

# Defining Jewish Medicine

# Episteme in Bewegung

Beiträge zu einer transdisziplinären Wissensgeschichte

Herausgegeben von Gyburg Uhlmann im Auftrag des Sonderforschungsbereichs 980 "Episteme in Bewegung. Wissenstransfer von der Alten Welt bis in die Frühe Neuzeit"

Band 8

2021 Harrassowitz Verlag · Wiesbaden

# Defining Jewish Medicine

Transfer of Medical Knowledge in Premodern Jewish Cultures and Traditions

Edited by Lennart Lehmhaus

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Publiziert werden Beiträge, die im Umkreis des an der Freien Universität Berlin angesiedelten Sonderforschungsbereichs 980 "Episteme in Bewegung. Wissenstransfer von der Alten Welt bis in die Frühe Neuzeit" entstanden sind.

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Gefördert durch die Deutsche Forschungsgemeinschaft (DFG) – Projektnummer 191249397 – SFB 980.

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Bibliografische Information der Deutschen Nationalbibliothek Die Deutsche Nationalbibliothek verzeichnet diese Publikation in der Deutschen Nationalbibliografie; detaillierte bibliografische Daten sind im Internet über https://www.dnb.de abrufbar.

Informationen zum Verlagsprogramm finden Sie unter https://www.harrassowitz-verlag.de

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ISSN 2365-5666 eISSN 2701-2522 DOI: 10.13173/2365-5666



ISBN 978-3-447-10826-3 eISBN 978-3-447-19606-2 DOI: 10.13173/9783447108263



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# Exploring Eurasian Transmissions of Medical Knowledge: Cues from the Hebrew *Book of Asaf*

#### Ronit Yoeli-Tlalim\*

Dedicated to the memory of Asaf Ha'rofeh Hospital, Israel

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.

This paper examines the narrative on the origins of medical knowledge as found in the *Book of Asaf*. This narrative presents the medical knowledge which follows it as deriving from Eurasian input. Narratives on the origins of knowledge such as this one both reflect and construct views on medicine and hence are important in providing a more poly-vocal history of medicine, taking into account local cultures of historiographies. More broadly, taking such accounts seriously can help to write *histories* of medicine rather than *the history* of medicine. As Nappi has pointed out, such attempts require taking local diversities in historiography seriously, and translating local differences into a meaningful common conversation.<sup>2</sup>

Narratives on the origins and history of medicine—and the history of knowledge more generall—are important within this scope for a number of reasons. Firstly, an analysis of how and why they were constructed can reveal important political, religious, economic and cultural factors at play at the time of construction. Secondly, narratives of this sort raise the large and complicated question of whether and to what extent such accounts actually reflect the nature of the knowledge they describe. In other words, they raise questions like: when and why does a culture/religion/state ideology choose to present/construct itself as multicultural? Are there correspondences between *being* multi-cultural and of *declaring* a culture as such?

The preface of the *Book of Asaf* has been known to scholars for a century and a half, although in ways which have caused a fair amount of confusion.<sup>3</sup> The preface was first

<sup>\*</sup> Research for this paper was funded by the Wellcome Trust (grant no. 088251). I would like to thank Tamás Visi and Lennart Lehmhaus for their comments on a previous version of this paper.

<sup>1</sup> For two recent publications, see Visi 2016 and Yoeli-Tlalim 2018.

<sup>2</sup> As called on by Nappi in regards to the history of science at large, see Nappi 2013.

<sup>3</sup> The following overview of the history of the study of the Introduction is based on Nutton 2012.

printed by Adolph Jellinek in his *Bet Hamidrash* in 1853, from the Munich ms 231. Jellinek appended the beginning of *Sefer Raziel* and the opening of *Sefer Ha'razim* to the Asaf preface and gave them the title: מפר (Book of Noah). <sup>4</sup> Jellinek's text was subsequently translated to German, again with the title Book of Noah, by A Wünsche. <sup>5</sup> Both Jellinek and Wünsche did not clarify that these were three separate texts. Louis Ginzburg in his *Legends of the Jews* began the process of clarification at the beginning of the 20<sup>th</sup> century. <sup>6</sup>

Also helping to clarifying the confusion was the important study by the Hungarian Rabbi and scholar Ludwig [Lajos] Venetianer of the *Book of Asaf*, which appeared in 1916, *Assaf Judaeus: Der aelteste medizinische Schriftsteller in hebraeischer Sprache* (Strassburg: Karl J. Tübner 1916). In that same year, Karl Sudhoff published a Latin text which was copied in the 15<sup>th</sup> century and which Sudhoff identified as deriving from the Introduction to the *Book of Asaf*. The Introduction to the *Book of Asaf* was also discussed by Muntner.<sup>8</sup>

# Versions of the introduction to the Book of Asaf

The manuscripts

The introduction to the *Book of Asaf* appears in the following manuscripts:

Munich Bayerische Staatsbibliothek Cod. hebr. 231; Firenze Laurenziana Plut. 88.37; British Library add.27018; Bodleian Oxford, Ms. Laud. Or. 113; Frankfurt Ms. hebr. Oct. 185; Institute of Oriental Manuscripts, Russian Acedemy of Sciences, St Petersburg Ms. A 170; Institute of Oriental Manuscripts, Russian Acedemy of Sciences, St Petersburg Ms. B 449.

Of the *Sefer Asaf* manuscripts which do not include the Introduction, mention should be made of Bodleian Oxford Ms. opp. 687 (OL 1645) (no. 2138 in Neubauer's Catalogue), which is one of three main *Asaf* manuscripts.<sup>9</sup>

<sup>4</sup> Jellinek 1853, vol. III, xxx-xxxiii & 155-160. Sefer Ha'razim is a work of magical character dated to the first millennium CE, probably towards the middle of that millennium. It has survived in fragments from the Genizah and was published with many variants by Mordechai Margaliot in 1966. An English translation was prepared by Michael Morgan and published in 1983. Sefer Raziel is a much later work published in Amsterdam in 1701.

<sup>5</sup> Wünsche 1909, vol. III, 201-210.

<sup>6</sup> Ginzburg 1913, vol. 1, 154–157, 172–174. The book itself was published in 1913, but the notes which clarified the sources appeared only in 1925 (vol. 5, 172–175, 196–197).

<sup>7</sup> Sudhoff 1916.

<sup>8</sup> Muntner 1965, at pp. 396–407; Muntner 1957, 65–72.

