

Dāwūd al-Muqammaṣ and the Beginning of Hebrew Logic
A Newly Discovered Hebrew version of the First of his *Twenty Chapters*

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Abstract

MS Mich. 335 in the Bodleian library, from the 15th century, is a collection of philosophical works in Hebrew, predominantly concerned with logic. Among them is a short text entitled *Treatise on the Four Inquiries*, attributed to “al-Muqammaṣ.” The present study shows that this treatise is in fact a Hebrew adaptation of the first chapter of Dāwūd al-Muqammaṣ’s *Twenty Chapters*, which was repurposed into a self-standing introduction to logic. This finding enhances the growing appreciation of al-Muqammaṣ’s place in the history of Jewish philosophy, extending it to the field of logic. The study is accompanied by an edition of the Hebrew text with a parallel English translation.

Keywords: Medieval Jewish Philosophy, Hebrew Translations, Medieval Jewish Theology, Arabic Philosophy

Introduction

In the first chapter of the first medieval work of Jewish philosophy, Dāwūd al-Muqammaṣ (fl. in the first half of the ninth century)¹ introduces a methodology of inquiry that consists of four questions: whether a thing is, what a thing is, how a thing is, and why a thing is. This method ultimately stems from Aristotle’s *Posterior Analytics*, and through the Aristotelian commentary tradition and Christian sources found its way into Arabic philosophical and theological literature.² Al-Muqammaṣ is aware of the method’s Aristotelian origins, and he mentions both Aristotle and Porphyry in the course of his discussion. As Sarah Stroumsa has argued, “the consistent, repetitive application of these questions to different topics, marking the various stages of the book, is peculiar to al-Muqammaṣ.”³ The four-question route is the “backbone” of al-Muqammaṣ’s philosophy, not only in his *Twenty Chapters*, but also in his (mostly) lost commentary on Genesis.⁴ If, as Stroumsa maintains, the first of the *Twenty Chapters* could be taken as an “introduction to logic,”⁵ then one can say that the first work of medieval Jewish philosophy is also the first Jewish medieval work on logic.

A point that I believe has been overlooked is that al-Muqammaṣ was not only the first medieval Jewish philosopher *per se*, but also one of the first medieval Jewish philosophers who were

¹ The most up to date account of al-Muqammaṣ, his life, and his works can be found in Sarah Stroumsa: *Dāwūd ibn Marwān al-Muqammaṣ: Twenty Chapters* (Provo: Brigham Young University Press: 2016), xv–xxxii.

² The history of the four-questions method has been studied by Samuel Stern in the context of Isaac Israeli’s *Book of Definitions*, which also starts with them. See S.M. Stern, “Isaac Israeli: The Book of Definitions,” in A. Altmann and S.M. Stern, *Isaac Israeli: A Neoplatonic Philosopher of the Early Tenth Century* (Chicago and London: The University of Chicago Press, 2009 [1958]), 11–13 (Isaac’s text); 13–23 (Stern’s analysis). For a recent study see Michael Chase, “Des quatre questions aristotéliennes au tawhīd: Notes sur les origines de la théologie négative en Islam,” *Studia graeco-arabica* 11 (2022): 35–51.

³ Stroumsa, *Twenty Chapters*, xxxii.

⁴ Sarah Stroumsa, “From the Earliest Known Judaeo-Arabic Commentary on Genesis,” *Jerusalem Studies in Arabic and Islam*, 27 (2002): 383.

⁵ Stroumsa: *Twenty Chapters*, xxxiv, with reference to possible sources there.

translated into Hebrew. Extensive quotations from a Hebrew translation of the *Twenty Chapters* are included by Judah b. Barzilai of Barcelona, in his late 11th/early 12th century commentary on the *Book of Creation*.⁶ This is well before the launch of Judah ibn Tibbon's Hebrew translation project in the 1160s.⁷

I have recently come across a hitherto unnoticed Hebrew version of the first of al-Muqammaš's *Twenty Chapters*, which transforms the work into a self-standing introduction to logic entitled *Treatise on the four inquiries* (*Ma'amar be-dalet meḥqarot*). As such—and coming full circle, as it were—it found its way into a mid-15th century Hebrew notebook, mainly concerning the study of logic. So far, it is the only known witness of this text. Although it is unclear if our text stems directly from the translation quoted in Judah b. Barzilai, their shared idiosyncratic terminology suggests that at the very least they come from the same intellectual circle. If this is indeed the case, then al-Muqammaš becomes a foundational figure in Hebrew literature on logic.

The purpose of this short contribution is modest: to present an editio princeps of the text alongside an English translation and some preliminary observations, with the hope that the material will be revisited in a more comprehensive manner at a later point.

