

Exploring Persian lore in the Hebrew *Book of Asaf*

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Abstract

The Hebrew medical text referred to as *Sefer refu'ot* or *Sefer Asaf* ("Book of Asaf") has long been considered one of the greatest mysteries of the Hebrew sciences with regards to fundamental questions such as the date and place of its composition and the identity of its author or authors. It has been dated anytime between the third and the eleventh centuries, and its composition has been located anywhere between Persia and southern Italy.

This paper explores some of the Persian lore in *Sefer Asaf*: the figure of Asaf himself, the similarity with other Persian or Persian-influenced accounts of the origins of the sciences; the appearance of the Indo-Iranian motif of the trees of medicine; the central importance given to Indic medical knowledge and the form and usage of the Persian months as they appear in the text.

Key contributions to the study of *Sefer Asaf* to date have argued for a Syriac connection while a number of other important studies have linked the text to a Persian cultural milieu. The data I present here links those two together and argues for dependence on material deriving from the Church of the East in Persia.

The Hebrew text referred to as *Sefer refu'ot* ("Book of Remedies") or *Sefer Asaf* ("Book of Asaf") is a very important text not only in the history of the Hebrew medical sciences, but also in the history of medicine as a whole. The text is an extensive medical compendium, containing a kind of 'medical history', sections on anatomy, embryology, pulse and urine diagnosis, seasonal regimen, a medical oath and a long *materia medica* section. It has long been considered one of the greatest mysteries of the Hebrew sciences with regards to fundamental questions such as the date and place of its composition and the identity of its author or authors. It has been dated anytime between the third and the eleventh centuries, and its composition has been located anywhere from Persia to southern Italy.¹ These grand questions have remained as yet largely unanswered.

¹ Main studies on *Sefer Asaf* include:

Ludwig Venetianer, *Asaf Judaeus: Der aelteste medizinische Schriftsteller in hebraeischer Sprache* (Strassburg: Karl J. Tübnner, 1916-17); Isidore Simon, *Asaph Ha-Iehoudi* (Paris: Librairie Lipschutz, 1933); Suessman Muntner, *Introduction to the Book of Asaf the Physician* (Heb.) (Jerusalem: Geniza, 1957); Aviv Melzer, "Asaph the Physician: The Man and His Book: A Historical Philological Study of the Medical Treatise, The Book of Drugs", unpublished PhD dissertation, University of Wisconsin 1972; Elinor Lieber, "Asaf's *Book of Medicines*: A Hebrew Encyclopedia of Greek and Jewish Medicine, Possibly Compiled in Byzantium on an Indian Model," *Dumbarton Oaks Papers* 38 (1984): 233-249; Ariel Bar-Sela and Hebbel E. Hoff, "Asaf on Anatomy and Physiology", *Journal of the History of Medicine and Allied Sciences* 20 (1965): 358-389; Shlomo Pines, "The Oath of Asaph the Physician and Yohanan Ben Zabda: Its Relation to the Hippocratic Oath and the Doctrina Duarum Viarum of the Didache", *Proceedings of the Israeli Academy of Sciences and Humanities* 5:9 (1975): 223-264; Joseph Shatzmiller, "Doctors and Medical Practices in Germany around the Year 1200: The Evidence of *Sefer Asaph*," *Proceedings of the American Academy for Jewish Research* 50 (1983): 149-164; Tamás Visi, "Uroscopy from East to West: The Reception of Greek Uroscopic Texts in the Hebrew *Book of Remedies* Attributed to Asaf", forthcoming; Vivian Nutton, "From Noah to Galen. A Medieval Latin History of Medicine," in Ildikó Csepregi and Charles Burnett, eds., *Ritual Healing: Magic, Ritual and Medical Therapy from Antiquity until the Early Modern Period*, (Firenze: SISMEL edizioni del Galluzzo, 2012), pp. 53-69.

Ludwig Venetianer (Hungarian: Venetianer Lajos), the Hungarian rabbi who published the first study on *Sefer Asaf* nearly 100 years ago, has already pointed out possible Persian links. Thanks to the advance in Persian studies over the last 100 years, we are now at a stage where we can say much more about these possible connections.

In this paper, I shall analyze some of the Persian lore in *Sefer Asaf*. Specifically, I shall discuss the figure of Asaf, some Indo-Iranian traces and the text's mention of Persian months. I shall also demonstrate links with the medical texts deriving from the Church of the East in Persia and suggest that with this hypothesis we can reconcile two main views on this text: one that has pointed out to Persian influence and one that has discussed Syriac ones. I propose that this material may hold the key to solving some of the on-going problems which this text has sustained.

THE MANUSCRIPTS

The most complete extant manuscript of *Sefer Asaf* is Munich Bayerische Staatsbibliothek hebr 231,² dated by Judith Olszowy-Schlanger based on preliminary paleographical indications – to the thirteenth or fourteenth century and originating from Italy.³ This manuscript includes 277 folios. A similar, but shorter text is Ox Bod 2138.⁴ Joseph Shatzmiller recounts that he examined a microfilm reproduction of this manuscript together with Prof. Malachi Beit-Arie, who dated it to around the year 1150 and as originating from Germany.⁵ It includes 188 folios. Judging by its orthographic mistakes, it seems to be a copy of an earlier manuscript. Another important manuscript is Florence Laurentiana Plut. 88.37, which has been dated to the 14th-15th century. Other than these three main texts, there are circa 16 manuscripts containing different sections of the text.⁶ The JTS Library holds what appears to be the oldest extant fragment of *Sefer Asaf*: JTS 10160. These are two folios from the Shlomo Schechter Collection, most probably deriving from the Cairo Genizah and which have been dated to 10th-12th centuries.⁷

The text as we have it appears to be a composite text—a collection of a number of different texts which were assembled together. Munich 231 and Oxford Bod 2138 are entire codices which have been identified as *Sefer Asaf*, although the structure of these two—or rather: the lack thereof—make it clear that what is in front of us are compilations of different texts which have been placed together. Looking at the three main manuscripts- Munich 231, Oxford Bod 2138 and Florence Laurenziana Plut. 88.37, along with the possible Cairo Genizah fragment, JTS 10160, I have begun to reconstruct something akin to an *urtext*: a shared text onto which, apparently, later additions were made.

² Moritz Steinschneider, *Die Hebraeischen Handschriften der K. Hof- und Staatsbibliothek in Muenchen* (Muenchen, 1875), pp. 82-83 (pp. 106-107 in the 1895 edition).

³ Prof. Olszowy-Schlanger kindly examined a reproduction of the manuscript at my disposal. I would like to thank Prof. Olszowy-Schlanger for sharing her profound knowledge with me.

⁴ Bodleian ms. opp. 687 (OL 1645) (no. 2138 in Neubauer's Catalogue), Neubauer A.D., *Catalogue of the Hebrew Manuscripts in the Bodleian Library* (Oxford: Clarendon); *Catalogue of the Hebrew Manuscripts in the Bodleian Library: Supplement of Addenda and Corrigenda to Vol. I* (Oxford, 1994).

⁵ Shatzmiller, "Doctors and Medical Practices."

⁶ For a listing and discussion of manuscripts see Muntner, *Introduction*, pp. 14-21.

⁷ The JTS online catalogue gives an estimated dating of 900-1150, whereas the online catalogue of the Hebrew Manuscripts Institute at the Hebrew University estimates it as dating from the 11th-12th centuries.

