A Key to Locked Doors

FESTSCHRIFT FOR GERRIT BOS

ON THE OCCASION OF HIS 75TH BIRTHDAY



EDITED BY

FABIAN KÄS, JESSICA KLEY AND FELIX HEDDERICH

BRILL

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Epithymum for Melancholy

Two Prescriptions in a Treatise Attributed to Isaac Israeli

Lola Ferre

I first met Gerrit Bos in Berlin in 2000, and since that first encounter we have maintained a cordial relationship and I have closely followed his extensive and extraordinary contributions to the field of medieval medicine, both in Arabic and Hebrew.¹ I have often availed myself of his editions of texts, as well as his works on Hebrew medical terminology. Accordingly, I wanted to participate in this well-deserved tribute with a topic related to these two facets of his output.

1 Introduction

To that end, I have chosen to present an edition and lexicographical study of two fragments from the *Treatise on the Disease of Melancholy* attributed to Isaac Israeli (c. 850–932, Kairouan), preserved in a single manuscript, Paris, BnF, héb. 1173.² This is a very well-cared for manuscript in its formal appearance. The Sephardic cursive script has clear and regular letters, quite different from other cursive scripts found in many medical manuscripts whose poor calligraphy makes them difficult to read. There are decorative elements, like drawings on the first folios and the use of red ink for titles and the key words. All the texts follow each other, without beginning each work on a new folio, and are written in the same hand. Unlike what is found in other manuscripts, this is not a case of various texts from different sources being sewn together in a single volume. The work is clearly that of a professional copyist.

¹ This work has been accomplished under the auspices of the research project "Lengua y literatura del judaísmo rabínico y medieval" PID2019–105305GB–I00, funded by MCIN/AEI/ 10.13039/501100011033. I would like to thank the reviewers for reading and commenting on the text, especially, Fabian Käs for his suggestions.

² See Munk, Derenbourg, and Zotenberg, Franc, *Catalogues des manuscrits hébreux et samaritains de la Bibliothèque Impériale*, Paris: Imprimiere impériale, 1866, § 1173, 215–216. I am preparing the edition of the text contained in this manuscript and its Spanish translation.

The contents of the manuscript comprise works by authors from al-Andalus and Kairouan. The first texts are by Maimonides: *Medical Aphorisms* $(1^{r}-92^{r})$,³ *Treatise on Asthma* (fols. $92^{v}-112^{r})$,⁴ *Treatise on Haemorrhoids* (fols. $112^{r}-115^{v})^{5}$ and *Treatise on Poisons* (fols. $115^{v}-124^{v})$.⁶ These are followed by the *Treatise on Diarrhoea* (fols. $126^{r}-127^{v})$, attributed to Abū Walīd Ibn Rushd 'the philosopher',⁷ and then works by authors from Kairouan: Abū Ja'far ibn al-Jazzār's *Treatise on Forgetfulness*, referred to in this manuscript as *Treatise on Forgetfulness*. *How to Produce Memory* (fols. $127^{v}-129^{v})^{8}$ and two works attributed to Yiṣḥaq ben Shlomoh ha-Israeli (hereafter Isaac Israeli), *Treatise on the Disease of Melancholy* (fols. $129^{v}-132^{v})$ and *Treatise on Hydropsy* (fols. $132^{v}-134^{v})$. The manuscript ends with Maimonides's *Treatise on Coitus* (fols. $135^{r}-137^{v})$.⁹

There is no evidence for the accuracy of the attribution of these two treatises to Isaac Israeli. No original Arabic manuscript has been found, and the first ref-

³ For the latest editions and translations, see Bos, Gerrit (ed. and tr.), Maimonides. Medical Aphorisms. Treatises 1–5. A parallel Arabic-English edition, Provo: Brigham Young University Press, 2004. Maimonides. Medical Aphorisms. Treatises 6–9. A parallel Arabic-English edition, Provo: Brigham Young UP, 2004. Maimonides, Medical Aphorisms. Treatises 10–15. A parallel Arabic-English edition. Provo: Brigham Young UP, 2010. Maimonides, Medical Aphorisms. Treatises 16–21. A parallel Arabic-English edition. Provo: Brigham Young UP, 2015. Maimonides, Medical Aphorisms. Treatises 22–25. A parallel Arabic-English edition edited, Provo: Brigham Young UP, 2017.

⁴ The colophon includes a word in Arabic that is dificult to interpret. See Bos, Gerrit, *Maimonides, On Asthma: A parallel Arabic-English edition,* Provo: Brigham Young University Press, 2002. Bos, Gerrit and McVaugh, Michael, *Maimonides, On Asthma, vol. 2: Critical editions of Medieval Hebrew and Latin translations,* Provo: Brigham Young UP, 2008.

⁵ This also ends with the same Arabic word. See Bos, Gerrit and McVaugh, Michael, *Maimonides, On Hemorrhoids. A new parallel Arabic-English translation.* Provo: Brigham Young UP, 2012.

⁶ After this treatise, the copyist writes: 'Thus end the treatises by Rabenu Moshe ibn Maimon, blessed be the memory of the just! And those translated by the scholar Mosheh bar Shmu'el ibn Tibbon, may the tongue of Qedar rest in peace, from the darkness (*qadrut*) to gold and glory' and the Arabic word. See Bos, Gerrit and McVaugh, Michael, *Maimonides. On Poisons and the protection against lethal Drugs*, Provo: Brigham Young UP, 2009.

⁷ The Hebrew term שלשול (*shilshul*) was used to refer to not only diarrhoea but also purgation.

⁸ See Bos, Gerrit, *Ibn al-Jazzār on forgetfulness and its treatment. Critical edition of the Arabic text and the Hebrew translations with commentary and translation into English* (Wellcome Asian Series 1), London: Royal Asiatic Society, 1995.