The Material Evidence

MS Bodl. Mich. 335 is a complex codex that bears witness to intensive study. The watermark in the portion of the manuscript we examine here features a bull's head with a flower and rod, which is found in several middle-late 15th century manuscripts ranging between Northern Italy and Southern Germany.⁸ Given the multi-layered nature of the codex, where different materials were gradually added to its margins and other empty spaces over time, it is difficult to determine the number of hands involved, but they were catalogued as using a semi-cursive Ashkenazi script.⁹

⁶ For a survey of the surviving Hebrew fragments on al-Muqamaš in this work and others see Sarah Stroumsa, *Dāwūd ibn Marwān al-Muqammaš: Twenty Chapters—Hebrew translation, notes, and introduction* [Hebrew] (Jerusalem: Magnes, 2022), 51.

⁷ The only philosophical book that was doubtlessly translated earlier is the anonymous translation to Sa'adia Gaon's *Book of Beliefs and Opinions*, which was completed in 988. See Oded Porat, *Two Early Translations to Sa'adia Gaon* (Los Angeles, Cherub Press: 2019), 9–10. Other possible candidates to predate it are Dunash ben Tamim's and Sa'adia's respective commentaries on *Sefer Yetzira*. The latter only exists in some quotations in Barceloni. We know from Judah ibn Tibbon's introduction to his translation of Bahya ibn Paquda's *Duties of the Hearts* that there has already been a translation movement in place, which Judah criticized. For this point see Reimund Leicht, "Judah ibn Tibbon: The Cultural and Intellectual Profile of the 'Father of the Hebrew Translation Movement'" in Reimund Leicht and Giuseppe Veltri, eds., *Studies in the Formation of Medieval Hebrew Philosophical Terminology* (Leiden: Brill, 2019), 115ff. For a general overview of the Hebrew philosophical translation project, see e Steven Harvey, "Arabic into Hebrew: The Hebrew Translation Movement and the Influence of Averroes upon Medieval Jewish Thought," in *The Cambridge Companion to Medieval Jewish Philosophy*, ed. Daniel H. Frank and Oliver Leaman (Cambridge: Cambridge University Press, 2003), 258–80.

⁸ This type is catalogued in Briquet under "Tête de Boeuf-à yeux-sommée d'une fleur," encompassing nos. 14708–14886 (<https://briquet-online.at/loadWmlcons.php?rep=briquet&IDsubtypes=1112>). I could not find the exact corresponding image in Briquet's list or in the "memory of paper" portal, nor have I encountered another Hebrew codex with this watermark, though this requires a fresh codicological and material examination beyond the scope of the present paper.

⁹ Adolf Neubauer, *Catalogue of the Hebrew Manuscripts in the Bodleian Library and in the College Libraries of Oxford. Vol. 1* (Oxford: Clarendon Press, 1886), n. 1318 (465–67; corr. p. 1157); Malachi Beit-Arié, *Catalogue of the Hebrew Manuscripts in the Bodleian Library: Supplement of Addenda and Corrigenda to Vol. I (A. Neubauer's Catalogue)*. Edited by Ron A. May (Oxford: Clarendon Press, 1994), 219.

Regarding the contents of this codex, much work still needs to be done and its various parts still need to be distinguished from each other properly, which is not an easy task. Neubauer's original entry in his catalogue of the Bodleian Library (including the corrigenda there) was slightly updated in the supplemental catalogue, but many parts in it remained unidentified.¹⁰ Since then, Charles Manekin has shown that it contains a work similar to Peter of Spain's *Tractatus* and attributed to Aristotle (22r–32v).¹¹ Upon examination, I can add that it contains selections from Averroes's middle commentaries on Aristotle's *Categories* (33r–34r) and *Prior Analytics* (55r–60v)—both in the translation of Jacob Anatoli—a short work about the division of sciences that was falsely attributed to Avicenna (35v),¹² a lexicon that originates from the school of Abraham Abulafia and linked to his *Mafteah Ha-Ra'ayon* (17v–19v),¹³ and the enigmatic “prolegomenon” to the study of Divine Science (67r–71v), which is ultimately based mainly on Averroes's *Incoherence of Incoherence* and of which several hitherto unidentified copies have recently come to light.¹⁴ On the margins of the codex we find extensive quotations from a long list of authors from the Arabic and Hebrew worlds in a plethora of contexts. To do justice to its richness, though, the codex should be catalogued anew, and in general warrants a dedicated study of the various practices of compilation, appropriation, annotation, and scholarship it exhibits.

MS Mich. 335 contains material that is ascribed to a certain al-Muqammaṣ. Sometimes the names *Nathan* al-Muqammaṣ or *Nathan* ha-Bavli are mentioned, together or apart. Since “our” al-Muqammaṣ's first name is David (sometimes referred to in Hebrew literature as “David ha-Bavli”), this attribution obviously causes complications, about which I will comment in a later section of the paper alongside a short survey of the material.

