



ALMA MATER STUDIORUM  
UNIVERSITÀ DI BOLOGNA

ARCHIVIO ISTITUZIONALE  
DELLA RICERCA

Alma Mater Studiorum Università di Bologna  
Archivio istituzionale della ricerca

Hallucinations and Smoke Screens: The Pseudo-Platonic 'Laws of Nature' (Nawāmīs) and Their Transmission

This is the final peer-reviewed author's accepted manuscript (postprint) of the following publication:

*Published Version:*

Ragetti, L. (2023). Hallucinations and Smoke Screens: The Pseudo-Platonic 'Laws of Nature' (Nawāmīs) and Their Transmission. *QUADERNI DI STUDI ARABI*, 18(1-2), 354-395 [10.1163/2667016x-18010227].

*Availability:*

This version is available at: <https://hdl.handle.net/11585/958506> since: 2024-02-16

*Published:*

DOI: <http://doi.org/10.1163/2667016x-18010227>

*Terms of use:*

Some rights reserved. The terms and conditions for the reuse of this version of the manuscript are specified in the publishing policy. For all terms of use and more information see the publisher's website.

This item was downloaded from IRIS Università di Bologna (<https://cris.unibo.it/>).  
When citing, please refer to the published version.

(Article begins on next page)

## Hallucinations and Smoke Screens: The Pseudo-Platonic ‘Laws of Nature’ (*Nawāmīs*) and Their Transmission

Lucia Raggetti

ORCID ID: 0000-0003-0681-0031

University of Bologna

### *Abstract*

If one masters the hidden laws of nature, there is no end to the wonders that these can produce. A particular group of such procedures that prescribe fumigations with dry, incense-like substances circulated in the Arabic mediaeval tradition, probably translated from Greek and eventually received by the Latin Mediaeval tradition. Plato’s pseudo-epigraphic authorial banner provides an authoritative narrative of transmission that presents these materials in connection with the most prestigious ancient Greek knowledge. This chapter explores the transmission of these erratic blocks of text from a *longue durée* perspective, analysing some specific textual clues disseminated along the tradition, first in the Pseudo-Platonic fragment in MS Paris BnF 2577 and then in the third chapter of al-‘Irāqī’s *Kitāb ‘uyūn al-ḥaqā’iq wa-īdāḥ al-ṭarā’iq* (The best of true facts and the explanation of their ways). This study also attempts to explore the possible technical and material reality behind the text, seeking to frame it in the social context in which these practices were embedded and to pin down the performative component that many of them implied.\*

Keywords: Pseudo-Plato - al-‘Irāqī – *Kitāb al-nawāmīs* – *Liber Anequemis* - Fumigations

### **Plato and his *Laws* in the Arabic tradition**

The reception of the Arabo-Islamic Mediaeval world to *The Laws* of Plato – the title of one of the later and most complex of Plato’s dialogues – took two very different paths. On one side, the Arabic version or adaptation of Galen’s synopsis of Plato’s *Law* (*Kitāb al-Nawāmīs li-Aflātūn*);<sup>1</sup> on the other, Plato’s *Laws* became a way to label a

---

\* This article is published within the framework of the project *Knowledge and manipulation of nature between usefulness and deception in the Arabo-Islamic tradition (9th–15th century) – UseFool*, which has received funding from the European Research Council (ERC) under the European Union’s Horizon Europe research and innovation programme (G.A. 101043939). A first version of this research was presented in Italian at the *Convegno Nazionale della Società Italiana di Storia della Scienza* (Catania, 30 maggio-1 giugno 2022).

<sup>1</sup> The reception of Plato’s *Laws* in the Arabo-Islamic philosophical milieu was deeply influenced by al-Fārābī’s summary. Since the publication of the *editio princeps* by Francesco Gabrieli, this work has been the object of a lively scholarly debate. For a summary of this scholarly debate, see Gabrieli, *Plato arabus*; Mahdi, “The Editio Princeps”, p. 1–24; Gutas, “Galen’s Synopsis of Plato’s Law”, ; and Moseley, “Arabic Support for an Emendation of Plato”. In the Arabic tradition, Plato is also known as alchemist and expert of astrology, see Ullmann, *Die Natur- und Geheimwissenschaften*, p. 154–156 and 287. Plato is presented as an ancient authority in the field of alchemy also in the *Corpus Jabirianum*. The MS Paris BnF Arabe 6915 preserves the unique textual witness to the *Rectifications to Plato* (*Muṣaḥḥaḥāt Aflātūn*) in the hand of al-Marrākūṣī, this

certain form of ‘natural magic’ (*sīmā*) that involves the manipulation of natural substances to obtain mesmerizing special effects.<sup>2</sup> In any case, in Arabic these particular ‘laws of nature’ were called *nawāmīs*. This characteristic form of Arabic broken plural has its singular in a calque of the Greek word *nomos* (‘law’, Ar. *nāmūs*). This contribution focuses on the reinterpretation of Plato’s *Laws* as ‘natural magic’,<sup>3</sup> and on the definition of a new authorial and technical profile for the great Greek philosopher. This pseudo-Platonic tradition presents the image of a nature whose implicitly stated laws are embodied by tangible properties that can be exploited for the grand effect. The longue durée transmission of this material allows to describe the shift the status of this knowledge in the course of time, taking into account on the one side its manuscript transmission and, on the other, its material and performative dimension.

Only a relatively short fragment of the text ascribed to the Pseudo-Plato (*Kitāb al-Nawāmīs*) survives in direct tradition. It has been possible to consult only one of the two manuscript witnesses recorded for this text, that is MS Paris BnF 2577 (f. 104r-105r).<sup>4</sup> This short excerpt follows the first and much longer text transmitted by this multiple-text manuscript, that is the *Kitāb al-Ustūṭās*,<sup>5</sup> a treatise on astral magic and talismans (*nīranġāt*) attributed to Hermes.<sup>6</sup>

The pseudo-Platonic fragment contains three different procedures to prepare and use particular substances meant for fumigation (*duḥna*, as *nomen unitatis* of *duḥn*).<sup>7</sup>

P1. Substance for fumigations that makes a huge fire and fearful beasts made of smoke appear

P2. Substance for fumigations that will obscure the sky and make the stars and the moon appear during the day

---

tradition has been studied by Bojidar Dimitrov in the frame of the *AlchemEast* Project. In presenting the ancient sources of Arabic alchemy, Sezgin underlines the influence of the *Kitāb al-Nawāmīs* on the *Corpus Jabirianum*, see Sezgin, *Geschichte des arabischen Schritttums* IV., p. 96–100.

<sup>2</sup> See Ullmann, *Natur- und Geheimwissenschaften*, p. 364–365. Among the manuscript witnesses to Plato’s magical work, Ullmann mostly mentions copies of the philosophical summary. For a recent discussion of related Arabic magic, see Burnett, “The Three Divisions of Arabic Magic”.

<sup>3</sup> For a discussion of the mediaeval concept of ‘natural magic’ in connection with the properties of natural substances, see Draelants, “The Notion of Properties”, and Van Der Lugt, ““Abominable Mixtures”. For the sources and the reception of Arabic pseudo-Platonic magic, see Saif, “*The Cows and the Bees*”.

<sup>4</sup> The other witness is a manuscript that Paul Kraus saw in Cairo, in the private collection of a family of booksellers and printers, al-Ḥanġī. The present location of the manuscript is unknown, but Kraus published a description of this multiple-text manuscript. From Kraus’s description, the Cairo fragment does not appear to contain more material than the one in the Paris MS. Unfortunately, Kraus mentions the title but gives no further detail about the contents. See Kraus, *Le corpus des écrits Jābiriens*, p. 181–182. The Arabic text was published before by Abdesattar Chaouech, as an appendix to Scopelliti book, see Scopelliti and Chaouech, *Liber anequemis*. The new critical edition and English translation will hopefully make the text available to a larger scholarly readership. Browsing the internet, one finds another manuscript presented as witness to the *Kitāb al-nawāmīs*. As already discernible from the limited number of available images, however, the text clearly appears be an excerpt from al-‘Irāqī’s *Uyūn al-ḥaqā’iq*, which strengthens the argument that the first chapter of al-‘Irāqī’s work was considered closely connected to the pseudo-Platonic tradition. See

<<https://alttyab.net/2021/01/23/%D9%85%D8%AE%D8%B7%D9%88%D8%B7-%D8%A7%D9%84%D9%86%D9%88%D8%A7%D9%85%D9%8A%D8%B3-%D8%B9%D9%86-%D8%A7%D9%81%D9%84%D8%A7%D8%B7%D9%88%D9%86/>> (last accessed, February 16, 2023).

<sup>5</sup> Sometimes identical to the *Kitāb al-Iṣṭamāṭīs*, see Ullmann, *Natur- und Geheimwissenschaften*, p. 375.

<sup>6</sup> For the Hermetic text, see Ullmann, *Die Natur- und Geheimwissenschaften*, p. 375; on the topic of *nīranġ*, see Burnett, “*Nīranj*: A Category of Magic”,.

<sup>7</sup> Planetary fumigations are presented as one of the great secrets of the Indian sages in the in the *Ġāyat al-ḥakīm (Picatrix)*, see Ritter, *Picatrix*, vol. I, p. 241–249; see also Saif, “The Cow and the Bees”, p. 3.

### P3. Substance for fumigations that makes giant figures appear

As for their technical component, these procedures require a curious mixture of mostly animal and mineral ingredients, though vegetal ones are attested as well. The nomenclature of the ingredients bears clear traces of transliterations from foreign names, some have their roots in Greek words. Both the presence of several synonymous names for a single ingredient and the disclosure of the actual substance hidden behind a code name reflect the multilingual environment in which the text was possibly produced and used. In P2, there is evidence of a one-to-one correspondence between the ‘sun stone’ and a light stone called *ṭalq*,<sup>8</sup> which would have made the identification, if not positive, at least possible on the basis of the text itself, without requiring any external knowledge or interpretation key. Similar indications are given about the sea creature whose head was counted among the ingredients. In order to reduce the potential confusion generated by the semantic habit of naming sea creatures based on their resemblance with more familiar terrestrial animals, the text explains that the fish in question is also called ‘sea hen’ (*dağāğat al-baḥr*).

The final product, the substance for fumigation, is prepared in grains and used in its dry form, similar to the preparation of incense and other dry aromatic substances.<sup>9</sup> The fire on which the wondrous substance must be thrown ought to be fuelled by dry camel dung, which is described as the best for this purpose. This kind of fuel does not reach particularly high temperatures due to its low carbon content, which, together with insufficient oxygen and high moisture, might result in a particularly smoky fire.

The procedure details precise indications for performers about the most suitable spot to choose for the fumigation. More than ritual actions, such instructions seem to describe an actual performative component of a wondrous show based on the most powerful forces of nature. The performer is instructed to select either a deserted place or an elevated spot to carry out the operation (*amal*): either solution would assure visibility from afar, unhindered by the obstacles of an urban landscape. The idea that the application of the *nawāmīs* was, at least in part, the execution of a wondrous piece of entertainment seems confirmed by its effect on the public. The reaction of onlookers is described as one of amazement and awe, inspired either by the vision of fearful beasts and giants or by the obscuration of sunlight in the middle of the day. The effects of the three pseudo-Platonic fumigations are all characterized by a certain grandeur, and are apparently meant to amaze as well as to instil terror in the spectators. Unfortunately, there are no further clues about the context of such performances to inform our understanding of the social circumstances in which took place.

MS Paris Ar. 2577, ff. 104r-105r

#### P1. From the ‘Book of natural laws’ (*Kitāb al-nawāmīs*) by Plato

Take the fat of the fish called *al-daḥaz* (?) in Basra – in Egypt it is called *al-dalfīn* (it is also said to be *al-darfīn*) – and the fat of *sālāmandār*, and this resembles the gecko in its colour, but its distinctive sign is that if you throw it in the fire, the fire will be

#### من كتاب النواميس لافلاطون

[أ١٠٤] تأخذ شحم السمكة تقال لها الدخز ويكون  
بالبصرة يسمى بمصر الدلفين وقيل الدرفيل وشحم  
سالامندار وهي تشبه سام ابرص في لونه وعلامتها

<sup>8</sup> The name *ṭalq* may refer to several inert minerals that can be ground into a white powder, see Käs, , *Die Mineralien in der arabischen Pharmakognosie*, vol. II, p. 769–779; see also Raggetti, “Inks as Instruments of Writing”, p. 230–231.