⁹ At the end of the last treatise, it says: 'the treatise and the book are done'. The treatises attributed to Isaac Israeli have not been edited. The last work, by Maimonides, has been translated and edited by Gerrit Bos, Charles Burnett, W.F. Ryan, and Moshe Taube, Maimonides' On Coitus. A new parallel Arabic-English edition and translation by Gerrit Bos; with editions of Medieval Hebrew translations by Gerrit Bos; medieval Latin translations by Charles Burnett; and a Slavonic translation by W.F. Ryan, Moshe Taube, Leiden: Brill, 2019.

erences to the works of Isaac Israeli, both in Islamic and Christian cultures, do not mention them. These first references are from the Andalusi biographer Ibn Juljul (Cordoba 944–ca. 976) and Constantine the African. Ibn Juljul cites three monographs—*Book on Urine, Book on Fevers*, and *Book on Food*—as his medical output, although he includes the *Treatise on Theriac* amongst the philosophical works.¹⁰ It was Constantine the African (eleventh century) who introduced Isaac Israeli to the Christian world through his translations into Latin, but he only translated these three works, limiting Israeli's corpus to this triad.

The testimony of Ibn Abī Uṣaybi'a (Damascus, 1203–1270) considerably broadened this legacy with the *Introduction to the Art of Medicine, Book on the Pulse* and *Book on Theriac* already cited by Ibn Juljul.¹¹ Another text, *Book on Antimony*,¹² was also attributed to Israeli in the Arab world. Amongst the Jews, a work on medical ethics, *The Conduct of Physicians*,¹³ was added to the treatises on melancholy and hydropsy. In the Latin-speaking world, the *Pantegni* in the edition of *Opera Omnia Ysaac* (Lyon 1515) is attributed to Israeli. There is, therefore, no doubt that Israeli was the author of the three monographs mentioned above, whose Arabic, Latin, Hebrew, and vernacular sources are reliable witnesses;¹⁴ the other attributions can be neither confirmed nor denied at this point.

Although the title of the *Treatise on the Disease of Melancholy* suggests that this is an independent treatise, certain expressions in the text seem to indicate

¹⁰ This work was edited by Fu'ãd Sayyid, Ibn Juljul, *Țabaqāt al-ațibbā' wa-l-hukamā'*, Cairo: Imprimerie de l'Institut Français d'Archéologie Orientale, 1955, and translated into Spanish by Eloísa Llavero Ruiz in her Master's thesis, *Ibn Ŷulŷul: Țabaqāt al-ațibbă' wa-lhukamā': Generaciones de médicos y sabios*, Granada, 1979. An English translation of the work was recently published, see Kahl, Oliver, *Ibn Juljul's Generations of physicians and sages. Translated from the Arabic with an introduction and indices*, Leiden-Boston: Brill, 2023.

¹¹ Ibn Abī Uṣaybi'a, A literary history of medicine, The 'Uyūn al-anbā' fī ṭabaqāt al-aṭibbā' of Ibn Abī Uṣaybi'ah, 5 vols., ed. and tr. Emilie Savage-Smith, Simon Swain, and Geert Jan van Gelder, Leiden: Brill, 2020.

¹² Sbath, Paul, *al-Fihris. Catalogue des manuscrits arabes*, 3 vols., Cairo, 1938–1940, i, 88 (no. 745).

¹³ Edited and translated on two occasions: Jarcho, Saul, "Guide for physicians (Musar Harofim) by Isaac Judaeus (80?–932?). Translated from the Hebrew, with introduction," in *Bulletin of the History of Medicine* (Baltimore) 15 (1944), 180–188; Bar-Sela, Ariel and Hoff, Hebbel E., "Isaac Israeli's fifty admonitions to the physicians," in *Journal of the History of Medicine and Allied Sciences* 17 (1962), 245–257.

¹⁴ See Ferre, Lola and Veit, Raphaela, "The textual traditions of Isaac Israeli's Book on Fevers in Arabic, Latin, Hebrew, and Spanish," in Aleph. Historical Studies in Science and Judaism 9.1 (2009), 309–334.

that it is a chapter from another book.¹⁵ A reading of his monographic treatises reveals that it does not come from of any of them.¹⁶

Given the uncertainty surrounding the authenticity of this authorship, I began by evaluating the existing possibilities in medieval medical literature from the Islamicate world, starting with the treatise on melancholy most highly valued by both Galen and other authors of medicine in Arabic: the *Treatise on Melancholy* by Rufus of Ephesus. However, a comparison between that work and the text at hand shows that it is not a translation of Rufus's work.¹⁷

I then considered the *Treatise on the Disease of Melancholy* written by Isḥāq ibn 'Imrān.¹⁸ The hypothesis that the treatise attributed to Isaac was a translation of the work by Isḥāq ibn 'Imrān, who was his teacher, has seemed quite plausible to me since I first heard about the treatise. The closeness between the two authors—Isaac was Isḥāq ibn 'Imrān's disciple in Kairouan—and the use of 'Isḥāq' in both names could have easily explained how a Jewish translator would have attributed it to his co-religionist. This similarity also produced confusion between the two authors in the Arabic tradition.

¹⁵ Several phrases suggest that this is part of a longer work on pathology. For instance, the treatise begins thus: 'Yishaq says: now we return to the place where we were engaged' and later says, 'And what was said about the evidence regarding this matter when I discussed laughter and crying is sufficient for us.'