But the focus of the present contribution is a short treatise that bears the Hebrew title מאמר מחקר נשלם מאל מקמץ בד' and ends with the text נשלם מאל מקמץ (without a first name). Previously, Neubauer catalogued it alongside other works as item 6 in the codex, encompassing pages 33r–35v: “Notes on logic, extracted from Averroës' comm., from נתן אלמקמץ דר' הגיון דר', and from Avicenna's אלושפא.”¹⁵ This description masked the independent status of the work within the codex, as it has its own title and ending. The inner division within this portion is as follows:

- A. Extract from Averroes, Middle Commentary on the *Categories*, in the translation of Jacob Anatoli (33r–top half of 34r). On the top of the page, in a later hand, we find the words

¹⁰ See previous note.

¹¹ For this work see Charles H. Manekin, “When the Jews Learned Logic from the Pope: Three Medieval Hebrew Translations of the *Tractatus* of Peter of Spain,” *Science in Context* 10/3 (1997): 396–97. See also Manekin and H. H. Biesterfeldt, eds., *Moritz Steinschneider: The Hebrew Translations of the Middle Ages and the Jews as Transmitters, Vol II: General Works, Logic. Christian Philosophers* (Cham: Springer, 2022), 227.

¹² This work survives in several manuscripts, listed in Y. Meyrav, “Averroes's Epitome of Aristotle's Physics in Hebrew: Translation, Transmission, and Revision,” *Aleph* 22 (2022): 191, n. 17. It was first printed by Leopold Dukes in *Otzar Nehmad* 2 (1857): 114–15 (based on an unidentified manuscript), from which it was quoted by Harry A. Wolfson, “The Classification of Sciences in Medieval Jewish Philosophy,” in *Studies in the History of Philosophy and Religion*, eds. Isadore Twersky and George H. Williams, vol. 1 (Cambridge, Mass.: Harvard University Press, 1973), p. 495 n. 8. For further discussion and partial translation see Mauro Zonta, “The Reception of Al-Fārābī's and Ibn Sīnā's Classifications of the Mathematical and Natural Sciences in the Hebrew Medieval Philosophical Literature,” *Medieval Encounters* 1/3 (1995): 376–77.

¹³ The same work appears in MS Paris 1092, 90r–91v, which is discussed in Moshe Idel, *Abraham Abulafia's Esotericism: Secrets and Doubts* (Berlin: De Gruyter), 59, n.73. In the Paris manuscript, the work is attributed to Abraham ibn Ezra.

¹⁴ The most up-to-date account about it was given in a lecture by Yonatan Shemesh, “A Forgotten Prolegomenon to the Study of Divine Science,” EAJIS Congress (Frankfurt, 18 July 2023). Shemesh and I are currently preparing a study of this text.

¹⁵ Neubauer, *Catalogue*, 465.

מס' השפא ("from the book of the *Shifa*"), crossed out by red ink. This later, mistaken addition was perhaps based on the ending of this portion of the codex (item E).

- B. A passage enumerating kinds of self-evident propositions or perhaps direct objects of knowledge. The title only has "and those which do not require explanation" (ואשר אינם צריכות לסברא). This is supposedly from "R. Nathan al-Muqammaṣ's *Logic*" (34r, bottom half; see below).
- C. "Treatise concerning the four inquires" attributed to "al-Muqammaṣ" (34v–35r), with no forename (our work).
- D. An anonymous passage about three kinds of difference (חלוקה) (35v, top half).
- E. An anonymous passage about the division of sciences, "found written in Arabic on [a copy of] the book of the *Shifa*" (35v, bottom half).¹⁶

The present study is concerned with item C.

Al-Muqammaṣ's Twenty Chapters and the Treatise on the Four Inquires: Preliminary Analysis

In order to determine the relationship between the works, I will first describe the chapter in its Arabic form and then explain what happens to it in the Hebrew. A detailed comparative table is found in the appendix.¹⁷

The beginning of the book's first chapter is missing, and we encounter the text amid an example of a person who encounters and studies a lote tree in the desert, which is meant to show how the fourfold method of inquiry works. Al-Muqammaṣ then proceeds to give a three-round discussion of the fourfold method of inquiry. The first round (sections 1–2) offers a general overview of the four inquiries. After outlining the programme of the chapter (3), the second round is a systematic discussion of the various *definitions* of each inquiry (sections 4–11). The third and final round is a systematic discussion of the various *divisions* of each inquiry into kinds, according to different criteria (sections 12–28). Altogether, al-Muqammaṣ gives us 2 definitions and 4 divisions for "existence"; 3 definitions and 2 divisions for "essence"; 4 definitions and 2 divisions for "quality"; and 3 definitions and one division for "why." Each discussion is immediately followed by a *mithāl*, which is, according to Stroumsa, a "graphical arrangement" of the topic, unusual to its time, which arranges the contents visually, something between a chart and a table.¹⁸ Each *mithāl* creates a duplication of information, though the wording is not always identical. The result is a saturated philosophical taxonomy of options for understanding each method of inquiry, with an abundance of information that does not always consolidate into a coherent picture. In the course of subsequent chapters, al-Muqammaṣ revisits the fourfold method repeatedly, it being a guiding element throughout the work.