<sup>9</sup> Even if not explicitly mentioned, such fumigations must have had an olfactive dimension, especially considering that the lists of ingredients invariably include at least one aromatic substance.

extinguished, and it is the salamander (*samandal*) – so take one part of each of them; also take one part of ‘Pharaoh’s glass’,<sup>10</sup> one part of cinnabar, one part each of mercury and calcified verdigris; also take the equivalent of half of all these parts of cow dung and the equivalent of a quarter [of all these parts] of hair from the mane of a stallion, of red dye (*baqqam*), and red natron; take one part of *hlfsfws* (?)<sup>11</sup> – that is the Nabatean pigeon’s grass (*riḡl al-ḥamāma*, vervain) – one part of each one; crush everything, sieve it, knead it with those [above-mentioned] fats, make it into grains and let it dry in the shade; smash them [the grains] in an elevated place on a mountain or in an isolated desert and then a fire that does not extinguish will rise in the air from them, along with grey animals with men riding on their back, a powerful impression and commotion will derive from this and it will not cease until the fire cools down, the smoke is extinguished, and the vapour is gone; the fire must be of camel’s dung since this is better, and this is wondrous; if it happens in the light of the day, you will see the stars, the moon, and the place will become dark.

## P2. Another nice substance for fumigations

If you fumigate with it on a clear day, the earth will become dark and you will see all the stars and the moon to the point that the world will be afraid of that, and this is a wondrous matter.

Take some *maṣṭūrak* – that is storax peels (Gr. στύραξ) – some sulphur, and the sun stone – that is talc and it is a light stone – and the head of a fish called ‘swallow’ (*ḥuttāf*) whose physical constitution, in fact, resembles the swallow, but this is the sea-hen

أنك طرحها في النار فتطفي النار وهي السمندل فتأخذ من كل واحد جزءاً ومن الزجاج الفرعوني جزء ومن الزنجفر جزء والزبيق والزنجار المكلسة من كل واحد جزء ومثل نصف هذا الأجزاء اختاء بقر ومثل ربع شعر نوصى الخيل وبقم ونظرون احمر وحلفسفوس وهو رجل الحمامة<sup>12</sup> النباتي [ب ١٠٤] من كل واحد جزء يدق الجميع وينخل ويعجن بتلك الشحوم وبها حبا ويجفف في الظل وبجر بها في الليل في مكان عالي في جبل او في صحراء معتزلة فانه يصعد منه في الهواء نار لا تطفي وحيوان شهب وامثال الرجال عليها ويكون منها تأثير عظيم ولا تزال كذلك حتى تبرد النار وتنطفي الدخان ويفرغ البخور ويكون النار نار بعر الجمال فهو اجود وهو عجيب وان كان في نور النهار ترى النجوم والقمر ويظلم المكان

## دخنة أخرى مليحة

إذا دخنت بها نهاراً جهاراً اظلمت الدنيا ورائت النجوم كلها والقمر حتى تخاف العالم من ذلك وهو امر عجيب

تأخذ مصطورك وهو قشر الميعة وكبريت وحجر الشمس وهو الطلق وهو حجر خفيف ورأس سمكة يقال لها خطاف وهي في خلقها تشبه الخطاف وهي

<sup>10</sup> See Käs, *Die Mineralien in der arabischen Pharmakognosie*, vol. II, p. 652–654.

<sup>11</sup> Chaouech reads this as *hl's'ws* and interprets it as alyssum. However, this does not take into account the evident paleographical difference between the open loop of *fā* or *qāf* and the closed knot of the *ʿayn*, see Scopelliti, *Liber anequemis*, p. 162.

<sup>12</sup> The manuscript reads رجل الحمامة.

(*dağāğat al-baḥr*); crush all of this, knead it with tortoise gall and let it dry in the shade.

When you want to make an operation with it, take one of those grains, burn it on a fire of thorns and leave it in an elevated place; and then you will see the moon and the celestial bodies during the day, but you should only fumigate it at midday.

### P3. Another substance for fumigations

If you fumigate with this, you will see gigantic people, whose feet are on the earth and whose heads are in the sky, you will be afraid of them and terrified.

Take silver foam, safflower, verdigris, blood from bloodletting, gold cadmia, red copper hammer-filings, burnt copper, and cinnabar, ten dirhams of each one; and half a dirham of blue bdellium, the same quantity of the whole amount of mulberry tree roots; crush it, sieve it, knead it with fish fat and mulberry water, give it the form of grains similar to pepper and let it dry in the shade.

When you want to make an operation with it, then fumigate it during the day and you will see wonders and baffle minds.

دجاجة البحر فيسحق ذلك كله [أ.هـ ١٠٥] وتعجنه  
بمرارة سلحفاة وتجففه في الظل

فاذا اردت العمل به فخذ حبة من تلك الحب واحرقها  
على نار شوك واتركه في مكان عال فانك ترى القمر  
والكواكب نهارا ولا تبخر به الا نصف النهار

### دخنة أخرى

اذا انت دخنت بها رأت ناسا عظاما ارجلهم في  
الأرض ورؤوسهم في السماء تخاف منهم وتفرق

تأخذ مَرْتَك وعصفر وزنجار ودم الحمامين واقليا  
الذهب ووروشنجج<sup>13</sup> احمر ونحاس محرق وزنجفر من  
كل واحد عشرة دراهم ومن المقل الأزرق نصف درهم  
ومن اصل شجرة التوت<sup>14</sup> مثل الجميع يدق وينخل  
ويعجن بشحم السمك وما التوت ويعمل منه حب  
على مثال الفلفل ويجفف في الظل

فاذا اردت العمل به فتبخر به نهارا فانك ترى عجا  
ويذهل العقول

### Pseudo-Platonic fumigations in al-'Irāqī's *Uyūn al-ḥaqā'iq*

A significant portion of similar materials, explicitly attributed to Plato, is preserved in the *Kitāb 'uyūn al-ḥaqā'iq wa-īdāḥ al-tarā'iq* (The best of true facts and the explanation of their ways).<sup>15</sup> This work was composed in the

<sup>13</sup> The manuscript reads ووروشنجج.

<sup>14</sup> The manuscript reads التوت.

<sup>15</sup> This chapters includes the critical edition of the third chapter of al-'Irāqī's *Uyūn al-ḥaqā'iq*. As for other passages from this text, they are revised English versions of the Italian translation from the MS Princeton Garrett 544H, published in 2021

13th century by the renowned alchemist Abū l-Qāsim al-‘Irāqī (13th cent.).<sup>16</sup> This handbook is a curious combination of sleight of hand, natural magic, and various forms of technical knowledge. The materials were collected from many different sources – not always mentioned explicitly – and arranged in thirty chapters.<sup>17</sup> The first chapter is entirely dedicated to Plato’s *Nawāmīs*. The introductory part of this section mentions two different kinds of *nawāmīs*, a ‘superior’ (*‘alā*) and a ‘inferior’ (*suflī*) one.<sup>18</sup> The *Ġāyat al-ḥakīm* (The Aim of the Sage, known in Mediaeval Europe as *Picatrix*) also mentions two different books of Plato’s Laws (the ‘great book’ and the ‘small book’ of laws, *al-kabīr wa-l-ṣaġīr*), offering a brief description of their contents. Al-‘Irāqī’s text explicitly lists only the contents of the ‘great’ *nawāmīs* (e.g. walking on water, resisting thirst or hunger). The *Ġāyat al-ḥakīm* notes that, among the minor *nawāmīs*, there is nothing that can be compared to the other and more prestigious ‘great’ group, apart from the making of rational and irrational beings, which may fit with al-‘Irāqī’s sequence of chapters, particularly the fourth one on fermentations and spontaneous generation (*ta’fīnāt*).<sup>19</sup>

The pseudo-Platonic references are concentrated in the first chapters of al-‘Irāqī’s *Uyūn al-ḥaqā’iq*. The third chapter specifically deals with the same kind of fumigation substances already encountered in the Paris fragment of Plato’s *Kitāb al-Nawāmīs*. Plato is explicitly indicated as the source and the fumigations are defined as ‘platonian’ (*aflātūniyya*). Al-‘Irāqī, however, includes three times as many procedures, and his material offers a much greater thematic variety that allows for more in-depth exploration of these practices.

*Third chapter on fumigation substances and manner of their operation*

- 3.1 Substance for fumigations that turns the day dark, making the stars and the moon visible during the day<sup>20</sup>
- 3.2 Substance for fumigation that makes huge stallions and horses, armies and soldiers appear
- 3.3. Substance for fumigations that will make large stars and birds appear in the sky
- 3.4 Substance for fumigations that will make a tree bend towards the ground, with its branches touching its roots<sup>21</sup>
- 3.5 Substance for fumigations that will make a palm tree bend<sup>22</sup>
- 3.6 Substance for fumigations that, when used in company, will make people see each other like elephants or other large animals
- 3.7 Substance for fumigations that will summon mice

---

(see Raggetti, *Un coniglio nel turbante*, or citations from another preliminary study of this text focusing on inks (see Raggetti, “Ordinary Inks and Incredible Tricks”,. This text is a core source of the *UseFool* Project, which plans to publish and study of substantial portions of this text.

<sup>16</sup> Al-‘Irāqī was also known as al-Sīmāwī (‘the practitioner of natural magic’). For the alchemical works of al-‘Irāqī, see Holmyard, “Abū l-Qāsim al-‘Irāqī”; see also *Kitāb al-‘ilm al-muktasab fi zirā‘at adh-dhahab* (*Book of Knowledge Acquired Concerning the Cultivation of Gold*), ed. and trans. Eric J. Holmyard, Paris, Librairie Orientaliste Paul Geuthner, 1923. His *Kitāb al-aqālīm al-ṣab‘ah* (*Book of the Seven Climes*), a work on alchemical illustrations, has been discussed in a post in the British Museum blog by Bink Hallum and Marcel Marée, see <<https://blog.britishmuseum.org/a-medieval-alchemical-book-reveals-new-secrets/>>.

<sup>17</sup> See Raggetti, *Un coniglio nel turbante*, p. 43–52.

<sup>18</sup> See Saif, “The Cow and the Bees”, p. 21.

<sup>19</sup> See Ritter, *Picatrix*, p. 153–157.

<sup>20</sup> See also Saif, “The Cow and the Bees”, p. 23.

<sup>21</sup> See also Saif, “The Cow and the Bees”, p. 24; see also al-Jawbarī, *The Book of Charlatans*, p. 54–55.

<sup>22</sup> See also Saif, “The Cow and the Bees”, p. 25.

- 3.8 Substance for fumigations that, when used at a feast, will give people the illusion they are sitting on the seashore and are being attacked by a huge crocodile
- 3.9 Substance for fumigations that will summon demons and jinns
- 3.10. The greatest of substances for fumigations, attributed to the sages of India and Babylon, substance for fumigation that involves the recitation of words in Hebrew (*al-ibrāniyya*) to summon angels.

On closer examination, only one of the three procedures in the Paris fragment (P<sub>2</sub>) can clearly be identified in the third chapter of the *Uyūn al-ḥaqā'iq*. While the set of ingredients clearly points at recipe No. 3.1, the double effect of the fumigation (obscuration of daylight and fearful smoke figures) is split between recipe Nos 3.1 and 3.2. The list of ingredients provides a good case for observing the modifications that a textual block may undergo in the course of its transmission. The explicit correspondence between 'sun stone' and *talq* has disappeared and only the reference to its lightness remains in part of the tradition, making identification on a purely textual basis very difficult. The phenomenon is even more remarkable in the case of the 'sea hen': any reference to a sea creature has disappeared and the complex parallel is simplified and reduced to the straightforward use of the head of a bird identified with the swallow.

