Fractal transmission patterns: Reconstructing the alchemical allegories of Ibn Umayl and his Greek-Byzantine affinities

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Abstract

The transmission of alchemy in Arabic language involved translation of Greek and Syriac manuscripts, as well as transfer of experience from other cultural traditions (pre-Islamic Egypt, Mesopotamia, India, and China). In many cases the Arabic synthesis can be traced through the further translation from Arabic into Latin. However, the distinction between older (e.g. Greek or Byzantine) heritage and genuine contributions during the Islamic era is often cumbersome due to pseudepigrapha, text corruption during copying, and scarcity of extent manuscripts.

A typical example is the text "*Kitāb al-mā' al-waraqī wa 'l-ar al-najmiyya*" composed by Ibn Umayl al-Tamīmī (10th century CE) as a commentary of the author upon his alchemical poem "*Risālat al-shams ila 'l-hilāl*". Both texts are also known in Latin translations of the 16th century CE under the titles "*Tabula chimica*" and "*Epistola solis ad lunam crescentem*". Their impact is underlined by the numerous printed editions of the Latin version. Comparing the Latin translation with the Arabic version scholars could reconstruct many alleged author names and previous alchemical works referred to in the texts. On this basis they have developed several approaches to support the hypothesis of a genuine Arab contribution based on Arabic reference texts (Ruska) or that of a re-course to pre-Islamic, possibly Greek and Syriac sources (Stapleton).

Since this dispute, further editions of Arabic as well as Greek treatises on alchemy and related subjects have offered a more solid textual basis for a new assessment of Ibn Umayl's sources and of his contribution to allegorical Arabic alchemy. The present study assesses the theoretical and practical implications in the transmission of Ibn Umayl's treatises through the translation path by focusing on (a) new evidence in respect with the contemporary context of the Greek, Arabic and the later Latin works, and (b) morphological, textual and iconographical aspects of a specific Arabic manuscript (Topkapi, Ahmet III, 2075) of 1339 CE which contains the above treatises. The specific contribution of the latter manuscript consists in its remarkable double frontispiece with a human figure which looks as if emerging from a Syro-Byzantine illumination of the 9th-12th centuries CE, and which holds tablets with texts from the other traditions. The pictorial composition is reproduced in the Latin translations - however in a "Latinised" style.

In spite of the distortions and corruptions – especially in the Latin transmission – the way in which the Arabic allegorical poem is re-compiled, commented and illustrated in the different manuscripts can be considered as a *fractal* reference of the Arabic treatise to pre-Islamic Egyptian, Greek and Byzantine alchemical traditions: The detail has the same "hybrid" consistence as the whole.

Graeco-Arabic Natural Sciences in Jewish Garb: Evidence from the Cairo Genizah

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Abstract

According to Jewish law, worn pieces of paper and vellum which may contain the divine name cannot be destroyed and need be stored in a repository until they are ritually buried. The Cairo Genizah was one such repository – a storage room attached to the Ben Ezra Synagogue in Al-Fus β (Old Cairo). Around the end of the 19th century, European scholars became aware of its existence and of the incredible importance of the circa 350,000 fragments of manuscripts it contained. Spanning the 5th–19th centuries (although the bulk of material dates to Fatimid and Ayyubid Egypt), Genizah material is the primary source for all research on medieval Jewish religious, intellectual, economic and daily life and is an essential source for any investigation on any aspect of the history of the Mediterranean during the Middle Ages.

Together with religious material, the Cairo Genizah has preserved a significant amount of fragments of scientific texts (Arabic translations of Greek works, their commentaries, and original Arabic treatises) that were transcribed in the Hebrew alphabet in order to make them accessible to Jewish scholars who knew the Arabic language but were uncomfortable with its alphabet.

In my paper, I would like to offer a survey of the Judaeo-Arabic Genizah fragments relevant to the transmission of Graeco-Arabic natural sciences and to underline their value for the study of the mechanisms of transmission Greek sciences in the Medieval world. I will focus in particular on the *corpus* of alchemical fragments that I have been able to identify in my current research: these fragments present characteristic features that seem to point to a peculiar, less scholarly, mechanism of transmission.