Of these works, only the first and third books of the Book on Fevers have been published, see Latham, John D., and Isaacs, Haskell D., Kitāb al-ļummayāt li-Ishāq ibn Sulaymān al-Isrā'īlī (al-maqāla al-thālitha: fī l-sill): Isaac Judaeus. On fevers (the third discourse on consumption). Together with an appendix containing a facsimile of the Latin version of this discourse (Venice, 1576), Cambridge: Cambridge Middle East Centre by Pembroke Arabic Texts, 1980 and Ferre, Lola, Isaac Israeli's The Definition of Fever and Its Essence in its Hebrew Translations (The First treatise of the Book on Fevers). Accompanied by Arabic, Latin, and Old Spanish editions and English translation, with the collaboration of Esther Boucher and Basem Mahmud, Philadelphia: American Philosophical Society Press, 2023. I have consulted the others in the Hebrew Translations held in manuscript sources at the Institute of Microfilmed Hebrew Manuscripts.

¹⁷ The original Greek work and its medieval Arabic version were lost, and Peter E. Pormann has reconstructed the text based on the fragments cited in medical works. See Pormann, Peter E., "Rufus of Ephesus On Melancholy. Fragments, Text and Translation," in id. (ed.), Rufus of Ephesus. On Melancholy (Sapere XII), Tübingen: Mohr Siebeck, 2008, 25–110.

¹⁸ See Garbers, Karl (ed. and trans.), Ishāq ibn Imrān. Abhandlung über die Melancholie, und Constantini Africani Libri duo de melancholia. Vergleichende kritische arabisch-lateinische Parallelausgabe. Deutsche Übersetzung des arabischen Textes, ausführliche Einleitung und arabischer wie lateinischer drogenkundlicher Apparat. Hamburg: Helmut Buske Verlag, 1977 and Omrani, Adel, Traité de la Mélancolie. Présentation, traduction française et commentaires, Tunis: Académie tunisienne de Sciences, des Lettres et des Arts. Beït al-Hikma, 2009.

After a thorough comparison, I was able to ascertain that it is, indeed, a translation of a passage found at the end of the first, theoretical, part of the *Treatise on the Disease of Melancholy* by Isḥāq ibn 'Imrān. An anonymous Hebrew translation of this treatise is preserved in a manuscript held by the Berlin State Library, shelfmark Ms. or. fol. 3088. This manuscript is known as אפנקס הרופא *The Physician's Notebook*. The fragment contained in manuscript BnF héb. 1173 matches this version. Despite the evidence that the text is a translation of Isḥāq ibn 'Imrān's work, there is one element that made me doubt at the beginning of the research: the reference to '*rabbenu* Saadia'. It was not plausible that a Muslim author would cite '*rabenu* Saadia' and, in fact, this reference is only found in the Hebrew version.

This is not the only addition with respect to the work by Ishāq ibn 'Imrān. The first part (fol. 129^{v} to fol. 130^{r}), which is concerned with theory, contains a complete paragraph that is not found in the work by Ibn 'Imrān. A discussion of the causes of melancholy found in the elderly lists a deficiency in their blood and the coldness and dryness of their organs. The Hebrew version adds the following:

This is compounded by the dryness of their brains and the weakness of their intelligences and all their faculties. They show us this with the agitation of their brains, frequent insomnia, their confused discernment. Their eyes are dry of essential natural moisture, and this dryness causes them pain, and they are close to death.¹⁹

Later, the text refers to the transformation of epilepsy into melancholy, and vice-versa, and talks about the types of epilepsy. It is in this context that Saadia Gaon is cited. The author, connecting epilepsy to the 'jinn' (transcribed to Hebrew as 'jnun'), writes: "and *rabenu* Saadia interpreted 'madness' as 'jnun'".²⁰ The author then mentions the types of epilepsy. The type caused by the black humour is subject to these transformations. He adds in the Hebrew text: "I wanted to reach this type, that is, the type of epilepsy that is made from the black humour." Here, two omissions are striking: when Ishāq ibn 'Imrān mentions lepers, this reference in the Hebrew text is replaced by the generic word

¹⁹ This paragraph is not in the Arabic text (Omrani, *Traité de la Mélancolie* 66) or in the version by Constantine the African (Garbers, *De Melancholia* 130–131).

²⁰ This most likely refers to Saadia Gaon's Arabic translation of the Bible. See *Œuvres complètes de R. Saadia ben Iosef al-Fayyoûmî*, publiées sous la direction de J. Derenbourg. Volume Premier. Version arabe du Pentateuque. Paris: Ernest Leroux, Éditeur, 1893: Deut. 38, 28 (p. 294).

'many', and the text replaces the reference to Hippocrates's book *Epidemics* with 'a book by the sages' (fol. 129^{v}).²¹ The two omissions seem intentional.

These differences between the original and the Hebrew text in the theoretical part are not inconsiderable, bearing in mind that they occur on a little over a folio. Moreover, none of them are found in the version by Constantine the African, meaning that they are not due to the influence of the Latin version.²²

The first part of the work by Isḥāq ibn 'Imrān on theory is followed by a second part on practical aspects, or treatment. Here, the differences are notable, beginning with the recipe book. The recipes included by Isḥāq ibn 'Imrān do not completely correspond to any of the versions, the Latin or the Hebrew. Neither do the two copies of the Hebrew version match. Moreover, while the ms. of *The Physician's Notebook* includes the text with which Isḥāq ibn 'Imrān introduces the second part, the text in Paris BnF héb. 1173 goes directly to the recipes.

How should this lack of fidelity to the text by the translators and copyists be interpreted? I can only do so using the logic of the usefulness of the work. Whoever translated and copied it adapted the book of recipes to the reality of the medicines at their disposal and the knowledge that existed in their time and place about treating the illness of melancholy and an excess of black humour.

The recipe book is a fundamental part of establishing the provenance of the text. A certain analytical tool has proven very useful for discovering additional information about a work, its context, and its potential authorship: the study of the lexicon. The data obtained from the analysis provides more information about the translator or the copyist than the author, but the translation none-theless sheds light on the original work.