If we assume that al-'Irāqī's *Uyūn al-ḥaqā'iq* preserves a larger set of pseudo-Platonic fumigations in indirect tradition, it must be noted that the textual blocks were not completely immutable and impermeable in the course of transmission, and that there was actually a certain reshaping of their contents, due to either deliberate choices or accidents in the tradition. Al-'Irāqī quoted from the pseudo-platonic materials as they were shaped in his time. Though the definition of clear filiations in the context of a fluid tradition is often beyond our reach, one may still rely on the transmission clues, i.e. those highly characteristic elements that would be hard to imagine as results of a polygenetic process, to draw possible lines of transmission. In this specific case, it would be hard to maintain that the series of ingredients (storax peelings, sulphur, 'sun stone', and 'swallow') was independently generated in the two different contexts, especially when a common authorial origin is claimed.

Only the first two and the last procedures are explicitly ascribed to Plato, however, and one cannot exclude the possibility that the others may have been variations on the theme elaborated in different contexts, observing a clearly recognizable pseudo-Platonic canon of style that resulted in them circulating together with the ancient nucleus. The mention of Indian and Persian sages, for instance, suggests a possible plurality of sources and hints at a long chain of transmission, or at a boisterous narrative (3.2 and 3.10). The presence of a Qur'anic quotation in the invocation included in the last procedure suggests the assimilation of these materials in the Islamic milieu. The multilingual dimension of the text is no longer pointing to the Graeco-Arabic correspondences, but rather provides the different names given to mandrake in Egypt and Syria (3.3). Viewed from this perspective, it is even more striking that this fumigation substance is explicitly labelled as 'Platonic'.

Some of the elements that characterized the three pseudo-Platonic fumigations appear in greater variety in al-'Irāqī's *Uyūn*. The kinds of fuel prescribed for the fumigations are expanded to include not only animal dung, but also specific plants. In the case of the fumigation for bending a palm, the wood should come from the same tree. Many different animals are mentioned as source of ingredients, though the method generally requires blood and fat.

While the three Pseudo-Plato fumigations create fearful spectacles, meant to scare and intimidate the spectator, al-'Irāqī enriches the thematic palette. For instance, one can clearly detect a plurality of

entertainment ‘genres’ offered by the different fumigations in the *‘Uyūn al-ḥaqā’iq*. The social gathering (*majlis*) is presented as a setting for some of these fumigations (3.6 and 3.8), which suggests that they were also practiced indoors. This can also be surmised from the instruction to conduct them in a closed space that will not let the smoke go out (3.6). The military vision of smoke legions surrounding the place of use clarifies that one possible reason to employ Platonic fumigations (3.2) was to terrify the enemy. The horrific visions described become more varied, in particular the aforementioned illusion of being on the sea shore with a monstrous crocodile about to attack the participants at the gathering (3.8). Such fumigations have the power to affect animals and plants: mice can be summoned (3.7) and plants bent at will (3.4). The palm is treated separately, perhaps due to its special status in the Arabo-Islamic culture.<sup>23</sup> This procedure reveals a unique feature: it includes an explicit statement about the theoretical foundation of the empirically observable amazing effect. The text states that the spiritual force inside the palm (*rūḥāniyya*) is bound to obey the substance for fumigation (3.5). Trees bending towards men are reminiscent of an hagiographic topos shared by many traditions, and the text does not fail to note the great personal advantage that a dishonest man might derive from the knowledge of such a procedure. The questionable issue here is not the efficacy of the procedure, but rather the moral status of those who will take advantage of such knowledge. In other words, a spectacular form of entertainment can easily turn into a colossal deception. In al-‘Irāqī’s *‘Uyūn al-ḥaqā’iq*, the performer calls upon spiritual entities to answer the questions and fulfil the wishes of onlookers (3.9). The last procedure of the chapter sees an additional component, the utterance of words said to be in Hebrew (3.10). Here, the performative component is elaborated in some detail, including the suggestions that the performer should invite the petitioner to close his eyes and turn his head.

Al-‘Irāqī’s chapter is not an outlier from a thematic point of view. Indeed, some of its themes are, already present in early *Manāfi’* literature. For instance, this literature is rich in preparations for summoning mice. While the purpose is not specified, it is presumably for disinfestation or in order to amaze.<sup>24</sup> The aim to induce horrific, idyllic, or amusing hallucinations is not exclusive to fumigations with dry substances. Lamps with special wicks and peculiar additives to the oil are apparently methods for achieving the same goal, and the circulation of these materials is attested from late antiquity onwards.<sup>25</sup> Looking at other handbooks of entertainment and deception, however, reveals that al-‘Irāqī’s specific chapter on fumigations in the *‘Uyūn al-ḥaqā’iq* has some parallels in the genre.<sup>26</sup> The second chapter of al-Iskandarī’s *Kitāb al-ḥiyal al-bābiliyya fī al-ḥizāna al-kāmiliyya* (‘Book of Babylonian Stratagems’), for instance, is dedicated to ‘aerial stratagems and celestial fumigations’,<sup>27</sup> which includes wooden boxes carefully constructed to make lights and luminous inscriptions suddenly appear in the dark, stratagems to cause or stop the rain, and other wondrous effects.

<sup>23</sup> See Ullmann, *Natur- und Geheimwissenschaften*, p. 62–93.

<sup>24</sup> After all, the pied piper of Hamelin managed both. See Raggetti, *‘Īsā ibn ‘Alī’s Book on the Useful Properties of Animal Parts*, in particular the thematic index; and Raggetti, ‘Apollonius of Tyana’s *Kitāb al-ṭalāsīm al-akbar*’, p. 173–175.

<sup>25</sup> See Raggetti, *Un coniglio nel turbante*, p. 131–154.

<sup>26</sup> The corpus of Arabic technical literature on entertainment and deception counts other three titles: al-Iskandarī’s *Kitāb al-ḥiyal al-bābiliyya fī al-ḥizāna al-kāmiliyya* (‘Babylonian Stratagems for the Treasure of al-Kāmil’, see al-Iskandarī, *Al-ḥiyal al-bābiliyya*), al-Ġawbarī’s *Kitāb al-muḥtar fī kašf al-asrār* (‘Anthology of the Unveiling of Secrets’, see al-Jawbarī, *Book of Charlatans*; see also Höglmeier, *Al-Ġawbarī und sein Kašf al-asrār*, and al-Zarḥūrī’s *Kitāb zahr al-basātīn fī ‘ilm al-mašātīn* (‘Book of the Flowers of the Gardens in the Science of Conjuring Tricks’, see al-Zarḥūrī, *Zahr al-basātīn*). For the definition of the corpus and its general presentation, see Raggetti, *Un coniglio nel turbante*, p. 34–64.

<sup>27</sup> See al-Iskandarī, *Kitāb al-ḥiyal al-bābiliyya*, p. 57–74.

Though al-Iskandarī never mentions Plato as source,<sup>28</sup> one of the pseudo-Platonic procedures (P<sub>2</sub>) is clearly recognizable in this chapter.<sup>29</sup>

**Substance for fumigation: when it is use to fumigate during the day, the land around it will become dark, the stars and the moon will shine, to the point that people will be scared**

If you want this, take storax peelings, sulphur, a stone called ‘sun stone’<sup>30</sup> [which is] light, and the head of a fish called swallow; crush them all together, then crush with tortoise gall, make it in granules, and let it dry in the shade. When you want to make an operation with it, take these granules and fumigate with them on a fire of thorns; leave it in an elevated place; then you will see - you and who is with you – what we have mentioned about it. You should not fumigate, if not at noon, and this belongs to the wondrous chapters.

In his *Kitāb al-muḥtar fi kašf al-asrār*, al-Ġawbarī attributes the practice of a similar fumigation to Fāris ibn Yahyā al-Sābāṭī, a false prophet who took up residence in Tinnīs during the reign of the Caliph al-Mu‘izz (r. 935-975). Al-Ġawbarī adds a personal note about the beauty of this fire, suggesting that he could still witness to this practice more than two centuries after the false prophet of Tinnīs. He actually describes these fumigations as the impressive ruse deployed by false prophets, when these wishes to be believed and followed.<sup>31</sup>

#### Section Ten of the Exposé of the Tricks of Fake Prophets

All the same, people would refuse to believe in him and the common folk would cold-shoulder him and refuse to obey his orders, so the prophet would put out the word that he was going to the mountaintop to ask God to torment them, and he’d set off up some mountain as though on his way to curse his people. He’d get hold of a fish, the kind called *dukhas* in Basra and *darfil* (“dolphin”) in Egypt, and take some of its fat plus the fat of a certain poisonous and patchily colored creature—namely, a gecko—along with that of a stellion (what the Egyptians call a *ḥirdhawn*), which is also poisonous and patchy in color (its distinguishing characteristic is that if you throw it onto a fire, it puts it out). You take three parts of each of these fats plus one part each of pharaoh glass (calcined), cinnabar, quicksilver, and verdigris. Then you take cow dung equal to around half of these quantities—that is, three and a half parts, plus around a quarter of the first-mentioned parts (which comes to seven parts including the fats, thus one and three-quarter parts) of hair from horses’ forelocks.

The whole comes to twelve and a quarter parts, all of which, including the three fats, are pounded, sifted, kneaded together, and formed into granules, then dried in the shade and used at night in an elevated place as one would incense. The resulting smoke fills the whole horizon, turning it red and making the entire sky look as though it’s enveloped in flames, and in the midst you’ll see jet-black, curvetting horses ridden by fiery men holding fiery lances, some charging one another in the air. By this time, the people will be in an uproar. They panic, believing that God’s punishment has fallen upon them, and the impression it makes on them is so overwhelming that they’re deluded into thinking the prophet was telling the truth and

---

<sup>28</sup>Some of these procedures are ascribed to the tradition of experts from Yemen, see al-Iskandarī 64 and 65.

<sup>29</sup> See al-Iskandarī, *Kitāb al-ḥiyal al-bābilyya*, p. 66-67.

<sup>30</sup> Here the editor opts for the reading (*al-samas*, السمس), as attested in the manuscript. In a foot note, the editor identifies it with jet or lignite, on the basis of al-Bīrūnī (*al-sabaḡ*, السبج) and with a paleographical mistake or a *lectio facilior* in mind. In the light of the longue durée transmission of this procedure, the omission of the three dots to mark the letter *šin* seems a more likely explanation.

<sup>31</sup> See al-Jawbarī, *Book of Charlatans*, p. 24–27.

has cursed them. The whole thing goes on until the fire dies down. The fire produced by these granules is very beautiful.

All this points to the continuity of transmission in a *longue durée* perspective, through different cultures and languages, with the inevitable fluidity that a text must be able to tolerate in order to survive long term. A text does not simply lose inconvenient or overcomplicated elements in the course of transmission, it is constantly being reshaped in order to make it appealing and understandable to new kinds of readership.<sup>32</sup> Moreover, al-ʿIraḳī's *ʿUyūn al-ḥaqāʾiq* appears to be part of a complex and intricate network of sources, in which the same aspects of technical knowledge about nature could be applied for many different purposes and in a variety of textual and social contexts. The pseudo-Platonic fumigations, for instance, were probably translated into Arabic along with quite a number of *Hermetica* dealing with technical procedures. They surfaced again in a curious handbook on entertainment, crafts, and illusionistic tricks composed by a thirteenth century alchemist, showing a clear shift towards entertainment. This technical knowledge consists in mastering the combination of natural ingredients (minerals, plants, and animals) in order to obtain effects that will appear supernatural to the ordinary onlooker. In the sources, there is no trace of an explicit theory that would explain these properties, the focus is on their practical goal. These sources convey the image of a nature whose elements are connected by a complex web of relations, invisible threads that can be pulled by those who master them.