Comparing codex Florence Laurenziana Plut. 88.37 as a whole to Munich 231 and Oxford Bod 2138 reveals something of the process of the compilation of texts which are regarded as *Sefer Asaf*. The Asaf text in Florence Laurenziana Plut. 88.37 is the first text in this codex (Fol. 1-26r), followed by six other medical texts.⁸ The second text, clearly demarcated as a separate text in Florence Laurenziana Plut. 88.37, is a head to toe list of illnesses (fol. 26r-30v), all with Greek names. This text of illnesses is incomplete, ending abruptly on fol. 30v, after illness number 15 (אמוטואיקיס- αἰμοπυκνοῖς⁹). It appears that a quire (perhaps more than one?) is missing here. In any case, when the codex was paginated, this section was already missing. While this text of the list of illnesses does not form part of the Asaf text in the Florence Laurenziana Plut. 88.37, it appears at the end of Munich 231 (fols – 267r-287r) and has been treated as part of *Sefer Asaf*. The text on the list of illnesses is also incomplete in Munich 231, although it does include a few more sections than the Florence manuscript, with eighteen sections rather than fifteen in the Florence Laurenziana ms. The text is unmistakably the same.

No scientific edition of the text has been made to date. Muntner has published a text that resulted from a collation of some of the manuscripts, but moved freely from one manuscript to another, resulting in a compilation which is very confusing indeed.¹⁰ I am in the process of producing an edition and translation of the sections which I consider to belong to the *urtext*. The following quotes are based on the Munich, Oxford and Florence manuscripts.

THE INTRODUCTION OF THE BOOK OF ASAF

The Introduction of the *Book of Asaf* is an intriguing text on the origins of medical knowledge, situating its knowledge as deriving from the medical systems of India, Greece, Egypt and Aram.¹¹ It is an example of an “origin narrative”: recounting the origin/s of a field of knowledge, the motivation for “inventing” or “establishing” that kind of knowledge and the field’s subsequent development.¹² Asaf here takes his place alongside Hippocrates, Dioscorides and Galen:

..ויכתוב נח את הדברים האלה על

⁸ 1. Fol. 1v-26r: *Sefer Refu'ot*;

2. Fol. 26r-30v: Head to toe list of illnesses (incomplete; missing quire at the end);

3. Fol. 31r-58r: ספר הראשון של פסיקא;

4. Fol. 58v-73v: הספר השני אנטיאוטריאור (*Antidotarium*);

5. Fol. 73v-84r: הספר השלישי: צירלוגיאה היא מלאכת יד

6. Fol. 84v-86r: ספר היקר

7. Fol. 86r-110r: הספר הרביעי: ספר ביאטקו (*Viatico*)

For a description of the codex see: Biscioni, Antonio Maria, *Bibliothecae Ebraicae Graecae Florentinae sive Bibliothecae Mediceo Laurentianae*, Florentiae 1757, Vol. 2

⁹ I would like to thank Petros Bouras-Vallianatos for discussing this term with me.

¹⁰ Suessman Muntner (ed.), “Assaf ha-rofeh, Sefer Refu'ot” (*Asaf the Physician, Book of Remedies*), *Korot* 3 (1965): 396-422, 533-560; 4 (1968): 11-40, 170-207, 389-443, 531-572, 691-730; 5, 1 (1971): 27-68, 160-187, 295-330; 5, 2 (1971-1972): 435-473, 603-649, 773-807; 6, 1 (1972): 28-51.

¹¹ For a fuller analysis of the Introduction to the Book of Asaf see my “On the Sources of Medical Knowledge: Cues from the Hebrew *Book of Asaf*,” in *Jewish Traditions and the Transfer of Medical Knowledge: Proceedings of the Panel ‘Jewish Medicine in Context(s)’ at the 15th Congress of the European Association of Jewish Studies (EJS), Paris, 20-25.7.2015*, ed. Lennart Lehmhaus (Wiesbaden: Harrassowitz), forthcoming.

¹² On origin narratives in Islamic sources see Keren Abbou Hershkovitz, *The Historiography of Science between the 10th and the 14th Centuries*, PhD Thesis, Ben-Gurion University, 2008 [in Hebrew] and Sonja Brentjes, “Narratives of Knowledge in Islamic Societies: What do they tell us about scholars and their contexts?,” *Almagest* 6:1 (2013): 75-94.

ספר ויתנהו לשם בנו הגדול ומן הספר הזה
העתיקו חכמי הראשונים ויכתבו ספרים הרבה
איש ואיש כלשונו ותרבה דעת הרפואה בארץ
בכל הגוים אשר בחנו את ספרי הרפואות
בחכמי הודו וחכמי מקדון וחכמי מצרים כי
חכמי הודו הם שוטטו למצוא כל עצי רפואות
והבשמים וחכמי ארם מצאו העשבים לכל
מיניהם וזירועיהם לרפא ואת פשר דברי
הספרים העתיקו ארמית וחכמי מקדון החלו
ראשונה לרפא בארץ וחכמי מצרים החלו
לחבר ולנחש במזלות¹³ ובכוכבים ללמד את ספר
מדרש הכשדים אשר העתיק קנגרובן אור בן
כשד לכל מעשה החרטומים ותגדל להם חכמתם
עד קום אסקלפינוס אחד מחכמי מקדון וארבעים
איש עמו מן החרטומים מלומדי הספרים הנעתקים
וילכו הלוך בארץ ויעברו מעבר להודו אל ארץ
(fol.2v) קדמת עדן למצוא מקצת עצי החיים למען
תגדל תפארתם על חכמי הארץ ויהי בבואם
אל המקום ההוא וימצאו את עצי המרפא ועצי
עץ החיים וישלחו את ידם לקחתם ויברק ה'
עליהם להט החרב המהפכת וילהטו כולם בשביבי
הברק ולא נמלט מהם איש ותעזב הרפואה מן
הרופאים ותשבת חכמת הרופאים שש מאות
ושלשים שנה עד מלוך ארתחשסתא המלך
בימיו קם איש נבון וחכם ומלומד דעת ספרי
הרפואות ומבין לכל דבר ושמו איפוקרט המקדוני
ושאר חכמי הגוים אסף היהודי ודיסקרדיוס
הבעלתי וגלינוס הכפתורי וחכמים הרבה מאד
ויחדשו עטרת הרפואה ותהי עד היום הזה

And Noah wrote all these things in a book, and gave it to Shem, his older son. And from this book, the early sages translated and wrote many books, each one in his own language. And the knowledge of medicine increased in the land, amongst all the peoples who studied the books of medicines – [i.e.] amongst the sages of India and the sages of Macedonia and the sages of Egypt.¹⁴ The sages of India took to wandering in order to find the trees of medicines and perfumes, and the sages of Aram discovered the herbs – [i.e.] all their kinds and their seeds – in order to cure. And they translated the meaning of the books into Aramaic [i.e. Syriac]. And the sages of Macedonia were the first to cure in the land, and the sages of Egypt began to calculate¹⁵ and perform divinations with the stars and constellations, to teach the book of Babylonian wisdom, copied by Kangar son of Ur son of Kesed¹⁶ as well as all the deeds of the magicians (*khartumim*).¹⁷ And their wisdom grew until Asclepius came, one of the Macedonian sages and forty men with him among the magicians (*khartumim*), learned in the translated books

¹³ מזרות in the Munich ms.

¹⁴ Ox. Bod. ms also has: “and the wisdom of Syria (Aram).”

¹⁵ לחבר – can also mean: compose

¹⁶ Kesed is mentioned in Genesis 22:22.