<sup>9</sup> This manuscript has been dated by Langermann to the 12<sup>th</sup> or 13<sup>th</sup> century. See Langermann 2009. On this manuscript see also Shatzmiller 1983. The manuscript includes 188 folios. Judging by its orthographic mistakes, it seems to be a copy of an earlier manuscript.

## Munich Bayerische Staatsbibliothek Cod. hebr. 231

Munich Bayerische Staatsbibliothek hebr 231 is a codex of 277 folios. <sup>10</sup> It has been dated by Judith Olszowy-Schlanger based on preliminary paleographical indications to the 13<sup>th</sup> or 14<sup>th</sup> century and originating from Italy. <sup>11</sup> Previous references and studies of the *Asaf* Introduction are based on this version.

#### Florence Laurenziana Plut. 88.37

Florence Laurenziana Plut. 88.37 has been dated to the 14<sup>th</sup>-15<sup>th</sup> century. 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. 12

Bodleian Libraries, Oxford, Ms. Laud. Or. 113 (Neubauer catalogue: 2142/20)

Provence, 16<sup>th</sup> century, paper. <sup>13</sup> This codex is a collection of medical texts, which are numbered. The *Book of Asaf* text is four folios long (fol. 97a–98b). It includes the introduction (97a–97b) followed by the general description of the structure of the body.

## British Library add. 27018

This is a medical codex, which includes four separate texts. Margoliouth has dated it to the 15<sup>th</sup> century. It is written on paper and includes 22 leaves with 27 lines to a page. Leaves are missing after fol. 6, 11, and 12. Most extant leaves are slightly damaged. The last word of each folio is repeated at the beginning of the next. Margoliouth has suggested that the text is written in a peculiar Rabbinic hand of what appears to be of oriental origin.<sup>14</sup>

The codex includes four texts. The first text is ספר אגור (fol. 2a–14a) based on the aphorisms of Hippocrates (See Steinschneider HU, pp. 660–1). The second text

For a description of the codex see: Biscioni 1757, Vol. 2.

The second text, a head to toe list of illnesses (fol. 26r–30v), which is clearly demarcated as a separate text in Florence Laurenziana Plut. 88.37, appears at the end of Munich 231 (fols.—267r–287r) and has been treated as part of *Sefer Asaf*. This is but one indication that what has been alluded to as *Sefer Asaf* is a composite text, which in different codices comprises of different collections.

- 13 Neubauer 1886 and Beit-Arié 1994.
- 14 Margoliouth 1965, Part III, 348.
- 15 Margoliouth says on the other copy of *Sefer Agur* (Harley 5527), that is it based on Constantinus Africanus' Latin version of the aphorisms of Hippocrates.

<sup>10</sup> Steinschneider 1875, 82-83 (pp. 106-107 in the 1895 edition).

<sup>11</sup> 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.

<sup>12 1.</sup> Fol. 1v-26r: Sefer Refu'ot;

<sup>2.</sup> Fol. 26r–30v: Head to toe list of illnesses (incomplete; missing quire at the end);

<sup>3.</sup> Fol. 31r-58r: ספר הראשון של פיסיקא.

<sup>4.</sup> Fol. 58v- 73v: הספר השני אנטיאוטריאו (Antidotarium).

<sup>5.</sup> Fol. 73v-84r: הספר השלישי: צירלוגיאה היא מלאכת יד

<sup>6.</sup> Fol. 84v-86r: ספר היקר.

<sup>7.</sup> Fol. 86r–110r: ביאטקו ספר : הספר (Viatico).

is also ascribed to Hippocrates, is titled: מידות אבוקרט (fols. 14b–16a) and is a brief treatise on signs of approaching death. The third text specifically refers to Asaf, and is titled: אלמדך להשכיל באותות הדפק מספר אסף (fols. 16a–17b)— "I shall teach you the signs of the pulse from Sefer Asaf".

The fourth text is titled: ספר עץ החיים (fols: 18b–22a, "The Book of the Tree of Life"). The title is followed by a further title: למען תגדל תפארתם על חכמי הארץ ("So that their glory shall increase among the sages of the land"). It is here we find an abbreviated version of the Sefer Asaf Introduction:

ויהי בבואם אל המקום ההוא וימצאו את עצי המרפא ועץ החיים וישלחו ידיהם לקחתם ויברק עליהם להט החרב המתהפכת ויתלהטו כלם בשביבי הברק ולא נמלט מהם איש ותעזב הרפואה מהגוים ותשבת חכמת הרופאים שש מאות ושלשים שנה עד מלוך ארתחשסתא המלך

בימיו קם איש נבון וחכם ומלומד דעת ספרי הרפואות ומבין כל דבר ושמו אפוקראט המקדוני ושאר חכמי הגוים

ואסף היהודי ודיסקורדיאוס הבעלכותי וגאליאנוס הכפתורי וחכמים הרבה מאד ויחדשו עבודת הרפואה

ותהי עד היום הזה

This abbreviated Introduction is followed by the *Sefer Asaf* account of the structure of the body (fols. 19a– 22a).

Frankfurt 185, St Petersburg A 170 and St Petersburg B 449 are all modern (19<sup>th</sup> and 20<sup>th</sup> century) copies:

**Frankfurt 185**—has been dated to the 19th century. It is titled: *Sefer ben Noah* and contains only the Introduction (Fols. 1–7).<sup>16</sup>

**St Petersburg A 170** has been dated to the 19<sup>th</sup> century. It consists of 11 folios. The Introduction appears on fol.1 (with no mention of India).

**St Petersburg B 449** has been dated to the 20<sup>th</sup> Century and appears to be a copy of St Petersburg A 170.

Commentary of Rabbi Elhanan ben Yakar of London to Sefer Yetsirah

Zvi Langermann has brought to our attention a quote from another version of the Introduction to *Sefer Asaf*, that of Rabbi Elhanan Ben Yakar of London, probably from the year 1200, which was discussed by Yehudah Arieh Vajda:<sup>17</sup>

והחכמה הזאת היא גדולה ועמוקה ובארץ הינד קמו פילוסופים גדולים ודרשו וחקרו וניסו בזאת החכמה ובימי ארתחשסתא קמו אחרים תחתם ואלה שמותם איצפוקר ההינדי תיאופילוס המישעי מארץ מואב וגליינוס הכפתורי מארץ כפתור ואסף הירחי. ותרב חכמת הרפואה בימים ההם כי עד הימים ההם לא ריפא אדם את חברו. והם שלחו בארץ הינד לקח משם עצי הרפואה ודשאי הרפואה וחיות הרפואה ותגדל חכמתם והמה עשו ספרים אין קץ

<sup>16</sup> According to the dating of the Jerusalem catalogue and also Roth and Prijs [1855] 1990, 58–59. See also: Jellinek 1855, 155.