#### 4. Mediaeval European reception: The *Liber Anequemis*

The Mediaeval European tradition came into contact with the Arabic tradition of the *Kitāb al-Nawāmis* and parts of it passed into Latin. This text circulated under different titles, one of which is a calque of the Arabic *al-nawāmis*, that is *Liber Anequemis*.<sup>33</sup> The book is also known as *Liber vaccae* ('Book of the cow'), referencing the notorious putrefaction of a calf for the spontaneous generation of a swarm of bees.<sup>34</sup> Without the help of a critical edition, the comparative remarks are based on the results of preliminary research on the manuscript tradition and on the transcription of the text of a single manuscript witness preserved in Florence.<sup>35</sup>

Regarding its general presentation, one may say that the work is divided into two parts, the *Anequemis maior* and the *Anequemis minor*, which is reminiscent of the distinction mentioned in al-ʿIraḳī's *ʿUyūn al-ḥaqāʾiq* and in the *Ġāyat al-ḥakīm* (see above). It is likely that a deeper philological inquiry will shed light on the fluidity of the *Anequemis*'s introduction. As far as we can read in the published text, it is presented as an

---

<sup>32</sup> As mentioned above, along with the willful changes introduced in the course of transmission, one must also take into account the trivial errors and corruptions that the transmission of manuscript texts inevitably brings with it.

<sup>33</sup> The spelling *anequemis* reflects the assimilation of the Arabic article *al-* into the so-called solar letters. The Latin manuscript tradition preserves other spellings as well, such as *angitionis*, *anagnensis*, *nemith*, and *neumich*, see Scopelliti and Chaouech, *Liber anequemis*, p. 9–10 and Van der Lugt, "Abominable Mixtures", p. 234. While arranging a complete overview of the *Anequemis* manuscript tradition in the frame of the ERC CoG Project *UseFool*, for the present research I have used Scopelliti's transcription; the English translations from Latin are mine. For the explorative study of the Latin manuscript tradition, see also Van der Lugt, "Abominable Mixtures", p. 243–249 and p. 275–277.

<sup>34</sup> See van der Lugt, "Abominable Mixtures", p. 229–277. David Pingree studied the *Liber Vaccae* and its Latin manuscript tradition in connection with the Near Eastern magical religious and philosophical tradition, see Pingree, "Plato's Hermetic Book of the Cow"; see also Pingree, "From Hermes to Jabir"; and Pingree, "The Diffusion of Arabic Magical Text", .

<sup>35</sup> The transcription of the Latin text is based on MS Firenze Biblioteca Nazionale 2.3.214. See Scopelliti and Chaouech, *Liber Anequemis*, p. 55–100.

Arabic translation of a Greek original, namely, Galen's commentary on Plato's *Laws* by Ḥunayn ibn Ishāq (809-873). The contents of the two parts can, for the moment, be summarized as follows:

*A. Maior*

- Fermentations (spontaneous generations)<sup>36</sup>
- fumigations to provoke hallucinations
- procedures for making it rain
- 'houses' in which wonders happen
- procedures for bending trees
- clairvoyance
- unguents to change the aspect of men
- invisibility
- perpetual lamps
- fumigations to cheer the spirit
- procedures for being able to see what is invisible

*A. Minor*

- instantaneous germination of seeds<sup>37</sup>
- substances for fumigation
- hallucinatory lamps<sup>38</sup>
- fireproof figurines
- procedures for night vision
- procedure for making ink that is only visible at night<sup>39</sup>

The thematic overlap with al-'Irāqī's text is significant and not solely confined to fumigations, though Plato is never explicitly mentioned as an authority.<sup>40</sup>

The presence of the Mediaeval Latin tradition in this study is a first explorative attempt to add another link to the chain of transmission followed by pseudo-Platonic materials. The same substance for fumigation analysed above (P2 and 3.1) serves as case study.<sup>41</sup>

***Suffumigatio mirabilis***

*Quando tu suffumigabis cum ea in die manifeste obtenebrabit[ur] mundus ex eo. Accipe adypem alchatar et est in forma similis alcotaf. Fere ergo id et afice com felle testudinis et sicca eum in umbra.*

**Wondrous fumigations**

When you fumigate with it in the middle of the day, it will turn the day dark. Take the grease of *alchatar*, which is similar to the swallow (*alcotaf*, i.e. *al-ḥuṭṭāf*). Take it, mix it with tortoise gall and dry it in the shade.

<sup>36</sup> See Saif, "The Cow and the Bees", p. 5–7; and Van Der Lugt, "Abominable Mixtures", p. 240–243.

<sup>37</sup> See Raggetti, *Un coniglio nel turbante*, p. 195–197.

<sup>38</sup> *Idem*, p. 136–145.

<sup>39</sup> The key ingredient for such inks appears to be different kinds of animal bile, see Raggetti, *Coniglio nel turbante*, p. 163, and Raggetti, *Manāfi'*, p. 528–529 (104.13); for inks visible only at night in the main handbooks devoted to the arts of the book more generally, see also Fani, *Prendi, aggiungi, mescola e scrivi*.

<sup>40</sup> Wondrous fumigations, hallucinatory lamps, and astonishing wicks are mentioned also in the *De mirabilibus mundi*, see Sannino, *Il De mirabilibus mundi*, p. 130–142.

<sup>41</sup> Scopelliti and Chaouech, *Liber Aneguemis*, p. 67 and 113–114; see also Saif, "The Cow and the Bees", p. 22.

*Cum ergo volueris <facere> operationem cum illo accipe unum ex illis granis et fumiga cum eo super ignem spinarum. Dimit[t]e eum super locum altum. Nam videbis lunam et stellas in die. Sed non fumiges cum eo nisi in meridie.*

And when you wish to perform an operation with this, take one of those grains and fumigate with it over a fire of thorns. Take it to an elevated place, then you will see the moon and the stars during the day, but you should only fumigate with it in the middle of the day.

The presence of terms transliterated from Arabic confirms the strong connection between the Arabic and the Latin traditions, though it is hard to determine this further without the support of a critical edition.

### Concluding Notes

The categories of translation and reception – at least as traditionally intended, i.e. as two separate and successive phases of a textual tradition – are not sufficient to contextualize the pseudo-Platonic materials that have reached us through the Arabic tradition. The Paris fragments represents a quasi-relic of a text in the early stage of acquisition, when the linguistic and cultural context of origin were still present and partly familiar to the readership. The form in which these materials resurface in al-'Irāqī's *ʿUyūn al-ḥaqāʾiq* bear witness to a process of adaptation to a new readership, in a different time and cultural milieu. This process has probably been partially animated by a conscious and active intention, but one should also take into account the more mechanical and trivial effect of the process of copying on the textual tradition. Moreover, it cannot be excluded that al-'Irāqī included materials in his handbook from other sources that were considered akin, in form and contents, to the Platonic fumigations. A first exploration of the Latin tradition reveals a continuity in the transmission of these materials. By implication, one may say that a certain idea of nature as an intricate web of relations that connects its single elements remained a matter of interest and relevance from late antiquity well into the European middle age.

The list of contents provided both by al-'Irāqī's *ʿUyūn al-ḥaqāʾiq* and the *Ġāyat al-ḥakīm* suggest that the authorial frame of the Pseudo-Plato was probably much larger than the three fumigations in the Paris fragment, and included a variety of effects that point to several possible social contexts for applications of the *nawāmīs*, from quasi-miracles to forms of entertainment at parties. The described effects of these fumigations have parallels in other procedures and tricks, such as hallucinatory lamps, and seem to belong to a specific genre of wondrous entertainment that could be performed either on the street or in a banquet hall, thus demonstrating how the same bit of technical knowledge could be applied for different ends and among different audiences.

## APPENDIX

### *Conspectus siglorum*

B – MS Berlin We II 1375

Bk – MS Bakhu Elyazmalar Institut A 375

C1 – MS Istanbul Carullah 1549

C2 – MS Istanbul Carullah 1550

D – MS Dublin Chester Beatty Ar. 4019

K – MS Jeddah King Saud Library 6230

L – MS London BL Add MS 23390

Li – MS Lithographic edition, *Maṭbaʿa Bārūniyya* 1321 H/1903 CE

P – MS Princeton Garrett no. 544H

T – MS Toronto Fischer 142

W – MS London Wellcome MS Collection Or. 506

The edition of the third chapter of al-ʿIrāqī's *ʿUyūn al-ḥaqāʾiq* is based on eleven witnesses, ten manuscripts, and a lithographic edition. Though it is not possible to define a stemmatic relationship between the witnesses, certain trends that emerge from the edition of Ch. 23 have been confirmed, such as the relative proximity between K and T.<sup>42</sup> The subsequent acquisition of new manuscripts has revealed an even closer relation between B and Bk, which share the same lacuna at the beginning of the chapter (3.1 and part of 3.2) – though Bk extends for a few words more.

The text is relatively stable and the *recensio* reveals many homeoteleuton mistakes that would remain invisible when considering just one or a few selected single witnesses, especially in the case of lists of ingredients. In most cases, one encounters indifferent variants (*variantes adiaphorae*) and the choice then follows the style of the prescriptions and the general syntactical and grammatical coherence of the text. There are cases in which this choice is arbitrary, for instance in the case in which the variant reading concerns the precise weight of the dry pill for fumigations (3.2, either 3 or 30), or in the case in which two names share the same ductus and are differentiated only by the dotting (3.3, either *ayyil* or *ibl*). In the case of series of elements that demonstrate a high concentration of variants, the editorial decisions have been taken on the basis of common sense and context. In the case of the different sages engaged with a certain fumigation, the edited texts only include the Persians, who are consistently mentioned by all the witnesses, leaving the other elements

---

<sup>42</sup> See Raggetti, "Ordinary Inks", p. 158–163.

in the list – or the lack thereof – in the critical apparatus (3.1). In the case of the invocation included in the final procedure, and taking the specific rhetorical genre into consideration, the longest series of attributes has entered the edited text (3.10). In the case of the name that Egyptians used for mandrake, it has not been possible to reconstruct the correct lemma, and thus to understand whether the correct reading is preserved in the manuscript tradition; in other words, it is impossible to say whether the *diffRACTio* is *in absentia* or *in praesentia*. In this case, the edition contains only a basic ductus of the Arabic word, with the numerous variants in the critical apparatus. A similar criterion has been followed for the magic formula attested in 3.10.

With respect to the edition of Arabic texts, I have opted to make it available to a broader scholarly audience, largely by adapting the orthography to modern conventions (i.e. orthography of the hamza, *yā'*/*alif maqṣūra*, dots on the *tā' marbūṭa*).