¹⁷ The *khartumim* are mentioned in Genesis 41, when they are unable to decipher Pharaoh’s dream; in Exodus 7, 8, &9 – in magic competition with Moses; and in Daniel 1, 2 & 4- when Daniel and his Jewish companions’ wisdom exceeds that of the local *khartumim* and as interpreters of Nebuchadnezzar’s dreams.

and they went in the land, passing beyond India to a land (fol. 2v) east of Eden to find some of the trees of life in order to increase their glory among the sages. And when they came to that place, they found the healing trees and the trees of the tree of life. And they stretched their hand to take them and God thrust upon them the flaming sword which turned every way.¹⁸ And they all burnt in the sparks of lightning and no one escaped.

And medicine was deserted by the doctors. And the wisdom of doctors ceased for 630 years, until the reign of Artaxšaça (Artakhshashtah, ארתחשטתא, Greek: Artaxerxes) the King. And in the days of Artaxšaça the King, there rose a clever and wise man, who studied the knowledge of the books of medicines and his name: Ippocrat (Hippocrates) the Macedonian and the rest of the gentiles' sages, and Asaf the Jew and Dioscorides of Ba'al¹⁹ and Galenos of Caphtor²⁰ and many other sages and they renewed the glory of medicine, and it is living till this day...²¹

THE FIGURE OF ASAF

We know nothing about *Sefer Asaf's* author or authors. Elinor Lieber has argued that we ought to regard the attribution to Asaf as pseudonymous.²² I would like to suggest further support of this view, particularly in light of the newly available first volumes of the English translation of the Persian *Dā'irat al-Ma'ārif-i Buzurg-i Islāmī* (*Great Islamic Encyclopaedia*). This Persian encyclopaedia includes a long and fascinating entry on Āṣaf b. Barakhyā, painting a picture of an extensive Persian tradition which links a legendary figure by the name of Āṣaf b. Barakhyā to knowledge.²³

The links of a person named "Asaf" with Persian lore is found already in the biblical Book of Nehemia, where a person by this name appears as the keeper of the grove (*pardes*) of Artaxšaça (Artaxerxes; ארתחשטתא), King of Persia (Nehemia, 2, 8).²⁴ The mention of Artaxšaça also appears in the introduction to *Sefer Asaf* quoted above.

The mention of a Persian king – Artaxšaça – within the overall context of the lineage of doctors is significant here. The name Artaxšaça (Greek: Artaxerxes) is the throne name of several Persian kings of the Achaemenid dynasty: Artaxerxes the First (465-424 BCE); Artaxerxes the Second (404-358 BCE) and Artaxerxes the Third

¹⁸ I follow the translation of the King James Bible for this expression as it appears in *Genesis* 3:24. The context in *Genesis* 3, 24 is similar to here: God is said to have appointed the cherubim and the "flaming sword which turned every way" to guard the way to the tree of life.

¹⁹ Perhaps referring to the mythical association of the god Ba'al with northern Syria, or sometimes more generally: the mythical 'Mountain of the north'.

²⁰ Biblical island; usually associated with Crete. In the Septuaginta and in the Syriac tradition, Caphtor was identified with Cappadocia. See: Gerald Avery Wainwright, "Caphtor-Cappadocia", *Vetus Testamentum* 6 (1956): 199-210; Roger Le Déaut and Roger Jacques, *Targum des Chroniques* (Rome: Biblical Institute Press, 1971). On this identification in the *Peshitta* and in the Syriac geographical tradition see: Witold Witkowski, "The Division of the Earth between Descendants of Noah in Syriac Tradition", *Aram Periodical* 5 (1993): 635-656, at pp. 637; 639 & 647.

²¹ Munich heb 231, fols. 2r & 2v, my translation

²² Lieber, "Asaf's 'Book of Medicines'". This view has been supported by Tamás Visi. See his forthcoming, "Uroscopy". I would like to thank Tamás Visi for sharing this paper with me.

²³ Farhad Daftary and Wilferd Madelung, eds., *Encyclopaedia Islamica* (Leiden: Brill, 2008-2011). This is a collection of translated articles from Musavī Bujnūrdī, Kāzīm, ed., *Dā'irat al-Ma'ārif-i Buzurg-i Islāmī* (Tehran, 1996). The entry on Āṣaf b. Barakhyā is in Vol. 3 (2011), pp. 829-831.

²⁴ For other biblical mentions of this king see: *Ezra* 4: 7, 8 and *Ezra* 7:1,7,11,12,21. *Nehemiah* 2:1.

(358-338 BCE). Indeed, Venetianer has suggested that Artaxerxes the Fourth (226-240 CE), known as Ardašīr I, founder of the Sasanian Empire, is the king referred to in Asaf's introduction.²⁵ While we should probably leave aside the issue of which Artaxerxes is in question here, the important point that emerges from the mentioning of his name is significant in establishing a possible Persian political-cultural milieu for *Sefer Asaf*.

In Islamic legends, Asaf b. Barakhyā was an exemplary vizier, known for his wisdom, rectitude and relentless protection of the interests of the people. He appears in Persian-Islamic narratives as a minister, scribe or companion of King Solomon (Sulayman), who had the 'knowledge of the book'. Tales concerning King Solomon in Islam were circulating in the Arabian Peninsula even before the appearance of Muhammad. The themes found in the Islamic King Solomon narratives go well beyond anything we find in Jewish sources.

Almost all of the numerous accounts found in Muslim commentaries and *Stories of the Prophets (Qīṣaṣ al-anbiyā')* works which mention his name refer to a *sūrah* in the *Qur'an (Surat al-Naml)* in which Sulayman asks his courtiers to bring him the throne of the Queen of Sheba (Bilqis) before her arrival. One of the courtiers, who is said to have "knowledge of the Book" responds, "I will bring it to you in the twinkling of an eye" (Q 27: 40)²⁶. Commentators were divided over the question of the identity of this person. In many Islamic commentaries this person is identified as Asaf b. Barakhyā who had 'knowledge of the Book'. We also find numerous Islamic tales mentioning Asaf b. Barakhyā as King Solomon's chief counsellor, who made use of the King's magic ring (khatam Sulayman).²⁷

The on-going popularity of the figure of Asaf b. Barakhyā in Persian culture can also be found in visual representations. Serpil Bağci has noted that in fifteenth and sixteenth century Shirazi manuscript front-pieces, Asaf b. Barakhyā is a personality who never fails to appear alongside King Solomon.²⁸ Bağci has suggested that these scenes were the products of a collective image, long in the making and in wide currency, shared by artists and readers.²⁹

All the above suggests that particularly in Persian and Islamic traditions, the figure of Asaf b. Barakhyā is not to be regarded as a specific historical person, but rather as a legendary figure who is associated with "knowledge of the book".

While we cannot read hagiographies and mythical accounts as straightforward historical narratives, we can – and probably should -- take some

²⁵ Venetianer, *Asaf Judaeus*, p. 8.

²⁶ *The Qur'an: a New Translation by Muhammad A.S. Abdel Haleem* (Oxford: Oxford University Press, 2004)

²⁷ Roberto Tottoli, "Āṣaf b. Barakhyā", *Encyclopaedia of Islam, Three*, Gudrun Krämer, Denis Matringe, John Nawas, Everett Rowson, eds., (Brill Online, 2013); Haim Z'ew Hirschberg, "Solomon in Islam", *Encyclopaedia Judaica*, vol. 18, pp. 760-761; Max Seligsohn, "Solomon in Rabbinical Literature and Legend", *Jewish Encyclopedia* (New York-London 1905), 11: pp. 438-444; David Sidersky, *Les origines des légendes musulmanes dans le Coran et dans les Vies des Prophètes* (Paris 1933), pp. 112-126. For the *Qīṣaṣ al-anbiyā'* see for eg.: Muḥammad ibn 'Abd Allāh al-Kisā'i, *Tales of the Prophets (Qīṣaṣ al-anbiyā')*, Wheeler Thackston Jr., trans. (Chicago: Great Books of the Islamic World, 1997), pp. 314-316. For more sources see Tottoli's bibliography.

