistant Professor of Assyriology, University of Copenhagen

“Why Do You Not Diagnose the Nature of this Illness of Mine?” A Closer Look at Sickly Esarhaddon

Everyone seems to agree that the Neo-Assyrian king Esarhaddon’s health deteriorated during the final years of his reign. His sickly disposition is particularly well known from his correspondence with scholars at court. Following Simo Parpola’s comprehensive study of this correspondence in 1983, in which he even diagnosed Esarhaddon with *systemic lupus erythematosus*, it has become an established fact that Esarhaddon suffered from a serious, chronic disease of some sort. In this talk, I will revisit what is actually known about Esarhaddon’s health and assess the previous research on possible diagnoses in order to provide a contextualized synthesis of the evidence.

2) Claire Bubb, Assistant Professor of Classical Literature and Science, New York University (ISAW)

The Anonymous London Papyrus and the Relationship between Food and Disease in Early Greek Medical Thought

The Anonymous London Papyrus, which contains a Greek text dating from the first century CE found in Egypt, includes a doxography of the theories of disease causation of a variety of Greek medical authors. The text includes many otherwise unknown theories, as well as ideas attributed to Hippocrates and Aristotle, which are fascinating to compare to the versions in our received Hippocratic and Aristotelian texts. This paper will focus specifically on the diverse roles that the authors mentioned in the papyrus assign to food and digestion in the origins of disease and relate these views to broader debates on the subject in their period.

3) Ida Adsbøl Christensen, PhD candidate in Egyptology, New York University (ISAW)

Assigning the Decans to the Zodiac according an Unpublished Decanal Handbook in Demotic

This paper discusses the assignments of the decans to the zodiac found in an unpublished astrological handbook on personal astrology from the Tebtunis temple library. The text includes lists of the decans for each of the zodiacal signs with specifications of their degrees as well as lengthy sections providing the influences of the heavenly bodies within the decans and signs.

4) Sean Coughlin, Junior Star Research Fellow in the History of Science, Czech Academy of Sciences

Perfumery and Alchemy in the Ancient World

Papyrus P. Oxy. 5242 contains three recipes for the preparation or 'stypsis' of oils used in perfumery. Scholars have noted the importance of the papyrus for the history of perfumery. In this paper, I show that its significance extends beyond perfumery to the history of practical chemistry in general. I do this by exploring previously unnoticed parallels between the 'stypsis' recipes in this papyrus and in the alchemical Leyden Papyrus X and Papyrus Graecus Holmiensis. Common to all three, I argue, are shared assumptions about the nature of matter and methods of its manipulation in Roman Egypt. These assumptions will be explored through practical recreations of the processes involved.

5) Marina Escolano-Poveda, Senior Lecturer in Classics/Ancient History and Egyptology, University of Liverpool and Kim Ryholt, Professor of Egyptology, University of Copenhagen (presented by Marina Escolano-Poveda)

Heavenly Bodies: Astrological Physiognomies in Egypt and Qumran

Among the texts found in the caves of Qumran, three have been classified as physiognomic in content: 4Q186, 4Q561, and 4Q534. Of these, 4Q186 (also known as 4QZodiacal Physiognomy) combines physiognomy with astrology. These texts, which date to the late first century BCE, have been examined in comparison with Mesopotamian and Graeco-Roman physiognomic and physiognomic-astrological sources in order to elucidate their meaning. Our paper analyses the Qumran material for the first time in parallel to a series of unedited Demotic astrological handbooks dating from the second century BCE to the second century CE. It offers new clues for the understanding of the contents as well as the context of the Qumran texts, and the transmission of astral knowledge in the Hellenistic period between Egypt and the Eastern Mediterranean.

6) Victor Gysembergh, Research Professor of the History of Science, French National Centre for Scientific Research

Eudoxus of Cnidus, Hipparchus of Nicaea, and Egyptian Astronomy

Eudoxus of Cnidus and Hipparchus of Nicaea are two of the main contributors to early Greek astronomy. This paper explores long-standing issues in their descriptions of the fixed stars and of the celestial motions in order to examine previously unnoticed influences of Egyptian astronomy on their work. Building on this, the paper will explore possible contexts in which such interaction may have taken place and underlying epistemological debates.

7) Friedhelm Hoffmann, Professor of Egyptology, Ludwig-Maximilians-Universität München

Identifying an Ancient Egyptian Plant: the *tby*-plant

The paper will present a case study from the demotic medical text Papyrus Vienna D 6257 of the plant *tby*. The case study will demonstrate the pitfalls of attempting to identify ancient herbal drugs, while suggesting a new botanical identification.