## Bibliography

- Burnett, Ch., "The Three Divisions of Arabic Magic", in *Islamicate Occult Sciences in Theory and Practice*, ed. L. Saif, F. Leoni, M. Melvin-Koushki, F. Yahya, Leiden-Boston, MA, Brill, p. 43–56.
- Burnett, Ch., "Nīranj: A Category of Magic (Almost) Forgotten in the Latin West", in *Natura, scienze e società medievali. Studi in onore di Agostino Paravicini Bagliani*, (Micrologus's Library, 28), ed. C. Leonardi and F. Santi, Florence, Edizioni del Galluzzo, 2008, p. 37–66.
- Draelants, I., "The Notion of Properties", in *The Routledge History of Medieval Magic*, ed. S. Page and C. Riser, London, Routledge, 2019, p. 169–186.
- Fani, S., *Prendi, aggiungi, mescola e scrivi. Ricettari arabi sulla produzione di inchiostri*, Milano, Editrice Bibliografica, 2023 (forthcoming).
- Gabrieli, F. *Plato arabus: Alfarabius compendium legum Platonis, edidit et latine vertit Franciscus Gabrieli*, London, Warburg Institute, 1952.
- Gutas, D., "Galen's Synopsis of Plato's Law and al-Fārābī's *Talḥiṣ*", in *The Ancient Tradition in Christian and Islamic Hellenism: Studies on the Transmission of Greek Philosophy and Sciences dedicated to H.J. Drossaart Lulofs on His Ninetieth Birthday*, ed. G. Endress and R. Kruk, Leiden, Brill, 1997, p. 101–119.
- Höglmeier, M., *Al-Ġawbarī und sein Kaṣf al-asrār — ein Sittenbild des Gauners im arabisch-islamischen Mittelalter (7./13. Jahrhundert). Einführung, Edition and Kommentar*, Berlin, Klaus Schwarz Verlag, 2004.
- Holmyard, E. J., "Abu' l-Qāsim al-'Irāqī", *Isis*, 3 (1926), p. 403–426.
- al-'Irāqī, *Kitāb al-'ilm al-muktasab fī zirā'at adh-dhahab (Book of Knowledge Acquired Concerning the Cultivation of Gold)*, ed. and trans. Eric J. Holmyard, Paris, Librairie Orientaliste Paul Geuthner, 1923.
- al-Iskandarī, *Al-ḥiyal al-bābiliyya li-l-ḥizānat al-kāmiliyya*, taḥqīq Luṭf Allāh al-Qārī, Iskandariyya, Maktabat al-Iskandariyya, 2018.
- al-Jawbarī, *The Book of Charlatans*, ed. M. Dengler and tr. H. Davies, New York, New York University Press, 2020.
- Käs, F., *Die Mineralien in der arabischen Pharmakognosie. Eine Konkordanz zur mineralischen Materia medica der klassischen arabischen Heilmittelkunde nebst überlieferungsgeschichtlichen Studien*, 2 vols, Wiesbaden, Harrassowitz, 2010.
- Kraus, P., *Jābir ibn Ḥayyān contribution à l'histoire des idées scientifiques dans l'Islam. Vol I. Le corpus des écrits jābiriens*, Caire, Imprimerie de l'Institut Français d'archéologie Orientale, 1943.
- Mahdi, M., "The Editio Princeps of Fārābī's Compendium Legum Platonis", *Journal of Near Eastern Studies*, 20/1 (1961), p. 1–24.
- Moseley, G. J., "Arabic Support for an Emendation of Plato, *Laws* 666B", *The Classical Quarterly*, 69/1 (2019), p. 440–442.

Pingree, D., “From Hermes to Jabir and the Book of the Cow”, in *Magic and the Classical Tradition*, ed. C. Burnett and W. F. Ryan, London, Warburg Institute, 2006, p. 19–28.

—, “Plato’s Hermetic Book of the Cow”, in *Neoplatonismo nel Rinascimento*, Roma, Pietro Pini, 1993, p. 133–145.

—, “The Diffusion of Arabic Magical Text in Western Europe”, in *La diffusione delle scienze islamiche nel medio evo europeo* (Roma, 2-4 ottobre 1984), Roma, Accademia dei Lincei, 2 vols., 1987, p. 57–102.

Raggetti, L., *Un Coniglio nel turbante. Intrattenimento e inganno nella scienza arabo-islamica*, Milano, Editrice Bibliografica, 2021.

Raggetti, L., “Ordinary Inks and Incredible Tricks in al-‘Irāqī’s ‘*Uyūn al-ḥaqā’iq*”, in *Traces of Inks. Experiences of Philology and Replication*, ed. L. Raggetti, Leiden/Boston, MA, 2021.

—, “Inks as Instruments of Writing. Ibn al-Ġazarī’s *Book on the Art of Penmanship*”, *Journal of Islamic Manuscripts*, 10 (2019), p. 201–239.

—, “Apollonius of Tyana’s *Kitāb al-ṭalāsīm al-akbar* (‘The Great Book of Talismans’)”, *Nuncius*, 34 (2019), p. 155–182.

—, *‘Isā ibn ‘Alī’s Book on the Useful Properties of Animal Parts. Edition, translation and study of a fluid tradition*, Berlin, De Gruyter, 2018.

Ritter, H., *Picatrix: das Ziel des Weisen, von Pseudo-Maġrīṭī*, Leipzig-Berlin, Teubner, 1933.

Saif, L., “*The Cow and the Bees: Arabic Sources and Parallels for Pseudo-Plato’s Liber Vaccae* (Kitāb al-nawāmīs)”, *Journal of the Warburg and Courtauld Institute*, 79 (2016), p. 1–48.

Sannino, A., *Il De mirabilibus mundi tra tradizione magica e filosofia naturale*, Firenze, Sismel – Edizioni del Galluzzo, 2011.

Scopelliti, P. and Chaouech, A., *Liber aneguemis. Un antico testo ermetico tra alchimia pratica, esoterismo e magia nera*, Milano, Mimesis, 2006.

Sezgin, F., *Geschichte des arabischen Schrifttums*, vol. IV, Leiden, Brill, 1971.

Ullmann, M., *Die Natur- und Geheimwissenschaften im Islam*, Leiden, Brill, 1972.

Van Der Lugt, M., ““Abominable Mixtures”: The *Liber vaccae* in the Medieval West, or The Dangers and Attractions of Natural Magic”, *Traditio*, 64 (2009), p. 229–277.

al-Zarḥūrī, *Zahr al-basātīn fī ‘ilm al-mašātīn*, taḥqīq wa-dirāsa Luṭf Allāh al-Qārī, al-Qāhira, Dār al-kutub al-miṣriyya, 2012



## الباب الثالث في الدخن وكيفية اعمالها

### صفة دخنة افلاطونية

قال الحكيم اذا انت دخنت بها نهارا اظلمت الدنيا ورأيت النجوم كلها والقمر نهارا حتى ان العالم يخاف من ذلك يؤخذ مصطروك وكبريت وحجر يسمى حجر الشمس خفيف ورأس الطائر يقال له الخطاف يسحق ذلك ويعجنه بمرارة سلحفاة بحرية وبريه ويجفف في الظل فاذا اردت العمل بهذه الدخنة خذ حبة من تلك الحبوب وبخر بها على نار من حطب شوك العوسج واتركه على مكان عالي فانك ترى القمر والكواكب نهارا ولا تبخر بذلك الا في نصف النهار فانه يظهر ذلك بقدره الله تعالى صفة دخنة اخرى افلاطونية اذا انت دخنت بها على رأس جبل عالي تبين لمن هو عنها بعيد ان خيولا عظيمة وفرسانا وجيوشا وعساكرا كثيرة قد احاطت بهم بحيث ان العدو يفرغ من ذلك فاذا اردت ذلك فخذ عشرة دراهم عود صيني

اعمالها | *om. B W* | وكيفية | *om. W* | *P* دخن; *B* صفة الدخن | الدخن | *om. W* | في 1  
*B C2* افلاطون | افلاطونية | *om. W* | دخنة | *om. W* | صفة 2 | *om. W* | *B* واعمالها  
 اذا | *D* افلاطون; *om. B C1 C2 K Li T* | الحكيم | *om. Li* | قال 3 | *om. W* | *C1* لافلاطون  
*om.* | بها | *W* ودخنت | دخنت | *P* اردت; *om. C2 W* | انت | *W* اذا اردت ذلك; *C1* اذا  
 الدنيا; *C2* الدنيا قد اظلمت; *C1 D P* اظلمت الدنيا كلها | اظلمت الدنيا | *om. W* | نهارا | *D*  
*C2* من حضرتك | العالم | *om. C2 K T* | نهارا 4 | *om. C2 K* | كلها | *K T* كلها قد اظلمت  
*C2* اذا اردت ذلك يؤخذ; *B* وهو ان يؤخذ | يؤخذ | *C1 D T* تخاف | يخاف | *Li* الناس  
 حجر | *om. W*; *B* سجا | يسمى 5 | *Li W* مصطرك; *C2* اصطرك; *B* مصطرون | مصطروك  
*W* في رأس; *C2* رأس | ورأس | *W* وهو حجر خفيف; *om. D* | اخفيف | *om. W*; *B* وحجر  
 | يسحق | *B* خطاف | الخطاف | *C2* يسمى; *B* المسمى | يقال له | *P W* طير | الطائر  
 | سلحفاة | *om. P*; *Li* وتعجن; *C1 C2 K T* ويعجن | ويعجنه 6 | *Li* تسحق; *C2 K W* ويسحق  
*B* وبخره | وبريه | *T* ونهرية; *add. C2 Li*; *om. C2 Li*; *B* بري | بحرية | *P* سلحفاة; *C1* سلحفاة; *B* سلحفاة  
 | بهذه الدخنة | *B C2* بعد ان تحبب | *add.* | الظل | *Li* وتجفف | ويجفف | *Li* وبريه كبيرة;  
 ] ... 1 | *om. W* | حبة | *C2 K Li T* فخذ | فخذ 7 | *C2* به; *B D P T W* بهذا الدخنة  
 8... 2 | *Li W* وتبخر | وبخر | *Li* من هذه الحبوب; *C2* منه; *B* فيها | من تلك الحبوب  
 حطب; *C2* من حطب العوسج; *B* حطب شوك عوسج | من حطب شوك العوسج ]  
 | نهارا | *Li T* عال | عالي | *D* وضعه | واتركه 8 | *W* من العوسج; *Li* شوك عوسج; *K P* عوسج  
*om. C2 K Li* | في | *C2* به لك; *B* بها | بذلك 9 | *B C2 D* يبخر | تبخر | *B D P W* نهار  
 بقدره | *Li* ما ذكرنا; *om. C1 D* | ذلك | *C2 D Li P* لك | *add.* | يظهر | *B D* وسط | نصف  
 | دخنة اخرى | *om. B C1 Li W* | صفة | *P W* باذن الله تعالى; *C2 K Li T* فالكتمه | الله تعالى  
*om. B Li T* | انت | *W* لافلاطون; *B* افلاطون افلاطونية | افلاطونية 10 | *B Li P* دخنة  
*K Li P* عال | عالي | *om. C2 K T* | رأس | *C2* دخن | دخنت | *W* اردت; *C2* اردت ذلك  
*om. C2* | هو | *om. C2* | لمن | *Li* يبين; *K T* خيل; *D* متبين; *C2* ترى | تبين | *W* قال  
*L* ثم بعيد; *D T* بعيدا; *om. C2* | بعيد 11 | *incipit post hoc verbum L* | عنها | *om. B C2 Li*  
 | وفرسانا | *L* عظيما; *om. C2 W*; *om. C2* | عظيمة | *incipit post hoc verbum Bk* | ان  
*Bk C1 C2 L Li P T W* وعساكر | وعساكرا | *B Li* وجيوش | وجيوشا | *B Li W* وفرسان  
*om. Li* | بهم | *P* احاطب; *om. Li*; *B* احاطت | احاطت | *om. Li*; *B* وقد | قد | *L* كبير | كثيرة  
*B* وتفرغ | يفرغ | *W* العدو; *P* العدق; *C2* من حضر; *B* والعدو | العدو | *om. C2* | ان 12  
*om.* | اردت | *Li* وهو ان; *om. C2*; *om. C1 D K P T W* | اذا | *Bk* اذا | فاذا | *om. L* | من | *P* وفرغ  
*add.*; *D* فتأخذ; *C2 Li* تأخذ; *Bk C1 K L T* فلتأخذ | فخذ | *om. C2 Li* | ذلك 2 | *C2 Li*  
*W* عودا صينيا; *om. P*; *C1* عود اصينا | عود صيني | *P* عاصيبيا

BC1C2DKLiPTW 10 عنها | *incipit post hoc verbum L* 11 عظيمة | *incipit post hoc verbum Bk*

## **Chapter three: On the fumigation substances and the manner of their operations**

### **3.1 Description of a Platonic substance for fumigation**

The Sage said: when you fumigate with it during the day, the earth will become dark, and you will see all the stars and the moon during the day, to the point that the world will be scared by this; take some storax, some sulphur, a stone called 'sun stone', a light one, and the head of a bird called 'swallow'; this must be ground and kneaded with sea and land turtle, and dried in the shade. When you want to make an operation with this substance for fumigation, take one of these grains and fumigate with it on a fire of boxthorn wood and leave it in an raised spot; then you will see the moon and the stars during the day, but only fumigate with this in the middle of the day and then this will appear, by the Power of God.