<sup>17</sup> Langermann 2009; Vajda 1966.

לבד מספר שם בן נח אשר היה להם לפנים כי ספר שם היה סתום והיה כתוב בו לזה החולי זה הסם ולא היה בו פיר<ו>ש הדברים ועלילות החלאים מאיזה יסוד ובמה ירפא בכח חם וקר ולח ויבש והמה הוסיפו ופירשו כל מסיבות וענייני היסודות והגידים כמה הם ואני לא באתי לפרש כי אם כפי הצורך לזה הספר.™

And this wisdom is great and deep and in the land of Hind there were great philosophers who enquired, analysed and tried this wisdom. And in the days of Artaxšaçā (Artakhshashtah, ארתחששתא, Greek: Artaxerxes), others rose in their place, and these were their names: Itspocar the Hindu, Theophilus of Mesha in the Land of Mo'ab, and Galenos the Caphtorite, of the Land of Caphtor and Asaf Ha'yerekhi (the astrologer?). And the wisdom of medicine increased in those days, since till those days no man cured another. And they sent to the Land of Hind to take the trees of medicine from there, and the herbs of medicine and the animals of medicine, and their wisdom increased and they made endless books in addition to the Book of Shem son of Noah, which they had from before, because the Book of Shem was obscure and it said: for this illness, that drug, but it did not explain the meaning and how illnesses develop, from what element, and how to cure—in the power of heat or cold, damp or dry. And they added and explained all the reasons and issues of the elements and the *gidim* 19, how many there are, and I have come but to comment as needed for this book. 20

The Hebrew text below is based on Munich Bayerische Staatsbibliothek Cod. hebr. 231 with variant readings from Bodleian Oxford, Ms. Laud. Or. 113, Florence Laurenziana Plut. 88.37 and British Library add.27018:

Fol. 1v

ספר רפואות נקרא אסף היהודי 21

זה ספר רפואות אשר העתיקו חכמים<sup>22</sup> הראשונים מספר שם<sup>23</sup> בן נח אשר נמסר<sup>24</sup> לנח בלובר ההר מהררי<sup>25</sup>

בשם יי נעשה ונצליח

ספר רפואות חשוב ובדוק מרופאי הקדמונים

ספר רפואות אשר העתיקו חכמים הראשונים

In the name of God we shall proceed and be prosperous

An important book of medicine, tested by the ancient physicians

A book of medicine copied by the early sages.

<sup>18</sup> Vajda 1966, 172, lines 316-327.

<sup>19</sup> Gid can mean either sinew or blood vessel.

<sup>20</sup> My translation.

<sup>21</sup> Plut. 88.33 begins:

<sup>22</sup> OX Or 113 החכמים.

<sup>23</sup> OX Or 113 בן שם בן נח.

<sup>24</sup> OX Or 113 שנמסר.

<sup>25</sup> OX Or 113 מהרי.

אררט אחרי<sup>26</sup> המבול כי בימים ההמה<sup>27</sup> ובעת ההיא החלו רוחות הממזרים להתגרות בבני נח להסטות ולהטטות ולחבל ולהכות בחלאים28 ובמכאובים ובכל<sup>29</sup> מיני מדוה הממיתים ומשחיתים את בני אדם<sup>30</sup> אז באו כל<sup>31</sup> בני נח ובניהם<sup>32</sup> יחדו ויספרו את<sup>33</sup> נגטיהם לנח אביהם ויגידו לו טל אודות המכאובים הנראים בבניהם ויבעת נח  $^{35}$ וידע כי מעון האדם  $^{34}$ ומדרך פשעם יתעאנו  $^{37}$ בכל מיני מיני תחלואים ומדוים אז הידש נח את בניו $^{38}$  ואת בני ביתו וביתו יחדו ויגש אל המזבח<sup>40</sup> ויעל עולות ויתפלל אל האלוקים<sup>40</sup> ויעתר לו וישלח מלאר אחד<sup>41</sup> ממלאכי הפנים מו הקדושים<sup>42</sup> ושמו רפאל לכלה<sup>43</sup> את רוחות הממזרים מתחת השמים לבלתי השחית עוד בבני האדם 44טפט המלאך בין ויכלאם אל בית המשפט אך אחד מעשרה הניח להתהלך בארץ לפני שר המשטמה לרדות בם במרשיעים 45 לנגע ולענות בהם בכל מיני מדוה תחלואים 47 ולנגע מכאובים ואת רפואות נגטי בני אדם וכל מיני רפואות הגיד המלאך לנח לרפא בעצי הארץ וצימחי

<sup>26</sup> OX Or 113 אחר.

<sup>27</sup> OX Or 113 ההם.

<sup>28</sup> OX Or 113 בחליים ומכאובות.

<sup>29</sup> OX Or 113 ולכל.

<sup>30</sup> OX Or 113 האדם.

<sup>31</sup> OX Or 113- no כל.

<sup>32</sup> OX Or 113- no ובניהם.

<sup>33</sup> OX Or 113- no את.

<sup>34</sup> OX Or 113 וידע נח כי מעון בני האדם.

<sup>35</sup> Plut. 88.33 יתענו.

<sup>36</sup> OX Or 113 כל.

<sup>37</sup> OX Or 113 קדש.

<sup>38</sup> OX Or 113 בניו ובני בניו ובנותיו.

<sup>39</sup> OX Or 113 אשר בנה.

<sup>40</sup> Plut. 88.33 האלהים.

<sup>41</sup> OX Or 113 מן הקדושים שר הפנים.

<sup>42</sup> Plut. 88.33 מלאך אחד מן הקדושים ממלאכי.

<sup>43</sup> OX Or 113 לכלות.

<sup>44</sup> OX Or 113 בבית המשפט.

<sup>45</sup> Plut. 88.33 no המשטמה. For *mastema* see also the Genizah version of the Damascus Document. The Damascus Document refers to Jubilees.

<sup>46</sup> OX Or 113 להכות המרשיעים.

<sup>47</sup> OX Or 113 מדוה ותחלואים / ויגד המלאך לנח לרפא.