The Hebrew version is not presented as a methodological beginning of a book, but as a self-containing treatise taking as its starting point al-Muqammaṣ' words according to which these four inquiries will provide the truth of any examined thing. On the textual level, it is different from the Arabic we have in three ways. First: it is much shorter. Besides removing the example of the lote tree from the beginning of the chapter (and whatever else was originally there and now lost), there are two main abridgment devices: (i) the complete elimination of the dual structure of narration followed by graphical arrangement; and (ii) exclusion of some definitions and divisions. Regarding the

¹⁶ For this text see above, n. 9.

¹⁷ The present discussion follows Stroumsa's division of sections with a slight modification. Section 25 is split into two sections: one (25a) that contains the graphical arrangement of section 24, and another (25b) that introduces an alternative analysis of quality, of which section 26 is the graphical arrangement.

¹⁸ Stroumsa, *Twenty Chapters*, xxxiii and further references there. Stroumsa uses "schema" for translating this term.

first device, we find that it is not a simple removal of the information found in the graphical arrangements, but rather a selection of material from both aspects of the work that results in a condensed reappropriation of each section. Regarding the exclusion of definitions and divisions, we see one omission of a definition (in the case of quality, which now has only 3 definitions against al-Muqammaš's original 4), and several omissions of divisions, the largest of which concerns the division of existence, which completely skips sections 16–21 and radically shortens sections 22–23. Future study of the work should focus on the selection priorities of the adaptor.

A second difference between the Arabic and the Hebrew is that the latter sometimes contains information that is *absent* from the Arabic we have. We find this in two cases: first, the Hebrew adds an additional definition of existence, which is not present in the Arabic we have (“the existent is that whose form is altered into another, or that acquired a form that it did not have”); second, it contains elaboration concerning the exclusion of the Creator from the inquiry “why,” both in the discussion of its definition, and in its division.

A final difference is that of paraphrasing, which functions for the smoothening of all the departures from the Arabic text and for the consolidation of the treatise as a self-sufficient unit with the functional utility of guiding the reader in how to use the interrogative method properly.

The Hebrew text often exhibits affinity to its Arabic source by using Hebraized Arabic words (e.g. למיה, כמיה) or by appending the original Arabic term to the translated Hebrew. Besides that, the translator uses terminology that differs from the terminology that later became more common. For example, for substance (Ar. *jawhar*) we find the Hebrew חרוץ; For accident (Ar. *'araḍ*) we find תחלופת; For cause (Ar. *sabab*) we find תואנה. This special terminology is also found in Judah b. Barzilai's quotations, which strengthens the connection between the works.¹⁹ Besides the term חרוץ for *jawhar*,²⁰ I do not know of analogous usages of these terms in other works. On the other hand, in Judah b. Barzilai's quotations we find some innovations that are absent from our text. For example, for genus (Ar. *jins*) and species (Ar. *naw'*), our text has, respectively, מין and זן, while in Barzilai we have (the quite nice) מין גדול and מין קטן.²¹ However, it is very difficult to draw something conclusive out of this, since we do not have any reference to check if and how Judah interfered with the text he was quoting.

While the Hebrew work is on the whole meticulous in adapting the text into a coherent unit, there is one case that seems to leave traces of the source material: the discussion of the definition of essence starts twice. First, by giving a single definition, and then by repeating the introductory words and giving three definitions, including the one that was already given. This reveals the practice of synthesizing the discussion with the graphical arrangement, as the first part is taken from the general discussion (section 7 in the Arabic), and the second one from the graphical arrangement (section 8)—without removing the duplication.

Another option

¹⁹ Judah Barzilai, *Commentar zum Sepher Jezira von R. Jehuda b. Barsilai aus Barcelona*, ed. S. J. Halberstam (Berlin, 1885), 78.

²⁰ The same translation is employed by Solomon ibn Daud in his translation of al-Baṭalyawsi's *Book of Imaginary Circles*, which according to Lucas Oro Hershtein should be dated sometime between 1205 and 1226. See Lucas Oro Hershtein, “‘I Am Not Inferior to Them’: Solomon Ibn Da’ud’s Introductions to His Arabic-to-Hebrew Philosophical and Medical Translations,” *Maimonides Review of Philosophy and Religion* 3 (2024): 113–58.

²¹ Judah Barzilai, *Commentar*, 78.