### **3.2 Description of another Platonic fumigation substance**

When you want to fumigate with this on a mountain top, huge spectral figures will appear to those standing far away from it, along with horsemen, armies, and huge troops that have surrounded the place, in such a way that the enemy will be terrified by this. When you want this, take ten dirham of Chinese

ومثله من شحم كلب الماء وخذ من القنا والسندروس والزفت والزيق من كل واحد عشرة دراهم ومن الجير كذلك ووزن مثقال من صمغ داري يدق كل واحد منهم على حدة ويعجن الجميع برطل من زيت البزر ويجعل بنادق كل واحدة وزنها ثلاثين درهما ويبخر بها على بع الماعز فانه يكون منه ما ذكرناه وهذا مما يعانیه حکماء الفرس الى يومنا هذا فاعلم ذلك واكتمه

15

### صفة دخنة أخرى

إذا أنت دخنت بها رأيت كان في السماء نجوما وطيوراً عظيمة تأخذ حشيشة يقال لها الوحسما بكلام أهل مصر وبكلام أهل الشام سراج

20

ومن القنة [وخذ من القنا Bk شيء add. الماء | om. Li P | من<sup>1</sup> | P ومثلهم] ومثله 13  
[والسندروس والزفت | Li وحب القنا; D وخذ من القنا; C2 L وخذ من القنا; B  
من<sup>3</sup> | P W والسندروس والزفت; Li والزفت والسندروس; B السندروس والزفت  
om. C2 K | عشرة دراهم | P شتى; om. C2 K T; Bk واحده | واحد 14 om. C2 K T | كل  
om. B; | كذلك | W الحبز; Bk الحبر; om. B C2 K T | الجير | om. B C2 K T | ومن | T  
| من | C2 ومثقال; om. B; | مثقال | Bk K L Li وزن; om. B C2 T | [ووزن | Li مثل ذلك  
L; الداني | KT الداري; C2 الدراري; C1 وادي; om. Bk; B الرادي | ادري | om. Li; B ومن  
منهم | منهم 15 Li يدق الجميع; L ويدق; Bk D وتدق | يدق | B مثقال add. W داد الوصيد  
om. P | الجميع | W ويجمعوا; B T ويجمع | ويعجن | Li P حدته | حدة | D منها; C1 منها; Bk L  
om. C2 | زيت من زيت; Bk من الزيت; B K Li زيت | من زيت | om. W | برطل | W  
K بنادق | بنادق | W ويعمل; C1 وتجعل | ويجعل | om. Bk L W; B Li برز | البزر | W  
وزن | وزنها | om. W; Bk L واحد منها; B واحدة منها | واحدة | om. W | كل 16 W حبوب  
om. W; D مشقالين; C2 K T ثلاثة; B Bk L ثلاثون | ثلاثين | om. W | Bk C1 L Li P;  
دهن | بعير | om. L W | على | om. W | بها | om. W; B وتبخر | ويبخر | om. P W | درهما  
| ذكرناه 17 W ذلك; Li كما | ما | om. B C1 C2 K Li T | منه | om. W | الماعز | B; om. W;  
B يتعانه | يعانیه | C2 ما | ما | Li وهو | وهذا | Li باذن الله تعالى add. om. W; P ذكرته  
K الحبشي الترك add. D الحبشة والبربر add. C2 الحبشة add. C1 التتر add. W تعاناه  
om. C2 | التتر; Bk حكماء | حكماء | T الحبشة والتتر add. Li الترك add. om. C2  
om. C2 | يومنا | om. C2 Li | الى | C2 والفرس | الفرس | L وحكماء; D K Li P T وحكماء;  
هذا وتعجن الحبوب برطل من الزيت البزر ويجعل بنادق كل واحدة; om. C2 Li | هذا | Li  
om. B D Li | ذلك | om. B D Li | فاعلم | W وزن ثلاثين درهما وبحر به على بع المعز  
om. B C1 Li | صفة 18 W واكتمه من غير اهل; P فانه من الخواص; om. B C1 D Li | واكتمه  
om. C2 | كان | Li نهارا add. | بها | W اردت; om. C2 Li | انت 19 om. W | أخرى | W  
C2 Li; طيوراً | نجوماً | طيوراً | C2 جواء السماء قد ملي; Bk L السماء فيها | في السماء  
C2 يقالوا | يقال 20 om. T; P W خذ; L يأخذ | تأخذ | T عظيم | عظيمة | K طيوراً | نجوماً  
الوحشتنا; L الوحسفاً; K الوحشيتنا; D الدحتتنا; C2 بقالة; Bk الوحشفاً; B الوحشيفا | الوحسما  
om. C2 | اهل<sup>1</sup> | W كلام; om. C2 | كلام | W الوحشيتنا; T الوحشيتنا; om. P; Li  
| اهل<sup>2</sup> | P W واما; om. Bk C1 C2 L; om. C2 | واهل | مصر  
يسمونه add. Bk C1 L W; Bk C1 L W; C2 الشاميين | الشام | om. C2 D; Bk C1 L; om. Bk C1 L; واهل  
P القطرب; Bk D K L T; سراج القطرب | سراج القطرب | P

aloe, the same quantity of shark fat, take some giant fennel, sandarac, pitch, mercury – ten dirhams of each – and the same quantity of lime, ten mithqal of native gum; each one of them must be ground separately, and the whole lot must be kneaded with one raṭl of seed oil and made into small balls – each of them of weighing thirty dirhams – one should fumigate with it over goat dung, and then what we mentioned will originate from it; this is part of what the Persian sages have been preoccupied with till the present day. You should know this and keep it secret.

### **3.3 Description of another fumigation substance**

When you fumigate with it, there will be huge stars and birds in the sky: take a plant called al wḥṣfā in the language of the people of Egypt, while in the language of the people of Syria it is called 'lantern of the quṭrub' (i.e. mandrake); take as much as

القطرب تأخذ منها ما شئت فندققها ناعما وتعجن بمخ ايل ومرارة ثور وتجعل كالحمص وتجفف في الظل وتدخن به على نار زبل هي زمن الشتاء فانك تري عجبا من كثرة الطيور واختلاف الوانها فاعلم ذلك واكتمه

### صفة دخنة أخرى

25 اذا انت دخنت بها تحت الأشجار فانها تنحني اليك حتى تصير فروعها عند أصولها من تلك الناحية التي انت فيها تأخذ دماغ نسر وعظم ادبي ميت وعظم حية سوداء واجمع الثلاثة وادفهم في الزبل الرطب أربعين يوماً ثم اخرجه وخذ منه جزوا ودقه ناعما وبخر به تحت الأشجار فانها تنحني اليك ويكون منه ما ذكرناه باذن الله تعالى

30

### صفة دخنة اخرى

ويدق [فتدققها | D ما شئت منها | B ما شئت منها ما شئت | P W خذ | om. B | تأخذ 21 | وتعجن | om. D | ناعما | P دققها | K T فيدق | D وتدق | C2 Li يدق | Bk W فدققها | B Li اربل | C2 T ابل | ايل | L الخ | W وتبخر | P واعجنها | B K C2 D K L T ويعجن | om. D ويجعل حبا | Bk K L T ويجعل | B ويجيب | وتجعل | om. Li | ثور | om. Li | ومرارة | om. Bk D K L T ويجفف | وتجفف | om. Li | كالحمص 22 | W واجمع ذلك | P واجعلهم | Li | om. Li | ويدخن | وتدخن | om. Li | الظل | om. Li | في 1 | P وجففهم | Li | om. Li | زبل | om. Li | B نار لين | نار | om. Li | على | om. Li | به | W ودخن | P وبخر | om. W | فانك | P شتاء | om. Li | الشتاء | om. D Li P | زمن | P من | om. Li | في 2 | كثرة الطيور واختلاف الوانها | om. D Li | من | Li طيور عجبا | B Bk | عجب | عجبا 23 | om. B C2 D Li W | ذلك واكتمه | om. B C2 Li W | لاختلاف الوانها وكثرتها | om. Bk | أخرى | om. B P | دخنة | om. B Li W | صفة 24 | Bk C1 L P ذلك | تحت | Bk L بين الجماعة يحيل لبعضهم ان | om. C1 C2 | بها | C2 بخرت | دخنت | C2 | om. C2 K | اليك | om. Bk C2 K L T W | فانها | W تحت شجرة | Bk L الأشجار | فروعها عند | فروعها عند أصولها 26 | Bk وتصير | B C2 يصير | تصير | om. Bk L | حتى | T | om. Bk C2 K L T | تلك | om. Bk L | من | K T عند فروعها | C2 اصفرها | Bk L | بها | P W | om. Bk L | فيها | om. Bk L | انت | om. Bk L | B C2 | الذي | التي | Bk L | Bk L الميت | الميت | Bk L | ادبي | ادبي 27 | C2 اذا اردت ذلك | add. Bk L P | وهو ان | B D وادققهم | وادققهم | C2 بالسحق | add. Bk L | العظام | add. | الثلاثة | P سودي | سوداء | B | ثم اخرجهم | ثم اخرجهم | om. K T | 28 | C2 رطب | الرطب | C2 L T | زبل | الزبل | P | om. L | B Bk | منهم | منهم | om. L | وخذ | W ثم اخرجهم نشفه | K Li T | وخرجه | C2 وخرقه | وبخره | وبخره | به | om. L | وادقه | om. L | Bk وادقه | وادقه | P جزء | om. L | جزوا | الأشجار التي | B | بعض الأشجار | الأشجار | om. L | تحت | om. L | D وتبخر به | C2 | om. C2 K L T | اليك | om. L | 29 | B Bk D T W | ينحني | تنحني | om. L | فانها | Li ذكرت | om. C2 K T | ما | om. C2 K L Li P T | B منها | om. B منها | om. C2 K L T | ويكون | C2 فاعلم ذلك واكتمه | add. om. B D Li P | باذن الله تعالى | P ذكرنا | om. C2 K T | om. C2 Li W | اخرى | om. C2 Li | دخنة | om. B C2 Li W | صفة 30

you want of it, crush it finely, knead it with the marrow of a deer and the bile of a bull, prepare it in the shape of chickpeas, and let it dry in the shade, fumigate with it on a dung fire in winter time, and then you will see something wonderful from the great number of birds and the variety of their colours. You should know this and keep it secret.

#### **3.4 Description of another fumigation substance**

When you fumigate with it under the trees, then they will bend towards you until their branches will be close to their roots on the side where you are: take the brain of a vulture, the bone of a dead man, and the bone of a black snake, put the three together and bury them in fresh manure for forty days; then take it out and take one part of it, crush it finely and fumigate with it under the trees, these will bend towards you and what we have mentioned will originate from it, with the Permission of God may He be exalted.