#### Fol. 2r

<sup>48</sup>האדמה ועיקריה וישלח את שרי הרוחות 49 הנותרים מהם להראות לנח<sup>50</sup> ולהגיד לו את עצי הרפואות עם כל דשאיהם וירקיהם ועשביהם ועיקריהם<sup>51</sup> וזירועיהם למה נבראו וללמדיהו כל דברי רפואתם עד פלט למרפא ולחיים ויכתוב נח53 את הדברים האלה על ספר ויתנהו לשם בנו הגדול 54 ומן הספר הזה העתיקו חכמי הראשונים55 ויכתבו ספרים הרבה איש ואיש כלשונו ותרבה דעת הרפואה בארץ בכל הגוים 56 אשר בחנו את ספרי הרפואות בחכמי הודו<sup>57</sup> וחכמי מקדון וחכמי מצרים כי חכמי הודו הם שוטטו למצוא כל58 עצי רפואות והבשמים וחכמי ארם מצאו 59 העשבים לכל מיניהם וזירוטיהם 60 לרפא ואת פשר דברי הספרים העתיקו ארמית וחכמי מקדון החלו ראשונה לרפא בארץ וחכמי מצרים החלו לחבר ולנחש במזרות<sup>63</sup> ובכוכבים<sup>64</sup> ללמד<sup>65</sup> את ספר מדרש הכשדים אשר העתיק קנגרבון66 אור בן  $^{69}$ כשד $^{67}$  לכל מעשה החרטומים  $^{68}$  ותגדל להם חכמתם עד קום אסקלפינוס אחד מחכמי מקדון וארבעים

<sup>48</sup> Plut. 88.33 שר.

<sup>49</sup> OX Or 113 מהם הנותרים הרוחות הרוחות שר הישלח.

<sup>50</sup> OX Or 113 אל נח.

<sup>51</sup> OX Or 113 no עיקריהם.

<sup>52</sup> OX Or 113 no למה נבראו.

<sup>53</sup> OX Or 113 ויכתוב נח כל הדברים האלה.

<sup>54</sup> Plut. 88.33 no הגדול.

<sup>55</sup> OX Or 113 החכמים הראשונים.

<sup>56</sup> OX Or 113 בארץ ובכל הגויים אין חכמים אשר.

<sup>57</sup> OX Or 113 וחכמי מצרים וכחכמת ארם כחכמי הודו.

<sup>58</sup> OX Or 113 no כל.

<sup>59</sup> OX Or 113 את.

<sup>60</sup> OX Or 113 וזרעיהם.

<sup>61</sup> OX Or 113 את פשר הדברים.

<sup>62</sup> OX Or 113 ראשונה.

<sup>63</sup> OX Or 113 במזלות.

<sup>64</sup> Plut. 88.33 וכוכבים.

<sup>65</sup> OX Or 113 ספר.

<sup>66</sup> Plut. 88.33 קנגר בן אור.

<sup>67</sup> OX Or 113 קינן בן כשד.

<sup>68</sup> OX Or 113 לכל החרטומים.

<sup>69</sup> OX Or 113 ותגדל חכמתו.

איש עמו<sup>70</sup> מן החרטומים מלומדי הספרים הנעתקים וילכו הלוך בארץ ויעברו מעבר להודו אל ארץ<sup>71</sup>

Fol. 2v

קדמת עדן למצוא מקצת עצי החיים 7 למען
תגדל תפארתם 7 על חכמי הארץ 7 ויהי בבואם
אל המקום ההוא וימצאו את עצי המרפא 7 ועצי
עץ החיים 7 וישלחו את ידם לקחתם ויברק ה 77
עליהם להט החרב המהפכת 7 וילהטו 7 כולם בשביבי
הברק ולא נמלט מהם איש ותעזב הרפואה מן
הרופאים 8 ותשבת חכמת הרופאים 8 שש מאות
ושלשים שנה עד מלוך ארתחשסת 8 המלך
בימיו קם 8 איש נבון וחכם ומלומד דעת ספרי
הרפואות 8 ומבין לכל דבר 8 ושמו איפוקרט 8 המקדוני
ושאר חכמי הגוים אסף 8 היהוד 8 ודיסקרדיוס
הבעלת 8 וגליינוס 6 הכפתורי וחכמים הרבה מאד
ויחדשו עטרת 9 הרפואה 9 ותהי עד היום הזה

<sup>70</sup> OX Or 113 no עמו.

<sup>71</sup> OX Or 113 אל ארץ נוד קדמת עדן.

<sup>72</sup> OX Or 113 עצי הרפואה ועץ החיים.

<sup>73</sup> OX Or 113 רפואתם.

<sup>74</sup> BL add. 27018 (hereafter: BL) introduction text begins here. Ox Or 113 על כל חכמי הארץ.

<sup>75</sup> OX Or 113 ואת עץ החיים הרפואה.

<sup>76</sup> BL ועץ החיים.

<sup>77</sup> Plut. 88.33 omits 'л.

<sup>78</sup> OX Or 113 & BL: ויברק עליהם להט החרב המתהפכת.

<sup>79</sup> OX Or 113 ויתלהטו.

<sup>80</sup> Plut 88.33 מן הגוים; BL מהגויים.

<sup>81</sup> OX Or 113 מן הגויים ותשבות הרפואה.

<sup>82</sup> Plut 88.33 ארתחשתא.

<sup>83</sup> OX Or 113 עמד.

<sup>84</sup> OX Or 113 הרפואה.

<sup>85</sup> OX Or 113 ומבין דבר מתוך דבר.

<sup>86</sup> OX Or 113 אפוקראט המקדומי BL אפוקרט.

<sup>87</sup> BL ואסף.

<sup>88</sup> OX Or 113 אסף וחכמי היהודים והרבה חכמים אחרים.

<sup>89</sup> BL ודיסקורדיאוס הבעלכותי.

<sup>90</sup> BL וגאליאנוס.

<sup>91</sup> BL עבודת.

<sup>92</sup> OX Or 113 ויחדשו את עבודת הרפואה.

(fol. 1v)

The Book of Medicine [by the so-] called Asaph the Jew

This is the Book of Medicine translated by the first sages from the Book of Shem son of Noah, which was given to Noah at the Luvar Mountain, one of the Ararat Mountains <sup>93</sup> after the flood.

Since in those days and in that time, the evil spirits began to torment the sons of Noah, to deviate and terrorise and blow with illnesses and pain and all sorts of destructive and deadly ailments.

Then all the sons of Noah came together with their offspring and told their father Noah about all their ailments.

And they told him about the sicknesses visible in their offspring.

And Noah was terrified and he knew that it is due to human iniquity and the path of misconduct that they would contrive all sickness and ailments.