For this article, I chose the two particular pharmacological compositions common to the two Hebrew manuscripts, whose prescriptions contain two interesting elements for the analysis. Firstly, the names of the plants are usually transcriptions of foreign words ($l^{e'azim}$) and thus reflect the linguistic substratum of the author or translator. Secondly, Hebrew words reflect the process

²¹ Both this mention of melancholy and the reference to Hippocrates' *Epidemics* are found in the version by Constantine the African. See Garbers, *De Melancholia* 130–131.

As a translator, Constantine the African had little respect for the literality of the text and did not hesitate to omit and alter fragments. This attitude to texts is not characteristic of Hebrew translators. This can be seen in the different versions of Isaac Israeli's *The Book on Fevers*. While the Latin version, also by Constantine the African, and the translation into Old Spanish often deviate from the original text, the two Hebrew versions are scrupulously faithful to the base text, whether the Arabic original or the Latin version by Constantine. See the chapter "The transmission process through translations," in Ferre, *Isaac Israeli's The Definition of Fever* 20–33.

and evolution of the creation of medical terminology. These two prescriptions have the main ingredient that gives them their name, *epithymum* ('clover dodder'), in common.²³ Epithymum was considered a fundamental plant for the treatment of melancholy. Peter E. Pormann wrote: "Both venesection and the 'epithyme decoction' are also those remedies which Rufus of Ephesus recommends as the most fundamental ones against this condition"²⁴ and ar-Rāzī referring to the case of a young man who had melancholy wrote: "Twice a month, he should be given the epithyme decoction".²⁵

These two prescriptions are also the first ones that begin the section dedicated to pharmacological treatment. The first of them appears in the translation of the treatise by Isḥāq ibn 'Imrān in *The Physician's Notebook* (fol. 55^{v}), while the second appears in the context of diseases produced by the black humour (הליו מן המרה השחורה) at the beginning of the manuscript (fol. 3^{r}).

2 Edition and Translation

Below is a parallel edition of the texts of the two prescriptions from the two manuscript sources. The differences between *The Physician's Notebook* and the *Treatise on the Disease of Melancholy* are indicated in italics and the words omitted from the text of *The Physician's Notebook* have been crossed out.

בשול אפיתמון	
The Physician's Notebook	Treatise on the Disease of Melancholy
בשול האפיתמון המשלשל מן המרה השחורה מועיל מן המלאנכוניה פעולה גדולה ויועיל למנוגעים וחוזיות והגרב והסרטאן ואלסרע	

2.1 The First Prescription

²³ I have kept the word that reflects its Greek origin instead of using the common name, echoing the use of the term in medieval Arabic, Hebrew, and Latin texts.

²⁴ See "Melancholy in the medieval world. The Christian, Jewish and Muslim traditions," in *Rufus of Ephesus. On melancholy*, edited by Peter E. Pormann, Tübingen: Mohr Siebeck (Sapere XII), 2008, 191.

²⁵ See Peter E. Pormann, "Appendix 3: Melancholy in ar-Rāzī's *Book of Experiences*," in *Rufus of Ephesus. On melancholy*, edited by Peter E. Pormann, Tübingen: Mohr Siebeck (Sapere XII), 2008: 295.

בשול אפיתמון

Treatise on the Disease of Melancholy

הנעשה מן השחורה. זרע אפיתמון אקריטי מאתיים זוז הלילג כבלי והנדי מכל אחד המשים זוז תחבר הכל אחרי הסרת גרעיניהם תרצצם ותשרם במים מתוקים חמים ארבעים ליט׳ יום אחד ולילה אחד ותבשלם בבקר באש קלה עד שיחסרו שני שלישי המים וישתייר בו השלישית ואחר כד תסכרהו ותחזירהו טל האש מי בכתג טוב השלם מז השורף והעשוז ומז אלפנד הלבז וסכר אלסלימיני ששה ליט׳ או שבעה תנקם מז הפסולת ותבשלהו עד שיתערה ותסננו בכבדה ותצננהו ותצניעהו תשקה ממנו עד חמש אוק׳ תחממהו על אש ותתן בו טפות שמן שקדים מתוקים בלי שיעברו במשמרת. ואם יהיה בטן החולה קשה תתז בו בעת שתשקהו ג' שעורות. ואם תשקה בימי הקיץ ומזג החולה הטבעי חם נראית למרה האדומה תנוטה והיתה המרה השחורה מעורבת עם המרה האדומה תבשלהו הרפואה במשקה בנפסיג או במשקה אגאץ עשוי בסכר במקום הסכר והפאנד והבכתג שזכרנו לפי שיש בבני אדם מי שאצטו' שלו רבת ההרגש ואינם רוצים לשתות שום רפואה יתכז שנחלוק להם זו הרפואה בשתי פעמים ושקם החלק האחד בבקר והחלק השני בחום היום ותהיה שתיתו בהתמדה לפחות שבע פעמים ולא יותר מארבע עשרה פעמים וביז כל פעם ופעם שלשה ימים או ארבעה.