So far, I have described our work as a Hebrew adaptation of al-Muqammaṣ's first chapter. This makes sense given its general structure, several cases of literal translation, and terminological compatibility with Judah b. Barzilai. Furthermore, as Sarah Stroumsa has shown according to other parts of the work, the anonymous Hebrew translation seems to have relied on a slightly different version of the Arabic we have today.²² If this is the case, then the *Four Inquiries* is an adaptation of the first chapter into a self-standing treatise on logic disconnected from its original context. This would suggest, on account of the fact that the other surviving parts of the Hebrew translation do not express significant adaptation practices, that we have a two-stage process: first, the translation of the whole work into Hebrew, and second, an adaptation of the Hebrew first chapter into a self-standing treatise. Both steps could have been done by the same person. Alternatively, although less likely (at least from a common sense perspective), it is possible that the original translation was hybrid, alternating between adaptation and full translation.

However, perhaps there is another way to understand what happened. This way requires some speculation on our part, but I would not rule it out. Thanks to Stroumsa's research, we know that al-Muqammaṣ's four-stage inquiry method is not exclusive to the *Twenty Chapters*, as it is also used in his commentary on the six days of creation.²³ We also know that al-Muqammaṣ wrote a treatise entitled '*Arḍ al-maḳālāt 'alā al-manṭiq* ("Survey of Sections concerning Logic"). Although Georges Vajda suggest that it was a treatise about different heresies, Stroumsa has stressed that the contexts in which al-Muqammaṣ refers to it in the *Twenty Chapters* are exclusively logical.²⁴ MS Mich. 335 preserves, besides our treatise, several logical fragments that seem to have some connection to al-Muqammaṣ²⁵ and perhaps his work on logic:

1. 21v "from the Logic of R. Natan Ha-Bavli" (self-standing text): A discussion of different types of opposite propositions, including a table.
2. 22r "from al-Muqammaṣ" (on the margins of the pseudo-Aristotelian *Tractatus*): A short epistemological text that explains that air is a medium for carrying sound and colour to the sense organs.
3. 23r "from the logic of R. Nathan ha-Bavli" (on the margins of pseudo-Aristotelian *Tractatus*): A short explanation that in a logical proposition the subject is always a noun (or something equivalent) and the predicate can be either a noun or a verb.
4. 23v "from the logic of R. Nathan ha-Bavli al-Muqammaṣ" (marginal note on a marginal note in the context of modal divisions): a threefold division of modalities into necessary, possible, and actual.
5. 34r "from the logic of R. Nathan al-Muqammaṣ" (self-standing): An epistemological discussion of four types of irrefutable knowledge: Authority, trust in expertise, direct sense-perception, and first innate intelligibles.
6. 57v "from the logic of R. Nathan al-Muqammaṣ" (marginal note on Averroes, Middle Commentary on *Posterior Analytics*): An extension of a discussion of the Ferison syllogism (fifth mood of the third figure).

²² Stroumsa, *Twenty Chapters* [Hebrew], 51.

²³ See above, n. 3.

²⁴ Stroumsa, *Twenty Chapters*, xxvii–xxix, who cites Georges Vajda, "La prophétologie de Dâwûd ibn Marwân al-Muqammis, théologien juif arabophone de IXe siècle," *Journal asiatique* 265 (1977): 232.

²⁵ Mauro Zonta (as usual) already anticipated this option with reference to our manuscript, in his *La filosofia ebraica medievale. Storia e testi* (Rome: Laterza, 2002), 17 and n.5 there, but to my knowledge did not pursue it further.

We have a long way to go before we can say that some or all of these fragments ultimately stem from al-Muqammaṣ's *'Arḍ al-maqālāt 'alā al-manṭiq*, which would solve the mystery of what that book was about. If this were indeed the case, then one could also argue that *The Four Inquiries* we have here was originally part of that book and was later reworked into what became the first of the *Twenty Chapters*. But there are several obstacles that need to be tackled to be able to produce an argument of this sort.

The scattering of these fragments in different parts of the codex, in itself, is not problematic, since it is in tune with the various copyist practices it exhibits. The arrangement of Mich. 335 suggests that it draws from a large pool of texts from many periods, which are selectively copied according to taste and context either as main texts or as extensive marginalia.

A more serious problem is that the author is listed either as simply al-Muqammaṣ or with the first name *Natan*, who is also identified as *Nathan Ha-Bavli*, just as al-Muqammaṣ is referred to in Hebrew literature as *David Ha-Bavli*. This error (if it is indeed an error) could have been caused by the passage of time, and perhaps conflation with the famous historian of the same name.

But the largest challenge is that it is difficult to show how they were all composed by the same author or even translated by the same person. Some of them are clearly connected through shared Hebrew idiosyncratic terminology (e.g. Fragments 1 and 5 both use חִידוֹת for propositions). Others seem to have a similar format (e.g. Fragment 4 and *The Four Inquiries*). In general, with the exception of Fragment 3, their vocabulary is not standardized (e.g. סובל and נסבל for subject and predicate in Fragment 1; צבעון for colour in Fragment 2; מנצחת for eternal in Fragment 4; דמות for a figure of the syllogism in Fragment 6). Fragment 3 stands out as particularly standard, and Fragments 1 and (especially) 6 are quite technical compared to the others.