²⁸ Serpil Bağci, "A new Theme of the Shirazi Frontispiece Miniatures: The Dīvān of Solomon", *Muqarnas* 12 (1995): 101-111. In these images Asaf is situated to the left of Solomon (i.e.: seated to his right), both in the images from the Aqqoyunlu era where Solomon shares the throne with Bilqis (the Queen of Sheba) (figs 1&2 in Bağci's article) and the images from the Safavid era where they are each on their own throne (figs 3-6 in Bağci's article).

²⁹ Indeed at this time, Asaf was such a popular personality that a sixteenth-century Ottoman vizier, Lütü Paşa (d.1563) named his book on the qualities of a good vizier, *Asafnāme*.

cues from such texts. They often serve as pointers to identify strata otherwise forgotten or else rewritten by later historical accounts.³⁰ The study of hagiographies and transmission lines teaches us the importance of observing points of transition, which could be from legendary or chronologically remote to a more historically concrete time. I suggest that the transition here to the reign of Artaxšaça is significant. When corroborated with other types of data, two of which I discuss below, hagiographies and mythical accounts may have their historical value too.

PERSIAN MONTHS

Highly significant, but hitherto ignored, are the references to the Persian Months in *Sefer Asaf*. This part appears in the three main manuscripts mentioned above – Munich 231, Oxford Bod 2138 and Florence Laurentiana Plut 88.37, but is illegible in the Oxford one. The following is based on the Munich manuscript with some comparisons with the Florence manuscript. In the section dealing with seasonal behaviour, we find the following:

³¹ ואלמדך לדעת את מבואות התקופות
 לתוצאותיהם לזמניהם למיני מחלקותיהם כי הגוף נכון
 על ארבעת יסודותיו לפי ארבעת תקופות השנה המנהגות
 את השנה ולפי ארבעת הרוחות המנהגות בכל העולם
 והראשון לימי השנה ולחדשים ולמועדים ולתקופות
 הוא חדש ניסן מנהגו מזל טלה ראש המזלות³² והוא נקרא
 בלשון פרס בהמין מה הוא תחילת³³ האביב ותחילת
 התקופות היא תקופת ניסן...
 (Munich fol. 9v)

.... ואלה שמות החדשים
 בלשון פרס אדור מה³⁴ דיימה בהמיןמה³⁵ אספנדיר מידמה
 פרודון מה ארדבה ישתמה³⁶ כורדאד מה³⁷ תירמה
 מורדאדמה³⁸ שהרירמה³⁹ בהמיזמה אבאומה אלה
 שמותם בלשון חכמי פרס והם אמרו⁴⁰ בזמן שיתחילו הניצנים
 להראות בארץ ויבוא השמש במזל טלה הוא ירח ניסן הנק
 הנקרא בלשון פרס בהמיןמה⁴¹ במועד הזה⁴² יחלו הרופאים
 להשקות כל מיני תרופות לכבס המיעים⁴³ למען יינפש וינוח⁴⁴
 הגוף

³⁰ See my "Revisiting 'Galen in Tibet'", *Medical History* 56:3 (July 2012): 355-365.

³¹ This is more or less where Ox 2138 begins, although this first folio is extremely damaged and hard to read.

³² Fl ms.: המזרות

³³ תחלית in the Munich ms.

³⁴ מה ארוד in the Munich ms.

³⁵ בהמיומה in the Munich ms.

³⁶ ארדבה ישתמה in the Munich ms.

³⁷ כורדאר מה in the Munich ms.

³⁸ מורדארמה in the Munich ms.

³⁹ שהדירמה in the Munich ms.

⁴⁰ This is the first legible word of Ox 2138 fol. 1v. The names of the Persian months appear in Ox 2138, but they are hardly legible.

⁴¹ בהמין מה in the Munich ms.; in Ox 2138:

⁴² בעת הזאת Ox:2138

⁴³ לכבס המיעים Ox 2138 omits

⁴⁴ יניח Ox 2138:

And I shall teach you to know the influence of the seasons and their outcomes [according to] their time and their divisions since the body is founded on its four constituents according to the four seasons of the year which rule the year and according to the four winds which rule the entire world.

And the first of the days of the year and the months and the fixed times and the seasons is the month of Nisan. It is ruled by Aries, the first sign of the zodiac and in the language of Persia it is called Bahmen mah – the beginning of spring and the beginning of the seasons - this is the period of Nisan....

(fol. 9v).... And these are the names of the months in the language of Persia: Adurmah,⁴⁵ Daymah, Bahmenmah, Asfandir midmah,⁴⁶ Farwardun mah, Ordbh yshtmah,⁴⁷ Khurdād⁴⁸ mah, Tīrmah, Murdādmah,⁴⁹ Shahrīrmah,⁵⁰ Bhamīzmah, Abānmah.

These are their names in the language of the sages of Persia and they said [that] in the time that the blossoms begin to appear in the land, and [when] the sun is in Aries, the month of Nisan which is called in the language of Persia Bahmenmah – in this time doctors would begin to prescribe all kinds of medicine to cleanse the intestines so as to let the body rest and restore itself.⁵¹

In my attempts to make sense of this section, I consulted François de Blois, a world leading authority on ancient Persian calendars,⁵² and a member of the ancient calendars research group at UCL, led by Prof. Sacha Stern.⁵³ Judging by the forms of the months, de Blois has made a number of very interesting observations. Firstly, de Blois observed that the form of the months' names is post-Sasanian Middle Persian. The first on this list, for example, Ādur ma – is closer to Middle Persian than the New Persian variation of the name of this month: Adar. Shahrīrmah (שהרירמה), on the other hand, is closer to the New Persian form Shahrīr māh rather than the Middle-Persian form: Shariwar māh. In all, however, de Blois is of the opinion that these forms derive from the late Umayyad or early 'Abbāsīd period.

Table 1: Persian Months in *Sefer Asaf*

Hebrew form in <i>Asaf</i> Munich 231	Hebrew form in <i>Asaf</i> Florence Laurentiana Plut. 88.37 (fol. 4v)	Persian name
⁵⁴ אדורמה	אדור מה	Ādur māh
דיימה	דיי מה	Day māh
⁵⁵ בהמיןמה	בהמין מה	Bahman māh

⁴⁵ Arudma in the Munich ms. Here and in a number of cases below, the *dalet* and *resh* have been exchanged due to what seem to be scribal errors.

⁴⁶ Mirma in the Munich ms.

⁴⁷ Odrbhesma in the Munich ms.

⁴⁸ Khurdar in the Munich ms.

⁴⁹ Murdārma in the Munich ms.

⁵⁰ Shahdirma in the Munich ms.

⁵¹ Munich heb 231, fol. 9r & 9v; Florence Plut. 88.37 fol. 4r-4v

⁵² See for example François de Blois, "The Persian Calendar", *Iran* 34 (1996): 39-54.

⁵³ See: <http://www.ucl.ac.uk/hebrew-jewish/research/research-pro/calendars-antiquity-middle-ages> (last accessed: 03/03/15)

⁵⁴ ארודמה in the ms.

⁵⁵ בהמיומה in the ms.