The Physician's Notebook

הנעשית מן השחורה. זרע אפיתמון אקריטי מאתיים זוז הלילג כאבולי והנדי מכל אחד ואחד חמשים זוני תחבל הכל אחר חסרת הגרעינים תרצצם ותשרם במים מתוקים חמים מ׳ ליט׳ יום אחד ולילה אחד ותבשלם בבקר באש קלה עד שיסורו שני שלישי המים וישתייר בו השלישית ואחר כך תסננהו ותתסרהו על האש ומן בגתג על האש וישמר מן השרפה ומן העשן שים בו זמן אלפאנד׳ הלבן והסכרי אלסלימאני׳ שיש ליט׳ או ז׳ תנקם מז הפסולת ותבשלהו טד שיעבה ותסננהו בכברה ותסננהו ותצניטהו ותשמרהו ותשקה ממנו עד חמשה אוק׳ ותחממהו על אש ותתז בו טפת שמז שקדים מתוקים בלי שמור. ואם יהיה בטן החולה קשה תתן לו בעת שתשקהו ג' שעורות שקמוניאה׳. ואם תשקהו בימי הקיץ והיה מזג החולה הטבעי חם וראית למרה אדומה תנועה והיתה המרה השחורה ג מעורבת טם מרה האדומה תבשל זו הרפואה במשקה בנפסיג או במשקה אגאץ' עשוי בסכר במקום הסכר והפאנד' והמכתג' שזכרנו לפי שישי בבני אדם מי שאסטו׳ שלו רבת ההרגש ואינם רוצים לשתות כל הרפואה יתכן שנחלוק להם זו הרפואה בשני פעמ׳ ושקם האחד בבקר והחלק השני בחום היום ותהיה שתיתו בהתמדה לפחות שבפעמים ולא יותר מארבע עשרה פעמים וביז כל פעם ופעם שלשה ימים או ארבעה.

Translation

Decoction of epithymum that purges the black bile and is of great help²⁶ for melancholy and useful for ulcerations, scurf, itch, cancer, and leprosy produced

²⁶ The Physician's Notebook says 'action'.

by black bile. The seed of Cretan epithymum,²⁷ 200 *zuzim*, myrobalan from Kabul (emblic myrobalan) and from India, 50 *zuzim* of each. You combine²⁸ everything after removing the pips, crush them and immerse them in 40 litres of hot sweet water for one day and one night. It is boiled in the morning over a low flame until two thirds of the water is consumed and one third remains. After this you cover it and put it back on the fire with good inspissated wine,²⁹ and keep it from burning and smoking. *Add to it*³⁰ sugar-candy and Sulaymānī sugar,³¹ six or seven litres. You clean out the waste and boil it until it binds (integrates), and you filter it, putting a weight on it. You chill it and cover it and soak up to five ounces of it. You heat it over the fire and you put some drops of sweet almond oil that has not gone bad.

And if the belly of the sick person is hard, you will give him three barleys at the time when he drinks.³² And if you give it to him to drink in the days of summer—and the natural complexion of the sick person is hot, a movement is seen in the red humour and the black humour mixed with the red—you will boil the medicine with a drink of violets or a drink of plum made with sugar, and instead of sugar (you can use) sugar-candy and the inspissated wine that we mentioned.

If someone amongst the people has a very sensitive stomach and does not want to drink any prepared medicine, we will divide this medicine into two parts for them. They will drink one part in the morning and the second part during the heat of the day and they will drink it with perseverance at least seven times—and no more than fourteen times—and from time to time as three or four days (go by).

²⁷ The vocalisation is in *The Physician's Notebook*.

²⁸ The Physician's Notebook says 'you harm', surely an error.

²⁹ The misspelling of the manuscript 'му вктGH' can be identified as the Perso-Arabic name *maybukhtaj* (see Ibn Janāḥ, *Talkhīş* no. 227).

³⁰ Omitted from the *Treatise on the Disease of Melancholy*. I have taken this from *The Physician's Notebook*.

³¹ For *Sulaymānī* sugar defined as 'sugar made from hardened red sugar broken into pieces and further cooked to remove any impurities', see EI² ix, 804 [Waines].

³² I understand that this refers to three grains of barley, although 'barley water' is quite often used in medieval medicine and this could explain the later mention of 'six or seven litres'. *The Physician's Notebook* adds *scamonia* (scammony).

Treatise on the Disease of Melancholy

משרת האפיתמוז והחנטל המוציא תערובת

של בלגם ושל מרה השחורה מועיל לנכפים

שחלים מן השחורה או מן הבלגם ומועיל מן

השראסיפי ממיני המלאנכוניה אפיתמוז מרוקה

מאה זוז שחם חנטל מרוקה מזרעו חמשים זוז

הלילג כבאלי חמשים זוז גאריקון שלש[ים] זוז

תקח הכל ותצניעהו ותתנהו בכלי קוניא ותתן עליו שמנה ליט׳ מים חמים ותניחהו כך שלשה

ימים בלילותם ואחר כך תרתיחהו על האש עד שיחסר השליש ותורידתו ואל תסננהו. ובנסחא

אחרת תסננהו ותשליך הפסולת ותצניע המים

בכלי זכוכית ותתן בו עשרה זוזים מצטכי שחוק

ותכלהו לשמש שלשה ימים ותשקה ממנו שתי

אוקיאות והוא חם עם מעט שמן כריע. תשקהו

תעשו כד כל זמז שיצטרכו אליו ותוכל להשקותו

שלשה ימים זה אחר זה ותניחהו שלשה ימים

בתקופת ניסן ותקופת תשרי וזולתם ויתכן לד

להזהר בו מפני החנטל שבו שלא יגרור המטים.