Then Noah blessed his sons and their offspring [and his household?] together. And he went to the altar and brought sacrifice and prayed to God.

And He granted his wish and sent him one of the Angels of Presence (ממלאכי הפנים), of the holy ones, and his name—*Rafa'el*,

to extinguish the evil spirits under the heaven, so as not to harm humans any longer. And the angel did so.

And he locked them up in the house of justice.

But one out of ten—he let go in the land before the Prince of Animosity (שר)

to reign them, the evil ones, to cause illness and pain.

And the angel told Noah about the remedies for human ailments and all sorts of ailments—

how to heal with the trees of the land and the plants

(fol. 2r) of the earth and its roots (ועיקריה).

And he sent the remaining Princes of Spirits (שרי הרוחות) to show Noah and instruct him regarding the trees of medicine along with their grass and their herbs and their vegetables and their seeds and their roots—the reason for their creation, and to teach him every detail of their healing properties.

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 <sup>94</sup> and the sages of Egypt. <sup>95</sup> The

<sup>93</sup> Luvar as one of the mountains of Ararat appears also in *Jubilees 7:*1.

<sup>94</sup> The Eastern Christian origin of *Sefer Asaf* for which I argue in Yoeli-Tlalim 2018 also explains the use here of "Macedonians" for Greeks—a usage confined to the Septuagint, specifically to *Esther* and *Maccabees*. This point has been raised by Nutton, though he suggested this indicates a Jewish source. See Nutton 2012. I would like to thank Mark Geller for raising this question.

<sup>95</sup> OX Or 113 adds: "and the wisdom of Aram".

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 calculate <sup>96</sup> and perform divinations with the stars and constellations, to teach the book of Babylonian wisdom, copied by Kangar son of Ur son of Kesed <sup>97</sup> as well as all the deeds of the magicians (*khartumim*). <sup>98</sup> 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 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 flame of the swirling sword.<sup>99</sup> 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 Artaxšaçā (Artakhshashtah, ארתחששתא, Greek: Artaxerxes) the King. And in the days of Artaxšaçā 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'al 100 and Galenos of Caphtor 101 and many other sages and they renewed the glory of medicine, and it is living till this day... 102

<sup>96</sup> מחבר —can also mean: compose.

<sup>97</sup> Kesed is mentioned in Genesis 22:22.

<sup>98</sup> The *khartumim* are mentioned in *Genesis* 41, when they are unable to decipher Pharaoh's dream; in *Exodus* 7–9—in magic competitions with Moses; and in *Daniel* 1–2 and 4– when Daniel and his Jewish companions' wisdom exceeds that of the local *khartumim* and as interpreters of Nebuchadnezzar's dreams.

<sup>99</sup> The expression appears in *Genesis* 3:24. The *King James Bible* translates this expression as: "the flaming sword which turned every way". The context in *Genesis* 3: 24 is similar to here: God is said to have appointed the *cherubim* and the flame of the swirling sword to guard the way to the tree of life. Biblical commentators have discussed whether the deterrent refers to the sword or the flame. Rabbi David Kimkhi explains for example that it is the sight of the flame that is meant to frighten, i.e.: not the physical aspect, but the sight of it.

<sup>100</sup> Perhaps referring to the mythical association of the god Ba'al with northern Syria, or sometimes more generally: the mythical 'Mountain of the north'.

<sup>101</sup> Biblical island; usually associated with Crete. In the Septuaginta and in the Syriac tradition, Caphtor was identified with Cappadocia. See: Wainwright 1956; Le Déaut and Jacques 1971. On this identification in the *Peshitta* and in the Syriac geographical tradition, see: Witakowski 1993, 637, 639, and 647.

<sup>102</sup> Munich heb 231, fols. 2r and 2v, my translation.

## Links with Jubilees and Enoch

The close similarities between the introduction of the *Book of Asaf* and *Jubilees* 10: 1–14 as well as *I Enoch*, have been noted down before. <sup>103</sup> In *Jubilees*, a biblical apocryphal book dated to the mid–second century BCE, we find the same notion of medical knowledge as being derived from Noah and subsequently passed on to his son Shem. <sup>104</sup> The *Asaf* introduction also alludes to the book of *I Enoch*, in which Enoch—recounted in *Genesis* as going to heaven and not dying—transmits his divine wisdom to Metushelakh. <sup>105</sup> There have been two main views on the connection between the introduction to the *Book of Asaf* and *Jubilees*. One is that the *Book of Asaf* was partly based on *Jubilees*. The other is that they both preserve an older text/s known as the *Book* (or: *Books*) of *Noah*. <sup>106</sup> The *Book/Books of Noah* do not survive intact in any language. There are also no mentions of such a text in the canon lists, which suggests that the work was not widely circulated among Christians. Michael Stone has concluded that there were such literary work(s) in existence, preserved in bits in other texts such as the *Aramaic Levi Document, Jubilees* and the *Genesis Apocryphon*. <sup>107</sup>

The narratives as they appear in the introduction to *Book of Asaf* and *Jubilees* are generally similar, but there are some important differences. Firstly, in the *Book of Asaf* there is a far greater emphasis on the medical aspects of the story and the afflictions described are medical in nature. This medical terminology is repeated several times in the description. By comparison, in *Jubilees* 10:10 it is only when the remedies are introduced that it becomes clear that the afflictions involve illness at all. The *Book of Asaf* describes the remedies in much greater detail than in *Jubilees*. Himmelfarb has noted the difference in the angels to which the knowledge of medicine is attributed: in *Jubilees* they are anonymous angels whereas in *Sefer Asaf*, medical knowledge is attributed to a single angel: Rafa'el the arch-healing angel ('rafa' derives from the root 'to cure'; 'el' means 'God'). The topos of archangels as a source of knowledge is common in *Hekhalot* literature. Overall however, the introduction to *Sefer Asaf* is a more medicalised reworking of narratives found in other early Jewish sources—primarily as it serves—unlike *Jubilees*, *Enoch* or the *Hekhalot* literature—as an introduction to a substantial medical text.

The introduction to the *Book of Asaf* is an example of an "origin narrative": it recounts the origin/s of a field of knowledge, the motivation for "inventing" or "es-

<sup>103</sup> See Himmelfarb 1994, particularly pp. 127–136. See also Stone 1972. The link between *Sefer Asaf* and *Jubilees* and *Enoch* has also been pointed out by Muntner 1965.