8) Alexander Jones, Professor of the History in the Exact Sciences in Antiquity, New York University (ISAW), with Francesca Schironi, Professor of Classical Studies, University of Michigan

P.Hib. 1.27 Revisited

Recovered in multiple fragments from early 3rd century BCE mummy cartonnage, *P.Hib.* 1.27 is the earliest known Greek astronomical papyrus, and the earliest example in any medium of a “parapegma” text of the type represented in inscriptional form by I.Milet. inv. 456A–D + 456N (2nd century BCE) and by the so-called “Geminus Parapegma” transmitted through the medieval tradition as a sort of appendix to Geminus’s *Introduction to the Phenomena*. In connection with our forthcoming edition of *P.Par.* 1 (the “Ars Eudoxi” papyrus, 2nd century BCE), we will present a reexamination of *P.Hib.* 1.27 with particular emphasis on some of its unusual features: the structuring of its data on the civil Egyptian calendar year instead of the solar year, its inclusion of festival dates and computed lengths of day and night, its problematic references to the Sun’s presence in zodiacal signs or constellations, and its textual and astronomical coincidences with *P.Par.* 1.

9) Ulla Koch, Dr.phil. in Assyriology, independent researcher (Copenhagen)

The Placebo-Effect in Ancient Mesopotamian Medicine and Magic

The paper will focus on the placebo effect in ancient Mesopotamian medicine and magic. Placebo is known to be especially efficient against physical and psychological pain, but it can aid the body cure itself also from life-threatening conditions. There is an anecdote about a woman lying on her deathbed, her doctor does not want to upset her and says to the nurse “moribunda.” The woman—who obviously was not a classical scholar—thought the word sounded very positive and went on to live for another decade. I will investigate whether and how Mesopotamian medical and magical rituals and practices tapped into this powerful healing resource.

10) Levente László, Dr.phil. in Classics, independent researcher (Budapest)

Lots and Places by Sign and by Degree in Hellenistic Astrology

In Hellenistic astrology, specific meanings were assigned to parts of the zodiac by casting “lots” and establishing “places.” These two tools represented two divergent approaches stemming from a core set of ideas, but they were still interrelated in various ways. Both lots and places could be defined broadly by sign and more accurately by degree, but it is argued that not only did the more accurate versions remain largely a theoretical possibility, they were also not considered replacements but co-existing alternatives of their broadly defined counterparts.

11) Christian Leitz, Professor of Egyptology, Eberhard Karls Universität Tübingen (keynote)

The Astronomical Ceiling in the Temple of Esna

The paper will introduce the newly uncovered astronomical ceiling in the Temple of Esna in Egypt. The ceiling includes a complete depiction of the signs of the zodiac alongside reliefs of the planets Jupiter, Saturn, and Mars, and a number of stars and constellations used by the ancient Egyptians to measure time. Representations of the zodiac are very rare in Egyptian temples—besides the one in Esna, only two completely preserved versions are preserved from Dendera. The zodiac itself comes from Babylonian astronomy and does not appear in Egypt before Ptolemaic times.

12) Alexandra von Lieven, apl. Prof. of Egyptology, Universität Münster

Production and Reproduction of Knowledge. On the Transmission History of the Classical Sky Picture

The Egyptian Classical Sky Picture is a pictorial composition showing a starry night sky. Thus, sun and moon are missing, but the planets as well as the decans (including Sothis-Sirius and Orion) in the Southern Sky and the fixed stars including the circumpolar ones in the Northern Sky are all present. The lecture will follow the sometimes convoluted history of this composition through the millennia of its attestation in Egypt and Nubia.

13) Tanja Pommerening, Professor of the History of Pharmacy and Medicine, Philipps-Universität Marburg

News from Combining the Disciplines of Egyptology, History of Pharmacy and Medicine, and Sciences

Several projects are currently underway in Marburg that deal with the analysis of embalming substances. The results have an influence on lexicographical considerations for medicinal recipes and allow us to rethink the ingredient profiles of the recipes from a past and present perspective.

14) Luigi Prada, Assistant Professor of Egyptology, Uppsala University

Physical Blindness or Loss of Faith?

The paper will look into the graffito of Pawah, an Amarna-period instance of secondary epigraphy found in the Theban tomb of Paury (TT 139). The graffito discusses the topic of darkness and blindness, which has often been interpreted as a metaphorical mention to the banning of Amun during the reign of Akhenaton. An alternative interpretation, however, sees in it a reference to the frequent cases of (temporary) blindness, due to eye infection, from which many ancient Egyptians suffered. Through the analysis of the graffito's language, and comparison with contemporary texts concerning eye infections, it will be argued that the latter is indeed the correct understanding of this graffito.