The Physician's Notebook

משרת האפיתמוז והחנטל המוציא התערובות של בלגם ושל מרה השחורה מוטיל לנכפים שחליים מן השחורה או מן הבלגם ומועיל ממין השראספי ממיני המלאנכוניה אפיתמוז מרוקה מאה זו שחם חנטאל מרוקה מזרעו המישים זני הלילג בובולי חמשים זוז גאריקון שלשים זוז תקח הכל זתרצצהו ותתנהו בכלי קוניא ותתן עליו שמנה ליט׳ מים חמים ותניחהו כך שלשה ימים בלילותם ואחר כד תרתיחהו על האש עד שיחזור השליש ותורידתו ואל תסננהו **ובנסחא** אחרת תסננהו ותשליד הפסולת ותצניע המים בכלי זכוכית ותתן בו עשרה זוזים מוצטכי שחוק ותתלהו לשמש שלשה ימים ותשקה ממנו שתי אוקיאות והוא חם עם מעט שמן כריע. תשקהו שלשה ימים זה אחר זה ותניחהו שלשה ימים תעשו כך כל זמן שום שיצטרכו אליו ותוכל להשקותו בתקופת ניסן ותקופת תשרי וזולתם ויתכז לך להזהר בו מפני החנטל שבו שלא יגרור המטים

Translation

An infusion of epithymum and colocynth brings up the mixture of phlegm and black bile to help epileptics whose illnesses are from black [humour] or phlegm and helps one of the types of melancholy, the hypochondriac one. Purified epithymum, 100 *zuzim* that is hot; purified colocynth, one *zuz* of its seed; myrobalan from Kabul, 50 *zuzim*; agaric, 30 *zuzim*. Gather it all and preserve it and put it in a Kunia container³³ and add eight litres of hot water and leave it to rest like that for three days and their nights. After this, bring it to a boil over a flame until it has reduced to one third and you will reduce it, but do not filtrate it—in another copy: filtrate it and dispose of the waste—and preserve the water in a crystal container and add ten *zuzim* of ground mastic and let it con-

³³ I have not found this word, Kunia, and do not know if it refers to a material or a place. It is also in *The Physician's Notebook*.

sume the sun for three days. Give two ounces to drink while it is hot with a little safflower oil. Give the drink for three days, one after the other, and let it rest for three days. You will do this as long as necessary. You can give this drink during the time of *Nisan* and *Tishre* and others. It will be prepared for you, so that you are careful with it and so that the colocynth does not tug on the intestines.

3 Glossary of Pharmacological Terms and Names of the Diseases

References (Abbreviations, See Bibliography)	
BDB	Brown, Driver, Briggs, A Hebrew and English Lexicon
	of the Old Testament
Ben Yehuda	Ben Iehuda, אַלון הַלָּשון הָעָבְרִית <i>Thesaurus totius heb-</i> raitatis
Bos nm 1, 2, 3, 6	Bos, Gerrit, Novel medical and general Hebrew termi-
	<i>nology</i> , vol. 1, vol. 2, vol. 3, vol. 6
Bos-Käs	Bos, Gerrit and Käs, Fabian, "The Judeo-Arabic list of
	medicinal measures"
Ibn Janāḥ <i>, Talkhīş</i>	Ibn Janāḥ, Marwān. On the Nomenclature of medici- nal drugs
Ibn Wāfid, <i>K. al-adwiya</i>	Ibn Wāfid, <i>Kitāb al-adwiya al-mufrada</i>
Ibn Wāfid, <i>K. al-wisād</i>	Ibn Wāfid, <i>Kitāb al-wisād fī l-țibb</i>
Jastrow	Jastrow, Dictionary of the Targumim etc.
Löw	Löw, Die Flora der Juden
§	entry or entries

8

aghas אַנאץ

'Plum' (الاجّاص, *al-ijjāş*) Ibn Janāḥ, *Talkhīş*: § 58, 59.

oqyah אוקיאה

'Ounce' Jastrow: אוקיא. Bos-Käs: 'One ūqiyya (ounce) is 8 miṯqāls (maṯāqīl)'.

afitimun אפיתימון

'Epithymum' (افيثمون, *afīthimūn*). Ibn Janāḥ, *Talkhī*ş § 472, 807: 'Afīthimūn is a common transcription of ἐπίθυμον, the Greek name for clover dodder (Cuscuta epithymum L.)' (943). Ibn Wāfid, *K. al-wisād* 299. Löw i, 454 (*Cuscuta Epithymun* L.), iv, 131 (but not in Hebrew). In the first fragment, this alludes to אפיתימון הקריטי, *'afitimun ha-qereți*, vocalised in *The Physician's Notebook* copy.

'Phlegm' (البلغم الأبيض, *al-balgham al-abyad*) This word does not appear in the Bible or in Mishnaic Hebrew. Ben Yehuda (i, 545) considers it a medieval term. While looking for the term 'phlegm' in Bos NM 1 and 2, I found that in every case, the Hebrew expression ליחה לבנה humour') appears. Bos notes: 'Zeraḥyah translates Arab. ליחה לבנה (Bos NM 2:61); Ibn Janāḥ, *Talkhī*ș: § 176, 402.

בנפסיג banafsij

בלגם belgam

'Violet' (بنفسج*, banafsaj*) Ibn Janāḥ, *Talkhīṣ* the term is mentioned in § 115, 536, 645.

בשול bishul

'Decoction' Bos NM 6:31: Amongst other meanings, 'decoction' (Moses ibn Tibbon).

ga'riqon גאריקון

'Agaric' (غاريقون, *ghārīqūn*) Ibn Wāfid, *K. al-adwiya*: 396. Löw 1, 43.

נְגָרָב garav

'Itch'

This word is common to many Semitic languages. It appears in both biblical and rabbinical dictionaries and in Ben Yehuda.

Bos, Arabic جرب, *jarab*, Bos NM 1:83, 'granular conjunctiva i.e. trachoma', trans. Shem Tov ben Isaac; Bos NM 2:177, 'itch', trans. Anonymous; Bos NM 3:47, 'psoriasis' trans. Do'eg ha-Edomi; 'pustules', Arab. بثور, trans. Moses ibn Tibbon.

п

halīlaj Keba'li הלילג כבאלי

'Myrobalan from Kabul' (هليلج كابلي, *halīlaj kābulī*) Ibn Janāh, *Talkhī*s § 287, 1028 (*halīlaj*) is myrobalan. Ibn Wāfid, *K. al-adwiya*, vol. 2:155 and vol. 1, § 93. Ibn Wāfid quotes Ḥubaysh, and Luisa Aguirre de Cárcer identifies it with emblic myrobalan.