Levantine Chemistry in Athanasius the Rhetor's papers

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Abstract

Athanasius the Rhetor (1571-1663) was a Greek priest in the seventeenth-century Paris who devoted all his life to study. Completely forgotten today, he was the author of several books and an advocate of the unification of the Christian churches. When he was 71 Mazarin and Séguier sent him to the Levant for 10 years to bring them rare manuscripts which he sometimes bought by the kilo. Athanasius left two volumes of handwritten chemical papers (private drafts, notes, copies in various forms and languages of recipes) which might have been written at the time of his mission for his French patrons. They are quite unique and show the existence of a Levantine chemistry apart from the Western one.

The "Technical Treatises" of the Greek Corpus Chemicum. Technology transfer in the Byzantine world.

Robert Halleux, CHST, Univerité de Liège

Alchemical interpretations of ancient Mysteries

Didier Kahn, CNRS, Cellf 16e-18e

Abstract

Sacred initiation related to alchemy is a topic not widely diffused in alchemical texts, except in commonplace statements. Yet it can be traced from the origins of alchemy up to the 20th century. We shall evoke it mainly through the works of Michael Maier and other early modern alchemists. Then we shall jump to early 19th-century philologists, before arriving to Antonin Artaud (1932). Artaud's own alchemical interpretation reflected the state of the art regarding the place of Orphism and ancient Mysteries within the common interpretation of Plato in the years 1920-1930. His interpretation drew from other sources as well, implying a peculiar conception of ancient history, rooted in early 19th-century esotericism.

Byzantine Alchemy in Two Late Greek Alchemical Manuscripts from the Meteora and Elassona

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Abstract

In my paper I shall investigate the treatises preserved in two recently discovered alchemical manuscripts, namely MS 97 of Saint Stephen's monastery collection (Meteora) and MS 197 of Olympiotissa monastery's collection (Elassona). By comparing the texts handed down in these two codices with the standard printed collections of Byzantine alchemical writings (first of all, Berthelot-Ruelle's Collections des alchimistes grecs = CAAG), I shall give a general introduction to the contents of the two handwritten anthologies and highlight some possible criteria used by their compilers in selecting and epitomizing passages or treatises taken from the earlier alchemical tradition. Moreover particular attention will be devoted to a Byzantine recipe book (entitled in CAAG II 321-37 and 380-81), for which the two manuscripts are among the most important testimonies.

In pursuit of gold: Did alchemy pose a risk to the Byzantine state?

Gerasimos Merianos, Institute of Historical Research / National Hellenic Research

Foundation

Abstract

The few cases in Byzantine non-alchemical literature where mention is made of actual 'alchemical' activity are usually associated with techniques for imitation or counterfeiting of precious metals, especially gold. Interestingly, these cases also record the intervention of Byzantine authorities against this kind of activity which threatened certain state prerogatives and engendered economic and political instability. The motives behind the persecution of alchemical practices or practitioners, as presented in Byzantine literature, seem to be mainly economic, and are related with the control of precious metals and monetary production, and also with the suppression of counterfeiting and trickery. This paper will discuss these cases, their economic and legal connotations, as well as the links between alchemical practice and sectors of industry, in which the Byzantine state held a direct interest.

From Greek medicine to Arabic alchemy: Jābir ibn ayyān's 'Science of the Balance'

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Abstract

The corpus of alchemical texts attributed to Jābir ibn ayyān (written during the third/ninth century) is one of the most influential collection of alchemical treatises in the Arabic world. In this corpus of texts, the authors developed a complex physical system based upon the principles of the Greek theory of the four elements, the four properties and the four degrees of intensity, mixed together with alphanumerical considerations. This theory, called *'ilm almīzān*, 'Science of the Balance', is the basis of the alchemical Jābirian doctrine, and therefore a key concept of many Arabic alchemical texts. The paper aims at explaining this theory and its Greek origin.

Stéphanos d'Alexandrie: la tradition patristique dans son œuvre alchimique

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Abstract

La plupart des «praxeis» de l'œuvre alchimiques de Stéphanos d'Alexandrie commencent et se terminent par des prières. Stéphanos s'y réfère surtout à Logos, qui est la lumière, et à la sagesse de Dieu.