The book of *Jubilees*, a second century BCE retelling of *Genesis* and *Exodus*, which has come down to us in Ethiopic, preserved by Ethiopic Christians. The original language of *Jubilees* was Hebrew. There is no manuscript evidence at all for the Greek version, which was the basis for the Latin and Ethiopic, although there are numerous allusions and citations. See: Bhyaro 2005.

<sup>104</sup> See Sefer Hayovlot, chap. 10, verses 12–14. Hartum 1969.

<sup>105</sup> Genesis 5:24.

<sup>106</sup> See Himmelfarb 1994, particularly 127–136.

<sup>107</sup> Stone 2006.

<sup>108</sup> Swartz 1996.

tablishing" that kind of knowledge and the field's subsequent development.<sup>109</sup> Narratives of this sort have not yet made the impact they deserve in the historiography of medicine. One main reason for this is the way they appear to intertwine what is conventionally termed "mythical" and "historical". While we cannot read hagiographies and mythical accounts as straightforward historical narratives, we can—and should—take some cues from such texts as they often serve as pointers to strata otherwise forgotten or else rewritten by later historical accounts.

Narratives of universal histories and of universal histories of knowledge exemplify different ways of managing relationships between foreign and local knowledge as well as ways of negotiating cultural differences. The organization of knowledge from and about different peoples has been a powerful tool for articulating claims of empire, uniting multiplicities of locales in harmonious singularity, mirrored by a claim for comprehensiveness. <sup>110</sup> The *Sefer Asaf* origin narrative situates itself vis-à-vis medical knowledge deriving from other cultures. As a Hebrew text with clear Jewish characteristics, which appears to be derived from a Persian cultural milieu, transmitted via Syriac, <sup>111</sup> it is interlaced within a web of cross-cultural, religious, economic and political traces.

## Universality

The universality constructed in *Sefer Asaf* is created through the superimposition of the notion of a universal antediluvian knowledge on the one hand together with concrete references to the known world. The correlation between the *Book of Sefer Asaf* and *Jubilees* and *Enoch* help us to unravel the nature of this universality. These sources reflect two types of universality. The first is an antediluvian one. *Enoch, Jubilees* and *Sefer Asaf* all refer to a panhuman knowledge, predating language and culture divisions. The other notion of universality is the description of the known world as found in the *Book of Jubilees*. The areas of the world as described in *Jubilees* correspond to references we find in *Sefer Asaf*.

Wisdom from before the flood has fascinated humankind for as long as flood narratives existed in ancient Babylonia. "I studied inscriptions from before the flood", wrote the king of Assyria in the seventh century BCE. 113 Claims that before the flood humankind possessed precious knowledge, lost in the flood and subsequently available only to some fortunate few, were rampant in antiquity. Alien to our own notion of progression of science and knowledge, origin narratives such as these reveal rather an emphasis on priority. In the Hellenistic period, claims of priority played a major role in the cultural battle between nations on the origins of the arts and sciences. The

<sup>109</sup> On origin narratives in Islamic sources, see Abbou-Hershkovitz 2008 and Brentjes 2013.

<sup>110</sup> For Gutas's analysis of similar Sasanian texts on the origins and transmission of knowledge, see Gutas 1998, esp. 34–40. See also: van Bladel 2012. For a discussion of the Jewish case, see Reed 2014. On Pliny's Natural History as Roman imperial building, see Murphy 2007. I would to thank Lennart Lehmhaus for supplying this reference.

<sup>111</sup> See Yoeli-Tlalim 2018.

<sup>112</sup> See Scott 2002.

<sup>113</sup> Van der Horst 2002, 139.

Babylonian scholar Berossus, writing in Greek about Babylonian culture in the late fourth or early third century BCE, claims to have 'found' the ancient writings hidden before the flood on Cronos' order to Xisutros (the "Sumerian Noah"). There is also a Hermetic topos of stelae containing primordial wisdom, inscribed in a sacred language from before the flood, translated after the flood, reminiscent of what we find in the *Book of Asaf*. Amongst Jews, Josephus, the first century Jewish historian, also speaks about a stele which preserves ancient knowledge, otherwise lost, located in a mysterious place in the East (perhaps China?). Indeed, the inscription of tablets and stones to preserve the world's ancient wisdom and to withstand future world destructions by water or fire is a common topos in many Jewish and Christian sources of the first centuries CE.

As has been argued with respect to the origins of Jewish science as it emerges in the *Book of Enoch* and *Book of Jubilees*, in the *Book of Asaf* too, we find a cross-cultural, inter-cultural assembly of knowledge, domesticating, as Philip Alexander has put it with regard to Enoch, 'a body of alien wisdom within Jewish tradition'. Like the *Book of Jubilees* and the *Book of Enoch*, the compiler of the *Book of Asaf* is constructing a direct link between a divine antediluvian knowledge and the *Book of Asaf*: the medicine in this text is presented as a *renewal* of a lost *universal* knowledge—the medical book that follows it extends Jewish writings into new domains.

Another key topos found in the introduction to the *Book of Asaf* is the notion of travel to the orient as a means of acquiring knowledge. Though this topos appears already in Greek sources on the sciences, there are a number of significant differences between the Greek accounts on one hand and the *Asaf* one on the other. Most interesting for our discussion here is that in Greek sources, Greek medicine is not presented as being a synthesis of many traditions, nor do they emphasize India as a source of medical knowledge. <sup>118</sup> As Karttunen has noted, while Indian physicians were known in Greek general literature, Greek classical works on medicine do not mention them. <sup>119</sup> Specifically on Indian medicine, Herodotus notes that certain Indians make no attempt to cure and have no medical skill at all. <sup>120</sup>

## The social purpose of the narrative

The introduction to the *Book of Asaf* presents itself as fulfilling an ancient Jewish role of preserving and disseminating knowledge. The purpose of the introduction, as found in parallel cases of ancient science is—in the words of Charlesworth: "an

<sup>114</sup> Ibid, 146. On Berossus and Greek perspectives on Babylonian sciences and culture see also: Haubold 2016; Haubold 2014; and Haubold 2013. I would like to thank Lennart Lehmhaus for supplying these references.

<sup>115</sup> Van der Horst 2002, 144-5.

<sup>116</sup> Ibid, 150-1.

<sup>117</sup> For natural sciences see: Alexander 2002. For geography, see: Scott 2004.

<sup>118</sup> See Zhmud 2006, 40-41.

<sup>119</sup> Karttunen 1997, 232.