ב

ג

t

'Weight measure'

This term is not in BDB. Jastrow, s.v. זוו: 1) a silver coin, one fourth of a shekel. 2) a weight. Another weight measure that appears throughout the text is זהוב (*zahub*), derived from זהב (*zhb*), which appears in the Bible meaning measure of weight and value (BDB, s.v. זהב) and keeps this value in Rabbinic Hebrew (Jastrow, s.v., אוהב). Ben Yehuda believes it to be a rabbinic term that means gold coin. Bos MM 6:64, 'measure of weight equivalent to one *dirham*' (Nathan Ha-Me'ati and Anonymous). Zeraḥyah Ḥen transcribed the Arabic term ((ce^{Am})).

Π

'Scurf'

In the Bible, דוו appears meaning 'cut' or 'notch', and equivalents are found in other Semitic languages (אר ווה). In Rabbinic Hebrew, it was already being used to refer to a skin disease: Jastrow: 'lichen, a cutaneous disease connected with desquamation and sometimes ulceration'. Bos NM 6:71: הַוָּזָיָת 'scurf; dandruff': Arab. בָוֹן (hazāz) (Zeraḥyah Ḥen). Nathan ha-Me'ati translates Arab. יַלָּפָת אים.

חנטל hanzal

hazazit חווית

'Colocynth' (حنظل, *ḥanẓal*) Ibn Janāḥ, *Talkhī*ş § 87, 284, 390, 430, 482, 524, 993.

כ

keli zekhukhit כּלִי זְכוּכִית

'Crystal container' Jastrow: יןְכוּרָית (ו) vessel, receptacle; bag'. ין כוּבִית: 'glass, crystal'.

keli quni'a בִּלִי קוניא

'Kunia container'

Jastrow: קּלִי: 'N vessel, receptacle; bag'. קוּנְיָא: 'Kunia'.

5

ליט' *'liț*

'Litre'

Jastrow: ליטרא, '(λίτρα), the Roman libra, a pound. 1) a silver coin, one fourth of a shekel. 2) a weight'.

zuz 191

מזג mezeg

מ

'Complexion' Jastrow: '2) Temperament, disposition'.

my bktǧ מי בכתג

'Inspissated wine' Read in one word as Arabic *maybukhtaj*, referring to 'inspissated wine' or 'syrup of dates', Ibn Janāḥ, *Talkhī*ş § 227.

melankunyah מלאנכוניה

'Melancholy' From the Greek via the Arabic ملانخوليا (*malānkhūliyā*).

menuga' מְנָגַע

'Ulceration'

The *puʿal* form of the root נגע in Biblical Hebrew means 'to be stricken by diseases' (BDB, s.v., נגע). In Rabbinic Hebrew, it appears in the *piʿel* form, but not the *puʿal*, as 'to afflict with leprosy' (Jastrow, s.v. (גגע). Bos, NM 3:132: מנַגַע 'ulcerous' (Hillel ben Samuel).

מצטיכי mașțiki

'Mastic' (المصطكى, *al-maṣṭakā*) Ibn Janāḥ, *Talkhīṣ:* § 83, 348, 476, 562, 721, 971, 1081.

marah 'adummah, mara shehorah מְרָה שְׁחוֹרָה

'Red bile; black bile'

The word אָרָה appears in the Bible as 'bitterness', and in Rabbinic Hebrew it is specified as 'bile'. The concept of 'red bile' and 'black bile' appears in the medieval texts of medical works. Very often אדומה and ליחה אדומה are found instead of מרה אדומה מרה אדומה.

meshalshel מְשֵׁלְשֵׁל

'Purgative'

Jastrow: שלשל 'to relax, loosen the bowels'. Bos או 6:212 שלשל, amongst other meanings: 'to purge' (Nathan ha-Me'ati). 'Infusion'

In the Bible, מְשָׁרָה means 'juice' (אדם). In Rabbinic Hebrew, it evolved to 'infusion' (Jastrow). Bos אמ 6:133 'decoction' (Moses ibn Tibbon), Bos writes: 'Do'eg ha-Edomi translates the parallel Lat. term *sucus* as אשרוב'.

'Epileptic'

This term is not found in BDB or Jastrow. Ben Yehuda includes נְכְפֶה as a Rabbinic term that means 'epileptic'.

skr al-slymyny סבר אלסלימיני Sulaymānī sugar' (السكر السليماني, *al-sukkar al-sulaymānī*) For this type of sugar, see Ibn al-Jazzār, *Zād al-musāfir* (ed. Bos et al.), 1.10.4, 107.

This does not appear in BDB. In Jastrow: 'to filter, clear, refine'. Bos, אא 6:152, says: קנון 'filtrate' (Moses ibn Tibbon).

sarța'n סַרְטַאן

sinen (סנן) סנן)

'Cancer'

'To filter'

This does not appear in BDB. Jastrow: פָרְטָן 'crab; Cancer, the fourth sign of the Zodiac'. It often appears in medieval medical texts as the name of a disease.

פ

panad, panad laban פאנד, פנד לבן

'Sugar-candy'

Ibn Janāḥ, *Talkhīş* § 674: 'The Persian term *pānīd*, or *pānīdh*, refers to "sugarcandy, a sweetmeat", or to "purified, white sugar", "cane sugar", and "a sweetmeat".'

נכפים

mishrah מִשְׁרָה

ס

נ

hișni' צנע) הִצְנִיע)

'To preserve'

In BDB the verb in *hif'il* means: 'keep close, reserve, preserve', although it is amongst the terms that 'is not actually found, or that the Hebrew offers no positive proofs'. In Jastrow as 'to withdraw, to reserve, hide'. None of the examples provided by Jastrow are in a pharmaceutical context.