Selon notre recherche, les sources de Stéphanos sont l'Evangile de saint Jean, les épîtres des Apôtres, le Crédo et les œuvres des Pères de l'église. (e.g. Clément d'Alexandrie, Basile de Césarée, Grégoire de Nazianze, Grégoire de Nysse, Jean Chrysostome). On constate qu'il n'y a aucune allusion aux doctrines hérétiques des monophysites d'Alexandrie, ni aux doctrines de Serge, patriarche de Constantinople (610-638).

Stéphanos rédigea son œuvre alchimique en 617 à Constantinople. A cette époque là, entre 616 et 618 le patriarche Serge proposa son «monoenérgisme» et cherchait des textes qui lui serviraient d'appui. Cet effort a été prolongé bien au-delà des années 622/623.

Il paraît que Stéphanos qui mourut peu après 621, après sa conversion à l'Orthodoxie, par Eulogios, patriarche d'Alexandrie, renonça à l'hérésie de Serge, ce qui a provoqué la disgrâce du patriache. Il est donc bien probable que Stéphanos, après sa mort, est tombé dans l'oubli à cause de cette disgrâce.

Texts and Practices: The Promises and Problems of Laboratory Replication and Chemical Explanation of Early Alchemical Processes

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Abstract

A large proportion of early alchemical texts either contain experimental/technical processes or depend ultimately upon them. Their authors were generally (though not always) familiar with productive processes and materials in ways that the modern historians or philologists frequently are not, thus leaving a particular type of cognitive gap between ancient authors and modern readers. Of late, there has been increasing interest in the role that laboratory replication can play in historical investigations. This paper will illustrate how well-performed chemical experimentation can help us understand more accurately what ancient alchemical authors were actually doing, and assist us in translating/editing their texts more correctly, particularly in the case of early writings using Greek, Latin, and Arabic technical vocabulary. Notice is also taken of the potential dangers of chemical interpretations that are not supported by direct experimentation.

What is Mercury? Interpretation and Substitution in Alchemical Practice

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Abstract

One of the greatest obstacles to reading alchemical treatises is the difficulty of identifying ingredients, whose nature is often disguised behind cover names, or *Decknamen*. One of the most vexing of these terms is "mercury." From late antiquity to early modernity, mercury was an object of fascination for alchemical practitioners, both for its peculiar physical properties and its role in theories of metallic generation. Mercury's double life, as both metallic quicksilver and material principle, marks only the start of its identity crisis, as its nature was subjected to continual reinterpretation and debate – eventually coming to encompass a host of substances, from metallic quicksilver and mineral acids, to distilled alcohol and human blood.

An understanding of mercury's contested nature is necessary if we are to appreciate the complexity and rhetorical ingenuity of alchemical writing, not least because the identity of the starting matter had obvious and immediate implications for practice. In this talk, I shall trace the efforts of several late medieval and early modern alchemical practitioners to establish the nature of mercury: whether by reinterpreting textual authorities, redefining old practices, or even substituting completely new ingredients. In particular, I shall look for evidence of practitioners' concerns about the effects and efficacy of substituted ingredients – as well as some of the unexpected advantages of this alchemical *quid pro quo*.

Olympiodore l'alchimiste et la transformation du minerai d'or : art, nature, histoire et archéologie

Cristina Viano, CNRS, Paris

Abstract

Le commentaire d'Olympiodore *Sur le Kat'energeian* de Zosime, débute par l'exégèse d'une phrase sur la « macération » (*taricheia*), opération paradigmatique du traitement du minerai d'or, interprétée comme une allégorie de l'opération alchimique.

Or, la convergence des descriptions d'Olympiodore avec les témoignages littéraires anciens et les résultats de récentes fouilles conduites en Égypte dans les sites miniers aurifères de l'époque ptolémaïque, permet de faire lumière sur les enjeux théoriques et pratiques de la transformation de l'or et notamment sur le rapport entre nature et *technê*.

The project THERWAL (TRaditional Herbal Remedies of WALIonia).

Geneviève Xhayet, CHST Université de Liège