אספנדיר מידמה	אספנדירמוד מה	Isfandārmud māh (or: Espandarmed māh)
פרורדון מה	פרורדין מה	Farwardīn māh ⁵⁶
⁵⁷ ארדבה ישתמה	אדרבה ישת מה	Urdībehesht māh
⁵⁸ כורדאד מה	כורדד מה	Khurdād māh
תירמה	תור מה	Tīr māh
⁵⁹ מורדאדמה	מורדאד מה	Murdād māh
שהרירמה	שהריר מה	Sharī(wa)r māh (or: Šahrewar māh)
בהמיזמה ⁶⁰	בהמין מה	Mihr māh (Bih-Mīr māh?)
אבאןמה	אבאן מה	Ābān māh

Another question which the above quote raises is the usage of these months' names. The mention of the months here has a concrete practical use. The overall context in which the quote appears concerns regimen: when to eat what, and how to act or not act in each season. This contrasts with other Hebrew mentions of the Persian months, where their mentions seem to be more of a scholarly enterprise focused on the study of calendars.⁶¹

An important question which this section raises therefore is the provenance of the usage of this calendar. According to de Blois, the westernmost location where this calendar would have been used is the area of modern-day Iraq.

Lastly, and apparently, most importantly, this section of the months revealed something even more intriguing. The last part of the above quote equates the month of Nisan with that of Bahman: "...and they said [that] in the time that the blossoms begin to appear in the land, and the sun is in Aries, the month of Nisan which is called in the language of Persia Bahmenmah ..."

De Blois pointed out that the instances when the Persian month of Bahman occurs at the same time as the Hebrew month of Nisan are quite rare.⁶² Thanks to *KAIROS*, a new computer software of ancient calendars, it is possible to calculate when such an occurrence would have been possible. The calculation conducted by de Blois provided the following result: Bahman and Nisan correlated in the mid-eight century. It would take more than twelve hundred years before they would correlate again.

These two pieces of information: the months' correlation of the eighth century and a westernmost geographical location of modern-day Iraq, where this calendar would have been in use, provide an important contribution to the Persian hypothesis with regards to the origin of *Sefer Asaf*.

As noted above, the section in question appears in the three most complete manuscripts, namely Munich 231, Ox Bod 2138 and Florence Laurentiana Plut. 88.37. The first folio of Ox Bod 2138 is extremely damaged and hard to read, but enough is legible to see that the section discussed above is where more or less Ox Bod 2138

⁵⁶ Persian listings of the months usually begin with this month.

⁵⁷ ארדבה ישתמה in the ms.

⁵⁸ כורדאר מה in the ms.

⁵⁹ מורדארמה in the ms.

⁶⁰ The form בהמיזמה is oddly different from Mihr ma.

⁶¹ See for example Ilana Wartenberg, "The Zoroastrian Persian Calendar in a Medieval Hebrew Treatise on the Jewish Calendar by Abraham bar Ḥiyya," *Tarikh-e Elm: Iranian Journal for the History of Science* 12 (2013): 31-53.

⁶² De Blois, personal communication.

begins. Its integration within the text, dealing with a topic that is then further developed in the text – namely, seasonal regimen, suggests that the inclusion of this part in the text is significant.

INDO-IRANIAN TRACES

The Persian hypothesis also provides a very good explanation for some of the text's other features which have been puzzling scholars for a very long time. The Persian connection would explain *Sefer Asaf's* numerous intriguing references to India, both explicit and implicit.

The references to India appear in the introduction to *Sefer Asaf* as well as in the discussion of various *materia medica*. Elinor Lieber had suggested that the overall structure of the text is based on an Indian or even a Tibetan model.⁶³ This hypothesis is an important and interesting one, though one which requires further research. It is, however, time to finally reject the Tibetan hypothesis: we now know that the *Gyushi* (T: *rgyud bzhi*), the *locus classicus* of Tibetan medicine, dates from the twelfth century, and not from the eighth century as some had suggested in the past, and on which Lieber's argument is based.⁶⁴ But while we lay to rest the Tibetan connection, there remains the task of explaining *Sefer Asaf's* features which show its affinity with Indic medical knowledge.

INDIA AS A SOURCE OF MEDICAL KNOWLEDGE

India appears in *Sefer Asaf* as a source of superior medical knowledge and as a place where wondrous *materia medica* grows. Beyond the mentions quoted above from the Introduction of the text, we also find references to India in the section on *materia medica*.⁶⁵

India as a source of knowledge is a well-known topos in a variety of cultural contexts.⁶⁶ The notion of India as a source of knowledge appears already in the text by Palladius, the fifth century Bishop of Helenopolis, titled *On the Peoples of India and the Brahmins*. The text by Palladius is interpolated in some of the versions of the *Alexander Romance*. A version of the *Alexander Romance* was interpolated in the *Sefer Yosippon*, completed in southern Italy or Sicily around the end of the ninth/beginning of the tenth century.⁶⁷ The *Alexander Romance* (as interpolated in some of

⁶³ Lieber, "Asaf's 'Book of Medicines'".

⁶⁴ For a new and important study of the origins of the *Gyushi* see Yang Ga, "The Origins of the Four Tantras and an Account of Its Author, Yuthog Yonten Gonpo", in *Bodies in Balance: The Art of Tibetan Medicine*, ed. Theresia Hofer (New York: Rubin Museum of Art and Washington University Press, 2014), pp.154-177. For a summary of the main debates over the dating of the text, see Ronit Yoeli-Tlalim, "Yuthog Yonten (the younger)", in W.F. Bynum and H. Bynum, eds., *Dictionary of Medical Biography*, (Westport, CN & London: Greenwood Press, 2007), Vol. 5, pp. 1342-1344.

⁶⁵ I discussed these in my paper "References to India in Asaf's *Book of Medicine*", *Ninth Congress of the European Association for Jewish Studies*, Ravenna, 25-29 July 2010. The analysis presented there is due to appear in a forthcoming article.

⁶⁶ See Abraham Melamed, *The Myth of the Jewish Origins of Science and Philosophy* (Jerusalem: Magnes Press, 2010) (Heb.). On Jewish variations of this topos see: Richard Marks, "Hindus in Medieval Jewish Literature," in Nathan Katz et al., eds., *Indo-Judaic Studies in the Twenty-First Century*, (Palgrave 2007), pp. 57-73; Abraham Melamed, "The Image of India in Medieval Jewish Culture: Between Adoration and Rejection", *Jewish History*, 20:3/4 (2006): 299-314.

⁶⁷ David Flusser dated *Sefer Yosippon* to 953 CE, but as Dönitz has pointed out, this dating has been questioned several times. An earlier dating – at the end of the ninth or beginning of the tenth century is generally agreed. See Saskia Dönitz, "Historiography among Byzantine Jews: The Case of *Sefer Yosippon*," in Robert Bonfil et al. eds., *Jews in Byzantium: Dialectics of Minority and Majority*

the versions of the *Sefer Yosippon*) includes the well-known dialogue between Alexander the Great and the sages of India.⁶⁸

In this episode the Indian sages are described as “very wise” and “having books”.⁶⁹ Some of the wisdom associated with the Indian sages in the *Alexander Romance* is the knowledge of wondrous drugs. It might be noted here that there is a version of this episode which is mentioned in the *Babylonian Talmud*, tractate Tamid. In this version, the sages with whom Alexander has a similar dialogue are identified as the “sages of the south” (חכמי הנגב).⁷⁰

The specific way in which India is identified as a source of knowledge in the introduction of *Sefer Asaf*, however, is most reminiscent of Sasanian texts on the origins and transmission of knowledge as studied by Dimitri Gutas and Kevin van Bladel.⁷¹ One such important text is the account on the history of the sciences by Abū Sahl ibn Nawbakht (fl. Ca 770-809), which has recently been studied by van Bladel. As van Bladel has shown, Abū Sahl ibn Nawbakht’s account of the history of the sciences, the earliest extant history of science in Arabic, is based on pre-Islamic Persian sources. This account preserves a claim that the peoples of Indian, Babylonia and Egypt already possessed scientific knowledge in a pre-historic era, a claim similar to that found in the introduction to *Sefer Asaf*. Indeed, the entire overall structure of Abū Sahl’s account is very similar to that of *Asaf*, and contains the following parallels: a pre-historic flourishing of knowledge; the Macedonians coming and finding ancient knowledge; the disappearance of knowledge due to moral decline, followed by a revival of knowledge at the time of the Sasanian empire which involves collecting knowledge from Babylonian, Syriac, Greek and Indian sources.⁷² A view of the Persian sciences- and medicine among them- during the Sasanian Empire as integrating knowledge from India and Byzantium, also appears in the fourth book of the *Dēnkard*, a tenth-century Pahlavi summary of knowledge of the Mazdean religion.