I hope that as more attention is given to these parts, and with the surfacing of new materials, these questions could be properly answered.

Conclusion

Between the publication of the first and second editions of her foundational study about al-Muqammaṣ, Sarah Stroumsa radically changed her mind concerning his impact on Jewish philosophy. Whereas initially she thought it was limited, as the years passed, several materials have come to light to demonstrate that al-Muqammaṣ's place in Jewish philosophy is quite central, especially in theological contexts.²⁶ The short text presented here adds yet another dimension to al-Muqammaṣ's lasting impact and testifies to the richness of his legacy. Apparently, his presentation of the fourfold method of inquiry was broad enough to function as self-standing study material for logic and scientific procedure, regardless of al-Muqammaṣ's original theological aims, eventually finding its way into a 15th century notebook concerned with logic.

²⁶ Stroumsa, *Twenty Chapters*, xlvī–li.

Treatise Concerning the Four Inquiries

Hebrew text and English translation

Note: The text published here is a critical transcription of MS 335, 34v–35r. In the few cases where I chose to emend the text, I recorded the emendation in a note. Copyist self-corrections were not recorded. Besides this, the only interventions are completing shortened words, a division of the text into sections, and a mild standardization of the Hebrew transliterations of Arabic.

<p>A treatise about the four inquiries that are made concerning the truth of any thing</p> <p>[1] Nothing in this world is known correctly except after these four inquiries.</p> <p>[2] The first inquiry is about “is.” A person first inquires and asks “does this thing exist or not?”. Since³¹ the answer is that it exists, he continues the inquiry and asks “what?”, and says what it is, to know if it is a substance (called <i>al-ḡawhar</i>) or an accident³² (called <i>ʿaraḍ</i>). Since he knows the essence through the inquiry “what,” he thirdly inquires into the “how” and asks “how is it?” to know the difference between it and the rest of the existents. After all these comes the fourth inquiry, which is “why.” It asks “why does it exist?” or “why was it created?”. The answer for this question consists in the thing’s prominence and advantage in the world and in the fact that all existents are of two sorts—some are created and made not by man, like a rock, a stone, or wind, and some are made and fashioned by art, like a house, a chair, and the like.</p> <p>[3.1] “Existent” has three definitions: [i] the existent is that whose form is altered into another, or that acquired a form that it did not have; [ii] the existent is that which is not nothing but something; [iii] the existent is the term [lit. that] by which a person affirms or denies, either truly or falsely.</p> <p>[3.2] We inquire into the definition of essence. We say that the definition of essence is that by whose existence the thing that is defined by it exists, and with its non-existence it does not exist. We find the definitions of essence to be three: [i] essence is that with whose existence a thing of which it is the essence exists, and without which it does not; [ii] essence is the answer for the question “what is the thing?”; [iii] the essence is</p>	<p>מאמר בד' מחקרות שחוקרים על אמתת כל דבר</p> <p>[1] אין דבר בעולם נודע על נכונו אלא אחרי ארבע מחקרות אלו</p> <p>[2] המחקר הראשון מחקר יש והוא שיהיה אדם חוקר ראשונה ושואל היש הדבר הזה נמצא או לא וכיון שבא התשובה כי הוא נמצא הוא חוקר עוד ושואל במחקר מה ואומר מה הוא זה לדעת אם הוא חרוץ שנקרא אלג'והר או מקרה ותחלופת שקוראין אותה ערץ²⁷ וכיון שידע המהות במחקר מה הוא חוקר במחקר שלישי באיך ושואל איך הוא כדי לדעת הפרש בינו ובין שאר הנמצאות אחר כל אלה בא המחקר הרביעי והוא מחקר למה והוא שואל למה נמצא או למה הוא נברא ותהיה תשובת השאלה הזאת בעליונות הדבר ויתרונו בעולם ולפי שכל הנמצאות הם משני ענינים מהם נברא ונוצר לא ע"י אדם כגון אבן וסלע ורוח ומהן עשוי ומתקן במלאכה כגון בית וכסא וכיוצא בהם</p> <p>[3.1] ותהיה גדירי הנמצא שלשה גדירים האחד הנמצא הוא המתחלף מצורתו אל צורה אחרת או הקונה צורה שלא היתה לו והשני הנמצא הוא שאינו אפס אבל הוא יש והשלישי הנמצא הוא אשר בו יודה המודה ובו יכפור הכופר אם באמת ואם בשוא</p> <p>[3.2] אנו חוקרים על גדר מהות ואומרים גדר המהות הוא אשר במציאתו ימצא הדבר המגודר בה ובאפס הוא יאפס והוא נמצא גדירי המהות שלשה הראשון המהות במציאותה ימצא הדבר אשר הוא גדר לו ובאפסיה יאפס והשני המהות היא תשובת השאלה על מה הוא הדבר והשלישי המהות היא המפרשת בין המין ובין הזן²⁸ הנקראים</p>
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²⁷ In the MS: ערץ