<sup>120</sup> Thomas 2000, 29.

attempt to say that all the things that the Greeks revere were earlier invented by, or at least known to Jews." Hence, the introduction appears to address the issue of ambivalence towards medical knowledge in early Judaism—as a defence of medicine practised by Jews. This ambivalence is also found in many other early Jewish sources on healing. The *Mishnah*, for example, recounts that one of the three deeds held in favour of King Hizkiyahu was the concealment of the *Book of Medicine* (Sefer Refu'ot). In 3 Enoch, for example, Metatron brings down to earth secrets of healing in spite of the objection of other angels. He then passes them on to Moses, from whom the knowledge passes through Joshua, the Elders, the Prophets etc. It should be noted here that a figure by the name of Asaf is mentioned as the secretary of the King Hizkiyahu (2 Kings 18:18 and 37; Isiah 36:3 and 22).

A similar ambivalence reflective of an ongoing discourse between supporters of science and those who rejected it is also apparent in the Islamic sources analysed by Abbou-Hershkovitz. <sup>126</sup> In the Jewish case, just like in the Islamic one, we can see the construction of these narratives as reflecting attempts of the medical authors to define a place for themselves within a larger intellectual context.

#### Conclusion

The *Book of Asaf* is an important 'bridge of knowledge' in ancient medicine. Its compiler/s is/are in conversation with a breadth of foreign ideas, situating its knowledge as deriving from the medical systems of the Indians, the Greeks, the Syrians and the Persians. The text reveals the value of looking at the 'bridging' languages and cultures of Eurasia, in this case: Hebrew and Syriac. The Hebrew *Book of Asaf* presents us with an interesting case study on which we can attempt a contemplation on the relationship between a medical tradition and its histories. It demonstrates the importance of looking at the early histories of the history of medicine and analysing the correspondence, if any, of *being* multicultural and of *declaring* yourself as such.<sup>127</sup>

<sup>121</sup> Charlesworth 1977, 190

<sup>122</sup> VanderKam 1997, 20-22.

<sup>123</sup> Mishnah, Pesakhim, chap. 4. Also: Talmud Bavli: Berakhot, chap. 1; Pesakhim, chap. 4; Talmud Yerushalmi: Nedarim, chap. 6; Sanhedrin, chap. 1.

<sup>124</sup> Swartz 1996, 174-181.

<sup>125</sup> On the figure of Asaf not necessarily being a specific historical person, but probably a legendary one associated with "knowledge of the book", see Yoeli-Tlalim 2018.

<sup>126</sup> Abbou-Hershkovitz 2008.

<sup>127</sup> For similar questions with regards to early Tibetan medicine see Yoeli-Tlalim 2012, and Yoeli-Tlalim 2019.

## **Bibliography**

Sources

Manuscripts of Sefer Asaf:

Munich, Bayerische Staatsbibliothek Cod. hebr. 231

Firenze, Laurenziana Plut. 88.37

Bodleian Oxford, Ms. Laud. Or. 113

London, British Library add. 27018

#### Literature

- Abbou-Hershkovitz, Keren. 2008. "The Historiography of Science between the 10<sup>th</sup> and the 14<sup>th</sup> Centuries." PhD Thesis. BenGurion University. [In Hebrew]
- Alexander, Philip. 2002. "Enoch and the Beginnings of Jewish Interest in Natural Science." In *The Wisdom Texts from Qumran and the Development of the Sapiential Thought*. Edited by Charlotte Hempel, Armin Lange and Herrmann Lichtenberger. Leuven: Leuven University Press. Pages 223–243.
- Beit-Arié, Malachi. 1994. Catalogue of the Hebrew Manuscripts in the Bodleian Library: Supplement of Addenda and Corrigenda to Vol. I (A. Neubauer's Catalogue). Edited by Richard A. May. Oxford: Clarendon.
- Bhyaro, Siam. 2005. The Shemihazah and Asael Narrative of 1 Enoch 6–11: Introduction, Text, Translation and Commentary with reference to Ancient Near Eastern and Biblical Antecedents. Münster: UgaritVerlag.
- Biscioni, Antonio Maria. 1757. Bibliothecae Ebraicae Graecae Florentinae sive Bibliothecae Mediceo Laurentianae. 2 Volumes. Florence.
- Brentjes, Sonja. 2013. "Narratives of Knowledge in Islamic Societies: What do they tell us about scholars and their contexts?." *Almagest* 4:1: 74–95.
- Charlesworth, James H. 1977. "Jewish Astrology in the Talmud, Pseudepigrapha, the Dead Sea Scrolls, and Early Palestinian Synagogues." *Harvard Theological Review* 70: 183–200.
- Ginzburg, Louis. 1913. *The Legends of the Jews.* 7 volumes. Philadelphia: The Jewish Publication Society of America.
- Gutas, Dimitri. 1998. Greek Thought, Arabic Culture: The GraecoArabic Translation Movement in Baghdad and Early 'Abbāsid Society (2<sup>nd</sup>-4<sup>th</sup>/8<sup>th</sup>-10<sup>th</sup> centuries). London and New York: Routledge.
- Hartum, E.S., trans. and comment. 1969. *Hasefarim Hahitsonim. Sipurei Agadah*, vol. 2. Tel-Aviv: Yavneh.
- Haubold, Johannes. 2013. "Berossus." In *The Romance between Greece and the East*. Edited by Tim Whitmarsh and Stuart Thomson. Oxford: Oxford University Press. Pages 105–116.
- —. 2014. "Kulturkontakt aus der Sicht des Homerlesers". In Kulturkontakte in antiken Welten: Vom Denkmodell zum Fallbeispiel. Edited by Robert Rollinger and Kordula Schnegg. Leuven: Peeters. Pages 325–342.
- —. 2016. "Hellenism, cosmopolitanism, and the role of Babylonian elites in the Seleucid empire." In Cosmopolitanism and empire: universal rulers, local elites, and cultural integration in the ancient Near East and Mediterranean. Edited by Myles Lavan, Richard E. Payne and John Weisweiler. New York: Oxford University Press. Pages 89–102.
- Himmelfarb, Martha. 1994. "Some Echoes of *Jubilees* in Medieval Hebrew Literature." In *Tracing the Threads: Studies in the Vitality of Jewish Pseudepigrapha*. Edited by John C. Reeves. Atlanta, Georgia: Scholars Press. Pages 115–141.