'Leprosy' In BDS, אָרַעָת appears as 'leprosy' and the verb, only in the passive, as 'to be struck with leprosy'. Jastrow: *hif'il* 'to strike, smash, to strike with leprosy'. Bos NM 2:78. 'elephantiasis' (Nathan ha-Me'ati).

٦

'To crush'

BDB: 'crush'. Bos, NM 4:197 *pu'al רָצַין* 'to be crushed' (Moses ibn Tibbon). See also Bos NM 6:205 f. for the noun ירצויץ 'bruise, bruising; contusion' (Moses ibn Tibbon).

hirtiyah הָרָתִיח (רתח)

'To bring to a boil'

вов: 'boil', in *paʿal*. The *hifʿil* form does not appear. In Jastrow, s.v., רתח, the *hifʿil* form means 'to cause bubbling, foaming'. Bos NM 6: 207, includes it as part. *hofʿal* מַרתָת 'decoction'.

ש

shahoq שָׁחוֹק

'Pounded' Jastrow: שחק 'to rub, grind, pound'.

shemen kri'a שמן בריע

'Safflower oil (Carthamus tinctorius seed oil)'

I have not found the term *kriʿa* as it appears in the *Treatise on the Disease of Melancholy*, but in the manuscript of *The Physician's Notebook*, the epithymum infusion is followed by another oil recipe from *ḥariʿa* (שמן חריע), which Jastrow identifies as 'bastard saffron' (*Carthamus tinctorius*), and the confusion can be understood if this is read as *khriʿa*.

¥

rașaș רְצַץ

sara' צַרַע

'Sweet almond oil'

sharasify שראסיפי

'Hypochondriac melancholy'

'Rufus said in this book: Some ancient physicians called those suffering from this disease hypochondriacs [*sharāsīfīs*] since it originates in the region beneath the rib-cartilage'. In the Arabic fragment: الشراسيف. (Rufus, *On Melancholy* 30). Bos NM 2:54 f.: in some texts, the Arabic expression is different: مرض مراق البطن and it has two different Hebrew translations: המראקיה.

4 Some Deductions

This text must be placed in the context of the Hebrew translations from the Arabic that were prepared for the Jews in Christian Europe who did not speak or read Arabic. The earliest translators came from the exile of the Jews from al-Andalus, where Arabic was their primary language. At times, the works were first translated into Latin, and then these Latin versions were occasionally used instead of the Arabic texts as the base text for the Hebrew versions. In either case, it was difficult to avoid the influence of the local language, particularly regarding the inclusion of Romance terms for the names of the plants used in the recipes. A study of the lexicon in the two recipes that coincide in the two manuscript copies serves as a useful way to obtain data about both the translation and the original.

The linguistic substratum is Arabic. Transcriptions of the Arabic terms denote a close proximity when the transcription of a particular Arabic letter is indicated by using a dot over the Hebrew letter, such as the use of a *gimel* with a dot over it (\dot{x}) to indicate the Arabic letter $j\bar{n}n$ (;) or a *tet* with a dot over it (\dot{v}) to indicate the Arabic letter $z\bar{a}^{2}$ (\dot{z}) is transcribed. These plant names are incorporated into both Hebrew and Latin, but without the diacritical marks, suggesting that whoever wrote the treatise was very familiar with Arabic. This knowledge is reflected not only in the form of transcribing, but also in the inclusion of some words in Arabic in the colophons. Some Hebrew terms are used that are connected to Mishnaic Hebrew. Particularly notable is the use of \mathfrak{m} (*zuz*), which would later be replaced in Hebrew texts by the standard measure used in the Arab world, the *dirham*. Naturally, the text includes some terms that are identified as medieval medical Hebrew, but they do not always coincide with the terminology common amongst thirteenth-century translators.

This leads me to think that it is an early translation, unaffected by the Latin or Romance versions, or by the Hebrew medical language that would develop and consolidate beginning in the thirteenth century. Clearly, the differences with respect to the original in the theoretical part—additions, omissions, and variations—were the work of a doctor, and the recipes included that do not necessarily coincide with the original serve as evidence of some knowledge of the subject matter and the practice of the art of medicine. The reference to the Jewish author Saadia Gaon strongly suggests that the author of this revision of the text was Jewish. Saadia was a well-known author in tenth-century Kairouan as can be seen in the work of Dūnash ibn Tamīm, a disciple of Isaac Israeli. He cited both his master and Saadia several times in his commentary on the *Sefer Yetzirah*.³⁴

I am inclined to think that the modifications in this version of the *Treatise* on the Disease of Melancholy are not the result of the translator interfering with the Hebrew, but that a Judeo-Arabic text, the work of a Jewish doctor, contained the differences with respect to the work by Isḥāq ibn 'Imrān, and that this work served as the base for the Hebrew translation. I can detect enough elements to set this text in the context of the heyday of Hebrew culture among Arabic-speaking Jews in tenth-century Kairouan and place its translation at an early stage, when the Hebrew pharmacological lexicon was still very similar to the Arabic, without the influence of the Romance language, and the medical lexicon continued to adhere closely to rabbinical Hebrew.

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³⁴ See Vajda, Georges, Le Commentaire sur le Livre de la Création de Dūnaš ben Tamīm de Kairouan (x^e siècle), Nouvelle édition, revue et augmentée par Paul B. Fenton (Collection de la Revue des Études juives), Paris-Louvain: Peeters, 2002.

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This book is volume 126 in the series ISLAMIC PHILOSOPHY, THEOLOGY AND SCIENCE. TEXTS AND STUDIES

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