²⁸ On the margin: ר"ל הסוג

³¹ “Since” is the literal translation of כיון (here and in the other occurrence of the term in the presence section). Within the logical structure of the sentence, “once” or “after” would work better. It is possible that the underlying Arabic was *lammā*, which can encompass these various meanings. I would like to thank an anonymous referee for this point.

³² Here one English term is translating two synonymous Hebrew terms: מקרה ותחלופת

that which distinguishes between the genus and the species, which are called in Arabic *al-jins wa-l-naw'*, and between the differentiating signs (called *al-fuṣūl*) and the general accidents (*a'rāḍ 'āmīyah*). The question that asks about the differentiae and the accidents is "which is it?"

[3.3] We inquire about the definition of quality. There are three definitions of quality. [i] Through which a thing is said to be similar or dissimilar; [ii] through which the questions "how is it?" rather than "what is it?" is answered; [iii] it distinguishes between things that have the same essence, e.g., Ruben and Simon, which are in one species, but of different quality, for this is white and this is red. Likewise, the quality of genera.

[3.4] We inquire about the definitions of "why." We say that [i] the [first] definition of whyness is a question about the reason and cause of each thing. [ii] The second is a thing that inquires into the cause of the existents' essence and quality. [iii] The third is a question about the prominence of every thing that is created, made, or originated. It does not ask about the primordial Creator, who has no beginning. For the originated and the made have a cause, and you can inquire into it. This is not the way of the Creator, may He be exalted, for He has neither a beginning nor an end.

[4] After completing the explanation of the definitions of the four inquires, we proceed to divide them into each of their parts [lit. dividers].

[4.1] We say that the existent, which is the "is," is divided into two. [i] The first exists in itself and by the power of its body and does not need another for its existence. This is the substance, which is called *al-ḡawhar*. [ii] The second is weak, and needs for its existence something else in which to exist. This is the accident, called *al-'araḍ*, which must exist in a substance.

[4.1.1] One of the sages divided existence in a different way and said that existence has two ways: [i] an infinite existent, which is the Creator, may He be exalted, and [ii] an existent that is created or made, and these are the rest of the existents.

[4.2] One of the sages divided essence and said that essence has two ways: [i] some of it is individual, like substance, and some of it is [ii] composite, like genus.

[4.3] One of the sages divided quality and said that quality is divided into two parts: [i] substantial and [ii] accidental. Substantial [quality] is divided into two: [a]

אלג'נס ואלנוע בלשון ערבי ובין הסמנין המבדילים הנקראים אלפצול ובין המקרים הכלליים הנקראים אעראץ' עאמיה והמבדילים והמקרים שואלין עליהם באיזה הוא

[3.3] אנו חוקרים על גדר האיכות ותמצא גדירי האיכות ג' האחד שבה יאמר לדבר דומה או אינו דומה השני שבה תשובת השאלה באיך הוא ולא במה הוא השלישי היא המפרישה בין המתייחדים במהות ר"ל ראובן ושמעון שהם בסוג אחד ונפרדים באיכות שזה לבן וזה אדום וכן איכות המינים

[3.4] אנו חוקרים על גדירי למה ואומרים גדר ה'למיה' הוא שאלה על עלילת כל דבר ותואנתו²⁹ השני הוא דבר חוקר על תואנת מהות הנמצאות ואיכותם והשלישי הוא שאלה על עליונות כל נברא ונעשה וחדש ואינו שואל על הבורא והקדמוני אין לו ראשית לפי שהחדש והעשוי יש לו עלילה ואתה יכול לחקור עליה ולא בזאת דרך הבורא ית' לפי שאין לו ראשית ולא תכלית

[4] אנו באים אחר שהשלמנו פירושי גדירי החקירות הד' לחלק אותם לכל מחלקיהם

[4.1] ואומרים כי המצוא והוא היש נחלק לשנים האחד מצוי בעצמו ובכח גופו ואינו צריך בהימצאו³⁰ אל אחר וזה הוא החרוץ הנקרא אלג'והר והשני חלש וצריך במציאותו לאחר שיהא נמצא בו וזה הוא המקרה והתחלופה הנקרא אלערץ' אשר הוא צריך להמצא בחרוץ

[4.1.1] וחלק אחד מן החכמים המצוא על דרך אחרת ואמר הנמצא על שני דרכים יש נמצא שאין לו תכלית והוא הבורא ית' ויש ממנו נברא ועשוי והוא שאר הנמצאים