This famous passage has been studied and translated many times:

Cultures, (Leiden: Brill, 2012), pp. 951-968; and Saskia Dönitz, *Überlieferung und Rezeption des Sefer Yosippon* (Tübingen: Mohr Siebeck 2013).

See also: Eli Yassif, “Hebrew Traditions about Alexander the Great: Narrative Models and their Meaning in the Middle Ages,” *Tarbiz* 75 (2006): 359-407 (Heb.); Saskia Dönitz, “Alexander the Great in Medieval Hebrew Traditions,” in *A Companion to Alexander Literature in the Middle Ages*, ed. Z. David Zuwiyya (Leiden: Brill, 2011), pp. 21-39. For editions see: Wout Jac van Bekkum, *A Hebrew Alexander Romance according to MS London Jews’ College no. 145* (Louvain: Peeters Press, 1992); Wout Jac van Bekkum, *A Hebrew Alexander Romance according to MS Hébr. 671.5 Paris, Bibliothèque nationale* (Groningen: Styx Publications, 1994).

⁶⁸ Luitpold Wallach, “Alexander the Great and the Indian Gymnosophists in Jewish Tradition,” *Proceedings of the American Academy for Jewish Research* 11 (1941): 48-52; Steven Bowman, “Alexander and the Mysteries of India,” *Journal of Indo-Judaic Studies* 2 (1999): 71-111. On Megasthenes’ theory of the connection between the wisdom of the Jews and the wisdom of the Indians as reported by Clemens of Alexandria, see Abraham Melamed, *Jewish Origins* (Heb.), p. 61.

⁶⁹ David Flusser, *The Josippon [Josephus Gorionides]*, edited with Introduction, Commentary and Notes (Jerusalem: Bialik Institute, 1978-1980) (2 Vols) (Heb.), vol. 1, p. 474.

⁷⁰ *Babylonian Talmud*, Seder Kodashim, Tractate Tamid 31b-32b.

⁷¹ Dimitri Gutas, *Greek Thought, Arabic Culture: The Graeco-Arabic Translation Movement in Baghdad and Early ‘Abbāsid Society (2nd-4th/8th-10th centuries)* (Routledge: London and New York, 1998), pp. 34-40; Kevin van Bladel, “The Arabic History of Science of Abū Sahl ibn Nawbakht (fl. Ca 770-809) and Its Middle Persian Sources,” in Felicitas Opwis and David Reisman, eds., *Islamic Philosophy, Science, Culture, and Religion: Studies in Honor of Dimitri Gutas*, (Leiden & Boston: Brill, 2012), pp. 41- 62.

⁷² Van Bladel, “Arabic History”. See also Kevin van Bladel, “The Bactrian Background of the Barmakids,” in Anna Akasoy, Charles Burnett and Ronit Yoeli-Tlalim, eds., *Islam and Tibet: Interactions along the Musk Routes*, (Farnham: Ashgate, 2011), pp. 43-88.

The King of Kings Shābūr son of Ardašīr, collected again the writings deriving from the religion concerning medicine, astronomy, movement, time, space, substance, accident, becoming, decay, transformation, logic, and other crafts and skills, which were dispersed among the Indians and the Greeks and other lands, and caused them to fit the Avesta.⁷³

The Sasanian imperial ideology, which is at the heart of these texts, an ideology promoting its self-view as one of hoary antiquity and matchless civilization, as described by Gutas, has been given a Jewish twist in *Sefer Asaf*. Just as in Gutas' analysis the Sasanian Zoroastrian imperial ideology promoted a "culture of translation," presenting all knowledge as deriving from the Avesta, so also *Sefer Asaf*'s narrative describes medical knowledge as given to Shem, then finding its way to the sages of India, before ultimately being returned to humanity under the auspices of a Persian king -- an intriguing Jewish variation on the narratives of the *Dēnkard* and Abū Sahl's account. The *Asaf* narrative, just like the *Dēnkard* and Abū Sahl's account, is promoting a culture of translation, presenting translation as a cultural good. The role of the Persian king as collating and harmonizing foreign knowledge which is a key feature both in the *Dēnkard* and Abū Sahl's account, is also clearly present in the *Sefer Asaf* account.⁷⁴

TREES OF LIFE AND TREES OF MEDICINE

Sefer Asaf's reference to the "trees of medicine and trees of the tree of life" (עצי המרפא ועצי עץ החיים), which are to be found "beyond India" allude to an important motif commonly found in Indo-Iranian traditions.⁷⁵ This Iranian concept of a huge tree which is the source of renewal for all plants upon the earth has been studied by Mary Boyce.⁷⁶ As Boyce points out, in Yašt 12.17⁷⁷ this tree is called the Tree of All Remedies, since it bears the seeds of all healing herbs. In Pahlavi sources it is given various names: The Tree of All Seeds; The Tree of All Healing; or The Tree Opposing Harm. The other great tree of Iranian mythology, the Gōkarn (or Gōkart), is described as being surrounded by healing plants. The Pahlavi sources explain that this tree is the "White Hōm", the "chief of plants", which gives long life to whoever

⁷³ *Dēnkard*, Book 4, translated in: Shaul Shaked, *Dualism in Transformation: Varieties of Religion in Sasanian Iran* (London: School of Oriental and African Studies, 1994), pp. 100-101. See also p. 103, note 37 for further bibliographical references on this passage. For a detailed study see: Mansour Shaki, "The *Dēnkard* Account of the Zoroastrian Scriptures", *Archív Orientalni* 49 (1981): 114-125. Shaki also mentions astronomy as another example of non-religious knowledge discussed in the *Dēnkard* which is presented as a collation of Indian, Greek and Persian knowledge (at p. 123). See also: Alberto Cantera, *Studien zur Pahlavi-Übersetzung des Avesta* (Wiesbaden: Harrassowitz, 2004), pp. 106-113. For some of the other translations see: H.W. Bailey, *Zoroastrian Problems in the Ninth-Century Books: Ratanbai Katrak Lectures* (Oxford: Oxford University Press, 1943), p. 81; Shai Secunda, *The Iranian Talmud: Reading the Bavli in its Sasanian Context* (Philadelphia: University of Pennsylvania Press, 2014), p. 60; Jason Sion Mokhtarian, *Rabbis, Sorcerers, Kings, and Priests: The Culture of the Talmud in Ancient Iran* (Oakland: University of California Press, 2015), p. 86.

⁷⁴ For the role of Ardašīr in these narratives, see Van Bladel, "Arabic History".

⁷⁵ Ronald E. Emmerick, "Indo-Iranian Concepts of Disease and Cure," *Journal of the European Āyurvedic Society* 3 (1993): 72-93.

⁷⁶ Mary Boyce, *A History of Zoroastrianism* (Leiden: Brill, 1996), Vol. I, pp. 137-138. Boyce refers to Friedrich Windischmann, *Zoroastrische Studien* (Berlin, 1863), 165 ff.