15) Joachim Quack, Professor of Egyptology, Ruprecht-Karls-Universität Heidelberg

Some Remarks on Divination by Means of Animals in Ancient Egypt

The presentation will look into the Egyptian evidence for animals used to predict the future. This occasionally involves extraordinary events but mostly concerns observations of everyday behavior, quite like the “terrestrial omina” well known from Mesopotamia. It will make use not only of published sources, but also of a largely unpublished, substantial demotic manual transmitted in a copy from the Roman period.

16) Sofie Schiødt, Humboldt postdoctoral research fellow, Eberhard Karls Universität Tübingen

Spit Happens! The Use and Concept of Spit in Egyptian Medicine

The use of spit in Egyptian medical treatments is very uncommon—indeed, until the recent addition of Papyrus Louvre-Carlsberg, less than a handful of such treatments were known to us. In this paper, I will present the newly enlarged corpus of recipes based on spit and discuss the conceptualizations of the bodily substance that underlie its uses.

17) John Steele, Professor of the History of the Exact Sciences in Antiquity, Brown University

Tabular Formatting of Compilations of Astronomical Observations in Cuneiform

Babylonian observational astronomy yielded a rich textual corpus including the so-called Astronomical Diaries, which contain night-by-night records of observations recorded in prose format, Goal-Year Texts, which contain collections of observations to be used in making predictions of future astronomical events, and a variety of texts containing compilations of particular types of observations (e.g., lunar eclipses, a planet’s synodic phenomena, the lunar six). In this presentation I will focus on a group of compilation texts which are set out in the form of a table. I will explore both the physical aspects of these compilations as they appear on tablets (e.g., the use of inscribed rulings, overflowing text, empty space) and their content in an attempt to better understand why these texts were formatted in this way, if and how the reports of observations were reformulated when they were entered into the table, and the how compilations might have been used.

18) Juliane Unger, PhD candidate in Egyptology, Ruprecht-Karls-Universität Heidelberg

The Medical Papyrus Brooklyn 47.218.75+.86

The paper aims to give a comprehensive overview of papyrus Brooklyn 47.218.75+.86, which the speaker has translated and analyzed in the course of her PhD research. A group of recipes concerning ailments of the back will receive special attention since this topic is hitherto nearly unknown from ancient Egyptian medical texts, and questions concerning *materia medica*, retrospective diagnoses, and knowledge transfer will also be dwelled upon.

19) Elyze Zomer, Akademische Rätin in Assyriology, Eberhard Karls Universität Tübingen (keynote)

A Science of Nightmares? Dream Interpretation in Ancient Mesopotamia

In many cultures, dreams are seen as tools of divination. Mesopotamia is no different, and the earliest examples of oneiromancy can be traced as far back as the Third Millennium BCE. References to dreams and dream reports are found in a wide variety of letters, literary texts, and royal inscriptions. Dreams (both spontaneous and induced) were considered signs from the divine sphere which were sometimes immediately intelligible, and sometimes needed extensive interpretation. This paper investigates the various interpretation strategies applied by the Mesopotamian scholars in the corpus of dream omens as well as the organizational principles behind the recently reconstructed Mesopotamian dreambook “Zaqiqu” elaborating on the intricate structure and contents reflecting the primary concepts of the Mesopotamian dream reality.

20) Nicla de Zorzi, Associate Professor of Assyriology, Universität Wien

Writing and Seeking Knowledge: Principles of Interpretation in Ancient Mesopotamian Divination

In this talk, I will argue that Mesopotamian divination as practiced and theorized by its Babylonian practitioners in the first millennium BCE is couched in a particular analogistic ontology. This ontology underpins also other branches of ancient Mesopotamian erudition. I will argue that the framing I propose here not only allows a coherent view on much of Mesopotamian knowledge production, but it also opens up a particular avenue for cross-cultural comparison. My argument will be developed in several steps. (1) First, I will discuss the basic working principles of ancient Mesopotamian divination. (2) I will then discuss how these principles reflect a Babylonian engagement with natural phenomena that resonates with other historical sciences. (3) Subsequently, I will focus on the formal analysis of divinatory texts, demonstrating how language and style are used for structural and communicative purposes in Babylonian technical texts. (4) Finally, I will turn to recent theoretical work on analogistic ontologies as a point of reference and yardstick for the engagement with comparative data.