[4.2] וחלק המהות אחד מן החכמים ואומר המהות על שני דרכים יש ממנה נפרדת כמו העצם ויש ממנה מורכבת כגון המין

[4.3] וחלק אחד מן החכמים האיכות ואמר האיכות נחלקת לב' חלקים חרוצית ותחלופית והחרוצית נחלקת לב' רוחנית כהגיון והאמירה במלאכים והדעת והבינה

²⁹In the MS: ותאותו

³⁰In the MS: בהמצאו

<p>spiritual, like thought and speech in angels or intellect and knowledge in souls, and [b] corporeal, like sensation³³ in living bodies or heat in the body of fire. Accidental quality is also divided into two: [a] spiritual, like rectitude and evil or knowledge and ignorance, which exist in the soul, and [b] corporeal, like blackness or redness that exist in the body or in the eye.</p> <p>[4.3.1] Aristotle, in the book of the <i>Categories</i>, divided quality into four parts. However, the division we offer here is better organized and explains the matter neatly.</p> <p>[4.4] Of whyness, we say that it is divided into two. [i] One part of it asks about the primordial that has no beginning or end, and [ii] another asks about a thing that is new and created. All the sages avoid asking the question of whyness about the primordial, which has no beginning or end, because it has neither a cause nor a reason. According to what they say, the question of whyness is only used for a thing that is new and created, about which you can say why it existed after having not existed, and why it was originated and why it was created.</p> <p>[5] That which is from Al-Muqammaṣ has been completed.</p>	<p>בנפשות וגופנית כמשישה בגופים החיים וכחמימות בגוף האש וכן האיכות התחלופית נחלקת לב' רוחנית כיושר וכרשע וכמדע וככסילות הנמצאות בנפש וגופנית כשחרות וכאדמימות הנמצאות בגוף או בעין</p> <p>[4.3.1] וחלק ארסטוטליס האיכות בספר קאטיגוריס לד' חלקים אלא שחלקנו בכאן להם תקון יתר ופירוש נאה בעניין</p> <p>[4.4] ואנו אומרים על הלמיה שנחלקת לשנים יש ממנה שאלה על הקדמוני מי שאין לו תחלה ותכלית ויש שאלה על דבר חדש ונברא וכל החכמים מונעים משאילת הלמיה על הקדמוני שאין לו ראשית ותכלית לפי שאין לו תואנה ולא עלילה ואין שאילת הלמיה נוהגת לדבריהם אלא על דבר חדש ונברא אשר אתה יכול לומר עליו למה היה אחר שלא היה ולמה נתחדש ולמה נברא</p> <p>[5] נשלם מאלמקמץ</p>
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Appendix: Comparative table

<i>Twenty Chapters</i> , chapter 1	<i>Four Inquiries</i>
[1] Introducing the 4 questions after the examples that are lost	N/A
[2] Graphical arrangement of the 4 questions	Narration of the 4 questions alongside an elaboration concerning the application of the "why" that is absent from the Arabic text.
[3] Transitional Discussion to the individual discussions	N/A
[4] 2 Definitions of existents	3 definitions of existence, including one that is absent from the 20 questions
[5] Graphical arrangement of the whether	
[6] 3 definitions of the what	Lists first definition and then restarts the list, repeating the first definition
[7] Graphical arrangement of the what	
[8] 4 definitions of the how	3 definitions of the how (omits last one)
[9] Graphical arrangement of the how	
[10] 3 definitions of the why	Expansion on the inapplicability of the why to the Creator
[11] Graphical arrangement of the why	
[12] Analysis of existents (substance/accident; general/particular)	Only analysis of substance and accident
[13] Graphical arrangement of 12	
[14] A different analysis of existents (God/the world)	Similar analysis

³³ I translate "sensation" because it fits better into the argument and also because the original Arabic has *ḥiss*. The word משישה can also be translated as "sense of touch."

[15] Graphical arrangement of 14	
[16] A different analysis of existents (God/the world[substance/accident])	N/A
[17] Graphical arrangement of 16	
[18] Different analysis (Aristotle's Categories)	
[19] Graphical arrangement of 18	
[20] Analysis of what (genus/species)	
[21] Graphical arrangement of 20	
[22] Different analysis (separate/composite)	Highly abridged
[23] Graphical arrangement of 22	
[24] Analysis of quality (differentiae)	N/A
[25a] Graphical arrangement of 24	
[25b] Analysis into substantial and accidental qualities, each of which is divided into spiritual and corporeal; mention/rejection of Aristotle's analysis of quality in the <i>Categories</i>	Similar analysis
[26] Graphical arrangement 25b	
[27] Analysis of the why (about the eternal or about the created)	Similar analysis
[28] Graphical arrangement 27	

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