⁷⁷ The Yašts are a group of 21 hymns which form an important part of the Zoroastrian sacred texts collected in the Avesta. See Almut Hintze, "YAŠTS," *Encyclopædia Iranica*, online edition, 2014, available at <http://www.iranicaonline.org/articles/yashts> (accessed on July 1, 2015).

eats from it, as well as bringing about the immortality of bodies after resurrection. Boyce has pointed out that there seems to be some confusion in Persian mythology between this Tree of Life and the Tree of All Seeds, since they grow close together and are both associated with healing plants.

The same concepts also appear in India.⁷⁸ Indeed Boyce suggested that these tree myths derive from an old Indo-Iranian concept. The common Indian tree myth talks about a huge tree, Jambū, which was associated with *soma*, the sacrificial drink, as well as healing herbs and immortality.⁷⁹ In both the Avestan and Vedic civilisations we have a tree of life, placed at the centre of the world, either on firm land or in the sea, on which winged divine creatures nest. The sap of this tree nourishes the plant of immortality.

MEDICAL CONTENT

Ascertaining the possible sources for the medical content of *Sefer Asaf* is clearly the most intriguing as well as the most complex aspect of the study of this text. The complexity derives from a number of reasons: firstly, as discussed above—the text considered as *Sefer Asaf* as attested in our extant manuscripts is a composite text. This in itself could explain the different positions scholars have taken regarding the origins of the text. This conclusion has also been recently reached by Tamás Visi.⁸⁰

The second problem is that all three areas of medical traditions which have been raised as possible sources for the medical knowledge represented in *Sefer Asaf* namely: Syriac medicine, Byzantine medicine and Persian medicine—are fields of study with extensive lacunae. Recent innovative research in these respective fields has revealed the composite nature of these medical traditions, which only further complicates the question at hand.⁸¹

⁷⁸ Odette Viennot, *Le culte de l'arbre dans l'Inde ancienne* (Paris 1954), pp. 26-32. On the Indo-Iranian link see pp. 29-30.

⁷⁹ This is but one meaning of the term. For an in-depth analysis of this term in the literature of classical Indian medicine, see, Dominik Wujastyk, “Agni and Soma: A Universal Classification,” *Studia Asiatica* 4 & 5 (2003-2004): 347-370.

⁸⁰ See Tamás Visi, “The Book of Asaf and Shabatai Donolo’s Hebrew Paraphrase of Hippocrates’ Aphorisms”, in *Jewish Traditions and the Transfer of Medical Knowledge: Proceedings of the Panel ‘Jewish Medicine in Context(s)’ at the 15th Congress of the European Association of Jewish Studies (EAJS), Paris, 20.-25.7.2014*, ed. Lennart Lehmann (Wiesbaden: Harrassowitz), (forthcoming).

⁸¹ For recent work on Persian medicine see Paolo Delaini, *Medicina del Corpo, Medicina dell’anima: La circolazione delle Conoscenze Medico-Filosofiche nell’Iran Sasanide* (Milano: Mimesis, 2013). For recent work on Syriac Medicine see the many publications of Grigory Kessel (a full list is available on his academia.edu page); Alexey Muraviev, “La médecine thérapeutique en syriaque (IV^e-VIII^e siècle)”, in *Les sciences en syriaque*, ed. Émilie Villey (Paris: Geuthner, 2014), pp. 253-284; Siam Bhayro and Robert Hawley, “La Littérature botanique et pharmaceutique en langue syriaque”, in *Les sciences en syriaque*, pp. 285-318. See also the work of Gerrit Reinink, such as: “Theology and Medicine in Jundishapur. Cultural Change in the Nestorian School Tradition”, in Alasdair A. MacDonald, Gerrit Jan Reinink, Michael Twomey, eds., *Learned Antiquity: Scholarship and Society in the Near East, the Greco-Roman World, and the Early Medieval West*, (Leuven: Peeters, 2003), pp. 163-174; and Gerrit Reinink, “Man as Microcosm: A Syriac Didactic Poem and its Prose Background”, in Annette Harder, Alasdair A. MacDonald & Gerrit Jan Reinink, eds., *Calliope’s Classroom: Studies in Didactic Poetry from Antiquity to the Renaissance*, (Leuven: Peeters, 2007), pp. 123-152; Adam Becker, *Fear of God and the Beginning of Wisdom: The School of Nisbis and the Development of Scholastic Culture in Late Antique Mesopotamia* (Philadelphia: University of Pennsylvania Press, 2006).

See also Stefanie Rudolf, “Die astraldivinatorischen Passagen des Syrischen Medizinbuchs: Neu übersetzt und kommentiert”, unpublished PhD dissertation, Freie Universität Berlin, 2015. The ground work for this field has been laid by the many works of Philippe Gignoux. On the lacunae in the study of Byzantine medicine, see the research proposal of Petros Bouras-Vallianatos “Experiment and Exchange: Byzantine Pharmacology between East and West (ca. 1150-

While much of the scholarship on Syriac medicine has focused on its role as a transmitter of Galenic medicine and as bridge between Greek and Arabic, the significance of medical texts composed by members of the Church of the East based in Persia⁸² is increasingly coming to light. Although these texts were influenced by Greek knowledge, they also reflect significant differences.⁸³ Hence, while we acknowledge that comparing medical melanges to one another is infinitely complex it is possible at this stage to say something about the grand question of the medical content of *Sefer Asaf*.

Firstly, there are a few markers that distinguish the medical content of *Sefer Asaf* from Galenic medicine: its *pneumata* (רוחות); its theory of embryology; its discussion of the 248 bones; its inherent link with astrology; its reference to “red bile” (מרירה אדומה) as well as the abundance and linguistic forms of Indic *materia medica*. All of these—except for the *pneumata*—have clear parallels in Syriac medical texts deriving from the Eastern Church in Persia. *Sefer Asaf*'s *pneumata* remains an open question with three possible hypotheses: one is that we are yet to find its Syriac parallels; the second is that this is an original contribution of *Sefer Asaf*, and the third is that it reflects influence coming from elsewhere. That said, however, the elaborate discussion on soul and spirit with reference to medical aspects is prevalent in the medical and medically-related texts of the Church of the East.⁸⁴

THE STRUCTURE OF SEFER ASAF AND A SYRIAC PARALLEL

Having reconstructed what appears to be a *Sefer Asaf* urtext, I have found a close similarity with a Syriac medical text previously ascribed to Aḥūdemmeḥ, bishop of the Church of the East in Nisbis in the mid sixth century. The similarity between these two texts is apparent not only with regards to the above medical content but also with regards to their overall structure.

Visi has already noted the similarity between the embryology section of this text and that of *Sefer Asaf*.⁸⁵ This Syriac text, edited by Chabot in 1943 and discussed by Philip Gignoux, Gerrit Reinink, Grigory Kessel and Paolo Delaini,⁸⁶ appears to be a composite text as well. The first part of the text is ascribed to Aḥūdemmeḥ

ca. 1450”. As Bouras-Vallianatos has pointed out, Byzantine medical literature remains largely unexplored. See also: Petros Bouras-Vallianatos, “Case Histories in Late Byzantium: Reading the Patient in John Zacharias Aktouarios’ *On Urines*”, in Georgia Petridou and Chiara Thumiger, eds., *Homo Patiens- Approaches to the Patient in the Ancient World*, (Leiden: Brill, 2016), pp. 390-409, at p. 390.