#### **3.5 Description of another fumigation substance**

If you fumigate with it under a palm, it will bend towards you and anybody who sees this will be amazed, as the spiritual

إذا أنت دخنت بها تحت نخلة انخنت اليك ويتعجب من ذلك أي شخص راها وروحانية النخل مطيعة لهذه الدهنة يؤخذ اطراف اصابع ميت قديم مع اسنانه واضراسه وعظامه ويكون العظام بالية والميت قديم جدا ثم خذ من شجرة يقال لها زين وشيء من طلع النخل وامض الى أي نخلة اردت تكون شاهقة وخذ شيئاً من حطب النخل والى عليه تلك الدخنة فاذا طلع دخانها انخنت تلك النخلة الى الجهة التي تشير اليها فان كان قد علم بذلك من اختار من قبل ان يفعله عظم شأنه جدا عند كثير من الخلق ويعتقدون فيه بالخير والصلاح فاعلم ذلك

35

### صفة دخنة أخرى

om. C2 Li | تحت | om. C2 Li | بها | om. C2 Li | دخنت | om. C2 Li | انت | om. C2 Li | اذا 31  
om. C2 Li | اليك | W تجيتي | D انخفت | om. C2 Li | انخنت | om. C2 Li | نخلة | C2 L Li |  
أي شخص | om. C2 Li | Bk L منها | من ذلك | om. C2 Li | B فتعجب | ويتعجب | om. C2 Li |  
K يراها | om. C2 Li | 32 W كل شخص | K T كل من | om. C2 Li | B واي من  
مطيعة | om. C2 Li | مطيعة | C1 النخلة | om. Bk C2 L Li | النخل | om. C2 Li | وروحانية  
K تأخذ | D P W خذ | om. C2 Li | يؤخذ | om. C2 Li | الدهنة | om. C2 Li | لهذه | W  
] 33 om. C2 Li | Bk L ادبي ميت | ميت | om. C2 Li | اصابع | om. C2 Li | اطراف  
اضراسه | om. C2 Li | اسنانه واضراسه | om. C2 Li | مع | om. C2 Li | B Bk قديمة | قديم  
D فتكوت | om. C2 Li | B وليكون | ويكون | om. C2 Li | D K T واسنانه  
B يكون | والميت | om. C2 Li | بالية | om. C2 Li | B Bk عظام | العظام | P W وتكون  
om. C2 Li | B D قديمة | قديم ] 2 | K T فيكون | المي | D ويكون | الميت | om. C2 Li |  
om. C2 Li | من ] 1 | D ثم تأخذ | B وخذ | om. C2 Li | ثم خذ | om. C2 Li | جدا | K قديما  
] وشيء | om. C2 Li | زين | om. C2 Li | لها | om. C2 Li | يقال | om. C2 Li | شجرة | om. C2 Li |  
om. C2 Li | النخل | om. C2 Li | طلع | om. C2 Li | من ] 2 | K T وشيئا | om. C2 Li |  
om. C2 Li | أي | om. C2 L Li | الى | K T وتعالى | D W وامضى | om. C2 L Li | B ويقدم | وامض  
من | om. C2 L Li | اردت | 35 om. C2 L Li | Bk D نخل | B شيء | نخلة | C1 C2 L Li |  
تكون | D T شاهقة | Bk يكون شاهقة | om. B C2 K L Li | تكون شاهقة | B النخل الطوال  
om. C2 L Li | حطب | om. C2 L Li | من | om. C2 L Li | شيئا | om. C2 L Li | وخذ | W شاهقة  
om. C2 K Li | عليه | L والى | om. C2 K Li | والى | om. C2 K Li | النخل | om. C2 L Li |  
] طلع | om. C2 K Li | الدخنة | 36 om. C2 K Li | الدخنة | W من تلك | om. C2 K Li | تلك  
W تحت | om. C2 K Li | انخنت | om. C2 K Li | دخانها | om. C2 K Li | Bk L دخل  
om. C2 L Li | الجهة | om. C2 Li | الى | om. C2 K Li | النخلة | om. B C2 K Li | تلك  
om. C2 Li W | اليها | W يشير | P تسير | L شير | om. C2 Li | تشير | om. C2 Li | التي  
om. B | اقدم | اعلم | 37 om. C2 D Li | قد | om. C2 Li | Bk L W فان | B وان كان | فان كان  
om. C2 Li | اختار | om. C2 Li | من ] 1 | B W من ذلك | بذلك | om. C2 Li |  
يعقله | يفعله | om. C2 Li | ان | om. C2 Li | B Bk ذلك | قبل | om. C2 Li | من ] 2 |  
om. C2 Li | شأنه | D ليعظم | om. C2 Li | عظم | W ينعله | D يقوله | Bk  
om. C2 Li | من ] 3 | om. B Bk C2 L Li | كثير | om. B C2 Li | عند | om. C2 D K L T | جدا  
منه | om. C2 Li | فيه | om. C2 Li | ويعتقدون | 38 om. B C2 Li | الخلق | B Bk C2 L Li |  
om. B Bk | فاعلم ذلك | om. C2 Li | والصلاح | om. C2 Li | C1 K P W الخير | بالخير | P  
] أخرى | om. W | دخنة | om. B Li W | صفة | 39 T وهو حرم | K وهو حرام | C2 D L Li P  
om. W

force of the palms is obedient to this fumigation substance; the extremities of the fingers of an ancient dead person should be taken, along with his teeth, his molars, and his bones – the bones should be pulverized and the dead person very ancient – then take [flowers? wood?] from the tree called ‘ornament of the day’ and some inflorescence from a palm, and proceed towards any palm you want to inhale this [fumigation]; take some palm wood and throw some of this fumigation substance [on the fire], and once smoke starts to rise, the palm will bend in the direction in which you are inviting it; and if a cheat knows about this before performing it, his status will enormously increase among many people and they will firmly believe that there is good and piety in him. You should know this.

### **3.6 Description of another fumigation substance**



If you fumigate with it amidst a group of people, everyone one will look like elephants or huge dreadful beasts to each other: take a herb called Indian alkekengi, then crush it, knead it with dolphin fat along with some elephant fat, make it into grains similar to chickpeas and do not leave a single place in the house where the smoke can escape; then fumigate with it in a censer by suspending it over the door of the hall of the gathering, and then what we have mentioned will originate from this, and the one who enters where these people are will be terribly scared by them.

### **3.7 Description of another fumigation substance**

When you fumigate with it in a place, the mice will gather there from everywhere, filling its ceiling, its walls, and its floor: take a herb called white vine and squeeze out its water, then take one part of sea onion ('mice onion'), one part of chrysocolla (tinkār), one part of red fogfruit, and grind each one separately;

كل واحد منها على حدته واعجنها بماء الكريمة البيضاء ثم اجعلها حبا كالمخص  
 وحففه في الظل وبخر به المكان فان الفار يجتمع اليه من كل مكان فاعمل بهم  
 ما شئت صفة دخنة أخرى اذا انت دخنت بها في مجلس توهم كل من فيه  
 انهم قاعدین على طرف البحر وقد طلع عليهم من البحر تمساح عظيم وهو  
 يريد ان يهربون منه ويلحقهم فرع عظيم وخوف شديد يؤخذ من الاذخر  
 اوقية وماء البابونج درهمين وفربيون ثلاثة دراهم ومن حب الفرصاد خمسة  
 دراهم ومن زبد البحر خمسة دراهم ومن شحم التمساح عشرة دراهم ومن شحم  
 الدلفين مثله ومن شحم حوت البحر مثله ثم اجمع الشحوم واسحق بها تلك

50

55

49 Bk C1 K L T ; منها | om. Li | واحدة | واحد | om. Li | B ; وكل | كل  
 واعجنهم | واعجنها | W دقا | om. Li ; B Bk C1 C2 L ; على حدة | على حدته | om. Li | D P ; منهم  
 om. C1 ; الكرامة | الكريمة | om. Li | بماء | W وتعجنهم ; om. Li | C1 K L P ; واعجنها ; B C2 D ;  
 Li ; واجعلها ; L ; اجعلها ; B C1 C2 K ; اجعلها | om. Li | ثم | om. Li | البيضاء | Li  
 ويبخر ; Bk L وبخره | وبخر به | Li وتحففه | وجففه 50 W حبوا ; om. Li | اجعله | P W  
 Bk L الذي اردت | add. B الذي تريد | add. المكان | W وتبخر به ; Li وتبخر بها ; D T ; به  
 W الى الدخنة ; C1 به ; B P فيه | اليه | K تجتمع | Bk W يجتمع | يجتمع | W الفيران | الفار  
 فان هذا | add. L شئت | ما شئت 51 L بها ; C1 Li P فيهم مكان | بهم | C2 جانب | مكان  
 om. C2 W | أخرى | om. C2 | دخنة | om. B C2 Li W | صفة | Li الباب اعجب وا يكون  
 | om. C2 | في | om. C2 | بها | om. C2 | دخنت | om. C2 | انت | om. C2 | اذا  
 D منهم ; om. C2 | من فيه | Li لكل | om. C2 | كل | om. C2 | توهم | D T المجلس ; om. C2 ;  
 على | W جالسون ; P جالسین ; om. C2 | قاعدین | om. C2 | انهم 52 W من في المجلس ;  
 om. C2 | البحر <sup>1</sup> | W شط ; P شاطئ ; om. C2 ; Bk L اطراف | طرف | om. C2 ;  
 منه ; om. C2 K Li T | من البحر | om. C2 ; B لهم عليهم | om. C2 | طلع | om. C2 | وقد  
 | يريد 53 om. C2 | وهو | om. C2 | Bk D K L T ; عظيم كبير | عظيم | om. C2 | تمساح | P  
 يطلبون ; K T يريدون ان يهربوا ; D L يهربوا ; om. C1 C2 | يهربون | om. C2 | ان | om. C2  
 om. C2 Li T | وفرع | om. C2 | ويلحقهم | W يمينا وشمالا | add. om. C1 C2 | منه | Li الهروب  
 ; om. C2 | Bk C1 D L P | وخوفا | وخوف | D P عظيما ; om. Bk C2 L ; عظيما | D L P فرعا ;  
 om. C2 | Bk K L Li | تأخذ | يؤخذ | B وهو | add. om. C2 ; C1 D P شديدا ; Bk L عظيما | شديد | C2  
 D P وقية | om. C2 | اوقية 54 om. C2 | الاذخر | om. C2 | من | T ويؤخذ ; om. C2 ;  
 | درهمين | W سابابونج ; om. C2 ; C1 K Li بابونج | البابونج | om. C2 ; Bk L ; ومن ماء | وماء  
 W ثلاث ; om. C1 C2 | ثلاثة | W وفربيون ; om. C1 C2 | وفربيون | om. B C1 C2 D  
 T ثلاثة ; om. C1 C2 D K | خمسة | om. C1 C2 D K | ومن حب الفرصاد | om. C2 | دراهم  
 om. C2 K | زبد البحر | om. C2 K W | ومن <sup>1</sup> | om. C1 C2 D K | دراهم <sup>1</sup> | 55  
 | ومن <sup>2</sup> | T ثلاثة دراهم ; Li كذلك ; om. C2 K W ; B عشرة دراهم | خمسة دراهم | W  
 D خمسة ; om. B C2 | عشرة | om. B C2 | التمساح | om. B C2 | شحم <sup>1</sup> | om. C2 |  
 | الدلفين 56 om. C2 | شحم <sup>2</sup> | om. B C2 | ومن <sup>3</sup> | om. B C2 | دراهم <sup>3</sup>  
 om. Bk | ومن | P خمسة دراهم ; om. C2 | مثله <sup>1</sup> | P الدرلين ; om. C2 ; B Li الدرليل  
<sup>2</sup> | om. Bk C2 L | البحر | om. Bk C2 L | حوت | om. Bk C2 K L | شحم | C2 L  
 | الشحوم | Li الجمع ; om. C2 | اجمع | om. C2 Li | ثم | K T كذلك ; om. Bk C2 L ; مثله  
 om. C2 W | واسحق | W بالنار وانحق بها تلك الهواجج | add. om. C2 ; B الشحوم كلهم  
 | om. C2 W | تلك | om. C2 W

knead it with the water from the white vine, then make it into little grains similar to chickpeas, let them dry in the shade, fumigate the place with it, and then the mice from everywhere will gather there, so you may do with them what you want.