- Jellinek, Adolf. 1853, Bet ha-Midrasch. Sammlung kleiner Midraschim und vermischter Abhandlungen aus der älteren jüdischen Literatur, Leipzig, C. W. Vollrath (6 volumes).
- Karttunen, Klaus. 1997. *India and the Hellenistic World*. Studia Orientalia 83. Helsinki: Finnish Oriental Society.
- Langermann, Y. Tzvi . 2009. "Was There Science in Ashkenaz?." Simon Dubnow Institute Yearbook 8: 1–26.
- Le Déaut, Roger and Roger Jacques. 1971. *Targum des Chroniques*. Rome: Biblical Institute Press.
- Margoliouth, George. 1965. Catalogue of the Hebrew and Samaritan Manuscripts in the British Museum, Part III. London: Trustees of the British Museum.
- Muntner, Suessman, ed. 1965. "Assaf ha-rofeh, Sefer Refu'ot" [Asaf the Physician, *Book of Remedies*]. Korot 3: 396–422. [In Hebrew]
- .—1957. Mavo le'Sefer Asaf Ha'rofeh: Ha'sefer ha' refu'i ha'ivri ha'kadum beyoter. Jerusalem: Genizah. [In Hebrew]
- Murphy, Trevor. 2007. *Pliny The Elder's Natural History: The Empire in the Encyclopedia*. Oxford: Oxford University Press.
- Nappi, Carla. 2013. "The Global and Beyond: Adventures in the Local Historiographies of Science." *Isis* 104,1: 102–110.
- Neubauer, Adolf. 1886. Catalogue of the Hebrew Manuscripts in the Bodleian Library and in the College Libraries of Oxford. Oxford: Clarendon.
- Nutton, Vivian. 2012. "From Noah to Galen. A Medieval Latin History of Medicine." In Ritual Healing: Magic, Ritual and Medical Therapy from Antiquity until the Early Modern Period. Edited by Ildikó Csepregi and Charles Burnett. Firenze: SISMEL edizioni del Galluzzo. Pages 53–69.
- Reed, Annette Yoshiko. 2014. "Ancient Jewish Sciences' and the Historiography of Judaism." In Ancient Jewish Sciences and the History of Knowledge in Second Temple Literature. Edited by Jonathan Ben-Dov and Seth Sanders. New York: New York University Press. Pages 195–254.
- Roth, Ernst and Leo Prijs. [1855] 1990. Hebräische Handschriften, Teil 1B: Die Handschriften der Stadt und Universitätsbibliothek Frankfurt am Main. Stuttgart: Franz Steiner.
- Scott, James. 2002. Geography in Early Judaism and Christianity: the Book of Jubilees. Cambridge: Cambridge University Press.
- —. 2004. "Review of A Study of the Geography of 1Enoch 17–19: 'No One Has Seen What I Have Seen'" by Kelley Coblentz Bautch." Journal of Biblical Literature 123,4: 752–756.
- Shatzmiller, Joseph. 1983. "Doctors and Medical Practices in Germany around the Year 1200: The Evidence of 'Sefer Asaph'." *Proceedings of the American Academy for Jewish Research* 50: 149–164.
- Steinschneider, Moritz. 1875. Die Hebraeischen Handschriften der K. Hof- und Staatsbibliothek in Muenchen. Munich: Palm Hofbuchhandlung.
- Stone, Michael. 1972. "Noah, Books of." In vol. 12 of *Encyclopaedia Judaica*. Edited by Cecil Roth. 16 vols. Jerusalem: Keter. Page 1198.
- —. 2006. "The Book(s) Attributed to Noah." *Dead Sea Discoveries* 13,1: 4–23.
- Sudhoff, Karl. 1916. "Ein neuer Text der Initia medicinae." Mitteilungen zur Geschichte der Medizin und der Naturwissenschaften 15: 281–288.
- Swartz, Michael, D. 1996. Scholastic Magic: Ritual and Revelation in Early Jewish Mysticism. Princeton: Princeton University Press.
- Thomas, Rosalind. 2000. *Herodotus in Context. Ethnography, Science and the Art of Persuasion*. Cambridge, Cambridge University Press.

- Vajda, Yehudah Arieh. 1966. "Perush R'Elhanan Ben Yakar le'Sefer Yetsirah." *Kobez al Yad* 6,16: 147–197. [In Hebrew]
- Van Bladel, Kevin. 2012. "The Arabic History of Science of Abū Sahl ibn Nawbaḥt (fl. Ca 770–809) and Its Middle Persian Sources." In *Islamic Philosophy, Science, Culture, and Religion: Studies in Honor of Dimitri Gutas.* Edited by Felicitas Opwis and David Reisman. Leiden: Brill. Pages 41–62.
- Van der Horst, Pieter Willem. 2002. *Japheth in the Tents of Shem: Studies on Jewish Hellenism in Antiquity*. Leuven: Peeters.
- VanderKam, James C. 1997. "The Origins and Purposes of the Book of Jubilees." In *Studies in the Book of Jubilees*. Text and Studies in Ancient Judaism 65. Edited by Matthias Albani, Jörg Frey and Armin Lange. Tübingen: Mohr Siebeck. Pages 3–24.
- Visi, Tamás. 2016. "Medieval Hebrew Uroscopic Texts: The Reception of Greek Uroscopic Texts in the Hebrew 'Book of Remedies' Attributed to Asaf." In Texts in Transit in the Medieval Mediterranean. Edited by Y. Tzvi Langermann and Robert Morrison. University Park, PA: Pennsylvania State University Press. Pages 162–197.
- Wainwright, Gerald Avery. 1956. "Caphtor-Cappadocia." Vetus Testamentum 6: 199-210.
- Witakowski, Witold. 1993. "The Division of the Earth between Descendants of Noah in Syriac Tradition." *Aram Periodical* 5: 635–656.
- Wünsche, August. 1909. Aus Israels Lehrhallen. Kleine Midraschim zur jüdischen Eschatologie und Apokalyptik. Leipzig: E. Pfeiffer.
- Yoeli-Tlalim, Ronit. 2012. "Re-visiting 'Galen in Tibet'." Medical History 56,3: 355–365.
- —. 2018. "Exploring Persian lore in the Hebrew Book of Asaf." Aleph. Historical Studies in Science and Judaism 18,1: 123–145.
- —. 2019. "Galen in Asia?" In Brill's Companion to the Reception of Galen. Edited by Petros Bouras-Vallianatos and Barbara Zipser. Leiden: Brill. Pages 594–608.
- Zhmud, Leonid. 2006. *The Origin of the History of Science in Classical Antiquity*. Translated by Alexander Chernoglazov. Berlin/New York: De Gruyter.