⁸² Previously referred to as ‘Nestorians’. On why the term ‘Nestorian’ in this context should be replaced by either ‘Church of the East’ or ‘Church of Persia’, see: Peter L. Hofrichter, “Preface”, *Jingjiao: The Church of the East in China and Central Asia*, ed. Roman Malek (Sankt Augustin: Monumenta Serica, 2006), pp. 11-14. For the role of the Eastern Church in transmitting medical knowledge further east, see my “Revisiting Galen”.

⁸³ See discussions in Delaini, *Medicina del Corpo* (particularly pp. 7-120); Reinink, “Theology and Medicine”; Becker, *Fear of God*.

⁸⁴ For an overview and discussion of related literature, see Henri Hugonnard-Roche, “La question de l’âme dans la tradition philosophique syriacque (VI^e-IX^e s.),” *Studia Graeco-Arabica* 4 (2014): 17-64.

⁸⁵ Visi, “Uroscopy”. Both Visi and myself have also discussed the similarities in the sections dealing with the 248 bones of the body, although this is a more complex issue as it is also attested in the Mishnah. Ronit Yoeli-Tlalim, “Counting body parts: views from the Hebrew Book of Asaf”, paper presented in *Defining Jewish Medicine* workshop, UCL, 28-29 July 2014.

⁸⁶ Jean-Baptiste Chabot, “Notice sur deux manuscrits contenant les oeuvres du moine Isaac de Rabban Isho et du métropolitain Ahoudemmeḥ,” *Notices et extraits des manuscrits de la Bibliothèque nationale et autres bibliothèques* 43 (1943): 43-76; Gerrit Reinink, “Man as Microcosm”; Grigory Kessel, “La position de Simon de Taibuteh dans l’éventail de la tradition mystique syriacque”, in *Les mystiques syriaques*, ed. Alain Desreumaux (Paris: Geuthner, 2011), pp. 121-150; Delaini, *Medicina del Corpo*.

Antipatro, although Delaini has suggested it is a (Pseudo) Aḥūdemmeḥ Antipatro.⁸⁷ Grigory Kessel has shown that the second part of this text is the so-called *Book of Medicine* by Simone di Taibuteh. Both texts, the Syriac and *Sefer Asaf*, begin with the same structure:

	<i>Sefer Asaf</i> (Munich 231)	Simone di Taibuteh and (Pseudo-) Aḥūdemmeḥ Antipatro (Chabot's edition, reference are to Chabot's Latin translation)
A narrative on the "history of medicine"	1v-2v	pp. 63-4
Description of the 248 bones of the body	2v-3r	p. 64
A description of the "canals" of the body	3r-3v	pp. 64-5
The seats of blood, bile, black bile and phlegm	4v	p. 65
Embryology (four seats of the semen and characteristics of those born as a result of those different locations of the semen	5v-6v	pp. 65-7
The role of parts of the body (brain, eyes, nose, lungs, kidneys, bladder, intestine)	7v	pp. 67-8

I am currently preparing a full comparison between the two texts. What can be said from the general comparison so far, it that the texts are not identical, but the similarities are substantial indeed.

CONCLUSION

The form and usage of the Persian months as they appear in *Sefer Asaf* point to Persian influence – whether direct or indirect. The hypothesis of Persian influence is further corroborated by other Persian input: the figure of Asaf himself, the similarity with other Persian or Persian-influenced accounts on the origins of the sciences; the appearance of the Indo-Iranian motif of the trees of medicine; and the central importance given to Indic medical knowledge. The Persian influence hypothesis can also explain the numerous references to the "sages of Persia," to Persian plant names, and indeed to entire Persian recipes.

Another question which the hypothesis of Persian influence could explain is the influence of apocryphal literature on the composition of the introduction of *Sefer Asaf*. The close similarities between the introduction of the *Sefer Asaf* and the *Book of*

⁸⁷ Pages 53-61 in Chabot's edition; 63-70 in his Latin translation.

Jubilees and the *Book of Enoch I* have been noted before.⁸⁸ The grand question of how and when this kind of input would have been possible has been left open. A possible solution, in line with my overall argument here, derives from Erder and Ben Shammai's work which has shown that apocryphal literature was prevalent in Babylonia and Persia in the middle of the eighth century.⁸⁹ The Eastern Christian origin also explains certain particularities of the text, such for example the use of "Macedonians" for Greeks- a usage confined to the Septuagint, specifically to *Esther* and *Maccabees*.⁹⁰

The Syriac influence on *Sefer Asaf* was suggested already by Steinschneider,⁹¹ Löw,⁹² Lieber⁹³ and recently analysed by Visi.⁹⁴ What the material presented here allows us to do now, however, is locate this Syriac influence as deriving from the Church of the East, located somewhere in Persia. *Sefer Asaf*, or at least some of what appears to be its basic text, seems to have been derived from Syriac medical literature of the Eastern Church in Persia.

There is a good reason why *Sefer Asaf* has remained an enigma for so long – this is indeed a very complex work, which requires the expertise of people working in several languages. The passages analysed in this paper are but a handful in a very long text. More research into the medical knowledge that is represented in *Sefer Asaf* still needs to be conducted in order to say more about the building blocks that make up this text. With the working paradigm that this article has presented, more collaborative work can be done to analyse the text and its sources in a thorough manner. What is clear in any case is that *Sefer Asaf* is a very important piece in the great puzzle of the history of Eurasian medical knowledge.

Acknowledgements

Research for this paper has been conducted as part of my Wellcome Trust project "Re-Orienting Early Medicine: Bridges of Knowledge between East and West" (grant no. 088251). Gad Freudenthal, Judith Olszowy-Schlanger, François de Blois, Sacha Stern, Mark Geller, Petros Bouras-Vallianatos and Paolo Delaini have provided invaluable advice and assistance in various stages of this research. Although I was unable to take up my IAS Hebrew University Fellowship as part of the "Jewish Physicians in Medieval Christian Europe" organised by Gad Freudenthal and Reimund Leicht, I benefitted enormously from my unofficial affiliation with the group. I am especially grateful for the opportunity to present parts of my research to the group on two occasions and to receive their comments. Reading sections from *Sefer Asaf* with members of Prof. Philip van der

⁸⁸ See Martha Himmelfarb, "Some Echoes of *Jubilees* in Medieval Hebrew Literature," in *Tracing the Threads: Studies in the Vitality of Jewish Pseudepigrapha*, ed. John C. Reeves (Atlanta, Georgia: Scholars Press, 1994), pp.115-141. See especially pp. 127-136.

⁸⁹ Yoram Erder, "When did the Karaites first Encounter Apocryphic Literature akin to the Dead Sea Scrolls?," *Cathedra* 42 (1987): 54-68 (Heb.); Haggai Ben-Shammai, "Some Methodological Notes Concerning the Relationship between the Karaites and Ancient Jewish Sects", *Cathedra* 42 (1987): 69-86 (Heb.)

⁹⁰ This point has been raised by Nutton ("From Noah to Galen"), though he suggested this indicates a Jewish source.

⁹¹ Moritz Steinschneider, *Die hebraeischen Übersetzungen des Mittelalters und die Juden als Dolmetscher* (Graz: Akademische Druck- u. Verlagsanstalt, [1893] 1956), p. 667.

⁹² Immanuel Löw, *Die Flora der Juden* (Vienna, 1824-1834), vol. 4, pp. 167-9.

⁹³ Lieber, "Asaf's 'Book of Medicines'".

⁹⁴ Visi, "Uroscopy".

Eijk's research group in Berlin: Orly Lewis, Peter Singer and Christine Salazar, has helped clarify the non-Galenic elements of the text. I thank Bill (William) MacLehose, Resianne Fontaine and the three anonymous reviewers of this paper for their comments. All errors remain my own.