### **3.8 Description of another fumigation substance**

If you fumigate with it amidst a social gathering, everyone who is there will be under the delusion that they are stand on the seashore, and that a huge crocodile is emerging from the sea towards them and that it wants to seize them, while they flee from this terrible terror and an intense fear will overcome them: one ounce of camel's hay (*juncus odoratus*), two dirhams of chamomile water and three dirhams of euphorbia, three dirhams of the grains of dried raisins, five dirhams of meerschaum, ten dirhams of crocodile fat, the same amount of dolphin fat and whale fat; then mix the fats together and grind these grains with

الحبوب كل حبة وزن مثقال فاذا اردت ذلك بحر بحبة من تلك الحبوب  
على حطب يابس يكون من مركب غريق عتيق فانه يكون ذلك

### صفة دخنة أخرى

- 60 اذا انت دخنت بها في الليل موضع خراب منقطع بعيد عن العماره  
الروحانيين من الجن والشياطين والمردة يجتمعون اليك من كل مكان وتسمع  
حديثهم وتستخبر منهم عما شئت وعما تريد تعلم انه يصيبك في يومك او  
جمعتك اذا اردت ذلك فخذ من دم حمام جزؤ ومن شحم الذئب جزؤ ومن  
ميعة يابسة جزءا من قصب الذريرة جزءا ثم اسحق الجميع واجعلهم شيئا  
65 واحدا ودخن بها على نار فحم فانهم يجتمعون اليك ويصيرون حولك فاسألهم

وزن كل *om. C2 D K W*; اكل حبة وزن | *Li* العقاقير *om. C2 W*; [الحبوب] <sup>1</sup> 57  
[بحر] *om. C2 D K W*; *B* العمل به [ذلك] *om. C2 D K W*; [مثقال فاذا اردت] *Li* حبة  
*om. C2 D K W*; [بحبة] *om. C2 D K W*; *W* وجفف وتبخر; *add. B* به منه *om. C2 D K*; ...  
*om. C2* [على 58] *P* من تلك; *om. C2 D K W*; *B* منه [من تلك الحبوب] <sup>2</sup> ...  
<sup>1</sup> | *om. C2 Li* [يايس] *W* طرفا *add. B* السنط *add. Li* خشب; *om. C2* [حطب  
غريق عتيق] *om. C2* | [مركب] *om. C2 Li* | *W* بل يكون; *om. C2 K Li* | [يكون  
يكون ذلك] *om. C2* | *Li* فان [فانه] *D K T* غريق; *om. C2*; *B Li W* عتيق غريق  
*C1 Li* باذن الله تعالى *add. Bk L* فافهم *add. Li* ذلك يكون; *om. C2 W*; *Bk* يكون  
[انت] *om. C2* | [اذا 60] *om. C2 W* | [أخرى] *om. C2* | [دخنة] *om. B C2 Li* | [صفة 59]  
موضع خراب | *om. C2*; *C1* بالليل [في الليل] *om. C2* | [بها] *om. C2* | [دخنت] *om. C2* |  
*om. C2 W*; [بعيد] *Li* موضع خالي منقطع خراب; *D* منقطع المواضع; *om. C2*; [منقطع  
*D*; الناس والعماره; *om. C2*; *B* الادرفان [العماره] | *Li T K* من; *om. C2 L*; [عن] *D* البعيدة  
*om. C2* | [من] <sup>1</sup> | *KT* الروحانيات; *om. C2*; *B* الروحانية [الروحانيين 61] *P* العمران; *Li* العمار  
*om. C2 K*; *B* والمورة [والمردة] *KT* والانس; *om. C2*; [والشياطين] *om. C2* | [الجن] *om. C2* |  
*om. C2* | [من] <sup>2</sup> | *B* اليه [اليك] *om. C2*; *Bk C1 D*; [يجمع] *om. C2*; *P* والمرة; *T*  
*Li* فتسمع; *KT* ويسمع; *om. C2*; [وتسمع] *om. C2* | [مكان] *om. C2* | [كل] *om. C2* |  
وتعتبر ونسئلهم; *Li* واستخبر; *om. C2*; *Bk* فتستخبر [وتستخبر] *om. C2* | [حديثهم 62]  
*P* تريد; *om. C2*; [شئت] *om. C2*; *Bk L* ما [عما] *om. C2 P*; *Bk L* عنهم [منهم] *P*  
[انه] *om. B Bk C2 K L Li P T* | [تعلم] *om. B C1 C2* | [تريد] *D* وما; *om. B C1 C2* | [وعما]  
[يومك] *om. Bk C2 L P* | [في] *om. B Bk C2 L P* | [يصيبك] *Li* ان; *om. B Bk C2 L P* |  
اذا *D* او في جمعتك; *om. Bk C2 L P*; *B W* وجمعتك [او جمعتك] *om. Bk C2 L P* |  
*om. C2*; *Bk C1* فتأخذ [فخذ] *D* بحر بحبة من تلك الحبوب *add. Li*; [اردت ذلك]  
*om. C2*; *B Bk K L Li T*; *B* جزؤ من [من] *W* خذ; *Li* تأخذ; *L* فيأخذ; *KT* فلتأخذ; *D* وهو ان تأخذ  
*Bk K L* وجزؤ [جزؤ] <sup>1</sup> | *W* حمام احمر; *om. C2 P*; [حمام] *om. C2* | [دم] *om. C2 D* |  
*om. C2 P* | [شحم] *om. C2 P*; *Bk K Li*; [ومن] <sup>1</sup> | *om. C2 P* |  
[ومن ميعة] <sup>2</sup> ... 64 | *om. C2 P*; *Bk C1 K L Li T*; *om. C2 P* | [جزؤ] <sup>2</sup> | *D* الدبة; *P*;  
*om. C2 P*; [يابسة 64] *W* او من البيعة; *KT* من ميعة; *om. C2 P*; *Bk L Li* ميعة; *B* وميعة  
*C1 L P W*; [ومن] *om. C2* | *B Bk C1 D K L Li T*; *om. C2* | [جزءا] <sup>1</sup> | *W* اليابسة  
*om. C2*; *Bk* الوريدة; *B D W* الدريرة [الذريرة] *W* فنسا; *om. C2*; [قصب] *om. C2* |  
*om. B Bk C2 D K L* | [جزءا] <sup>2</sup> | *T* الدريرة; *P* الدريرة; *Li* الدريرة; *L* الدريرة; *K* الدريرة  
*KL* واجعله; *om. C2*; [واجعلهم] *om. C2* | [الجميع] *om. C2* | [اسحق] *om. C2* | [ثم] *Li T* |  
[ودخن] *K* واحد; *D* واحدا حبوا; *om. C2*; [واحدا] *KT* 65 جزؤا; *om. C2*; [شيئا] *T* |  
*KT* اثر; *om. C2*; [نار] *om. C2* | [على] *om. C2*; *Bk C1 D K L Li P T W*; *om. C2* | [بها] *om. C2* |  
*om. C2*; [ويصيرون] *om. C2* | [اليك] *om. C2*; [يجتمعون] *om. C2*; [فانهم] *om. C2* | [فحم] *T* |  
*P* فاسئلهم; *om. C2*; [فاسألهم] *W* قولك; *om. C2*; [حولك] *C2* |

them – make every grain the weight of one mitqāl – and when you want this, make fumigations with one of these grains on dry wood that comes from an ancient sunken ship and this will happen.

### **3.9 Description of another fumigation substance**

If you fumigate with it during the night in a desolated and isolated place, far away from inhabited areas, then the spiritual forces of the jinns, of the devils, and of the rebellious [angels] will convene from everywhere, you will listen to their tales, you can ask all you want of them and all what you wish to know about what will happen to you during your day or your week. When you want this, take one part of pigeon blood, one part of wolf fat, one part of dry storax, and one part of sweet flag (*calamus aromaticus*); grind everything together and make into a single thing and make fumigations with it over a charcoal fire, and then they will convene and will be around you; you may ask



them anything you want without being afraid, as they will comply with what you want, will fulfil your needs, and will not harm you, with the permission of God, may He be exalted.

### **3.10 Description of another fumigation substance**

It is the greatest of fumigation substances used by the sages of India and the people of Babylon for their operations; it is said that they uttered these Hebrew names, made fumigations with this Platonic substance, and sought whatever they wanted, which they obtained from all the illusions, the fantastic deceptions, and the summoning of spiritual entities that alter and confound the eyes in such a manner that you will make the one sitting there believe whatever you want: the subjugation of the clouds and the air, the moving of solid bodies, the apparition of flaming luminaries, thunder, lightning, rain, and the subjection of all living beings. When you want this, take some mandrake with the same quantity of human blood, of rooster blood, of white pigeon blood, of woman's blood, blood from the bloodletting of a horse, and the sesame oil that serves to knead all this together; make it into discs and, when you want to work wonders in front of the one who asks for it, then tell him "Close

80 قدام من سالك عنها فقل له اغلق عينيك وحول وجهك ناحية ودخن  
 بالدخنة وتكلم بالاسماء وقل بينوا الي يا ايها الروحانيين كلما سألني عنه وما  
 طلبه مني ثم امره ان يفتح عينيه فانه يري ذلك منه عيانا وهذا الكلام الذي  
 تقال حنطا منطا منجا عليون هانيط سمعا شعيت يا من له الاسماء الحسنى  
 والصفات العليا والضيء والبهجة والبا ارحمني بملاءكتك ليحيوني طايعين  
 ويفعلون كذا وكذا اجيبوا ايها الأرواح الروحانية بحق من قال للسّموات  
 والأرض اثيتيا طوعا او كرها قالتا اتينا طائعين فان ذلك الشخص وغيره من  
 الجماعة يروا كلما سألوا عنه باذن الله تعالى

85

إله | om. L | B تقول [فقل | L عنا | عنها | Li يسالك | سالك | B بحضرة من | إقدام من 77  
 Bk حول | حول | om. Bk L | عينيك | Li اطبق | K اغمض | om. Bk L | اغلق | om. B L |  
 L ودخر | B فدخن | ودخن | K ناحية شرق مثلا | Li Bk L Li | عني | om. B | ناحية | K L Li T |  
 باسماء | K T | بها الاسماء | بالاسماء | Bk L Li | الدخنة | بالدخنة 78 | Li فاذا حول وجه دخن ;  
 Li | om. K L | B P | له | الي | om. L | K تينوا | بينوا | L وقل سوالي | C2 وتقول | وقل | Li  
 | لي | Li الروحانية | L P T W | الروحانيون | C2 الأرواح | الروحانيين | C1 C2 Li | أيها | أيها  
 طبه | C2 P | طلب | طلبه 79 | B وكل ما | وما | Bk D P | سألني | سألني | Li ما | B بكل ما  
 D K T | منك | om. B Bk L Li W | منه | D | إن | W بحق هذه الاسماء | add. | مني | L  
 وهذا | D الكلام الذي | B وهذا الاسماء الذي | وهذا الكلام الذي | L عيانا يري ذلك | عيانا  
 P احنطا | حنطا | C1 L P | يقال | B ذكرنا | نقال 80 | B تتلواها كما | add. | Li ما تتكلم به  
 عجا | add. | W منحا | متحا | L محا | C2 مينجا | Bk منحا | منجا | D حنطا | B سننطا | منطا  
 ها | P ه | C2 هانيق | Bk ها نط | om. B D | هانيط | P عينون | D عكيون | عليون | W  
 P طاشعت | K سبب | C2 شسيث | شعيت | W معا | P هاني | Li شمعا | سمعا | W نبيط  
 P الحسين | الحسنى | P سبحان من يسبح الرعد مجده والملائكة من حيفته | add. | T سب  
 W والرئسا | om. Bk C2 K L T | والبا | L والضيء | الضيار | العلي | العلي 81  
 K Li ويفعلوا | C2 وتفعلوا | Bk L ويفعلوني | B ويفعلوا بما | ويفعلون 82 | Bk يحيوني | ليحيوني  
 | كذا وكذا | P يؤمرون | add. | Li W | ما يؤمرون | add. | B امرتهم به | add. | P ويفعلواها | T  
 om. K | اللسموات | om. B | اجيبوا أيها الأرواح الروحانية بحق | كذا كذا | C1 K | om. B Li |  
 om. | او كرها | om. K | طوعا | C1 C2 Li | اثيتيا | اثيتيا | om. K | والأرض 83 | L السموات ;  
 | او غيره | om. W | P ذكر | ذلك | om. W | طائعين | om. K W | اتينا | اتينا | om. K W | قالتا | K  
 الجماعة | B الجماعة | بدا | الجماعة 84 | om. Li W | من | om. Li | B او غيره  
 كل ما | Bk L | كلما قد | B كل ما قد | كليا | om. B | يروا | om. W | Li والجماعة | C2 الحاضرين  
 | باذن الله تعالى | Li | عنه | P يستلوا | سألوا | W كل ذلك وكل ما | T كلما كانوا | D  
 فاحتفظ به | om. W | add. | D باذن الله تعالى عز وجل | B باذن الله تعالى وهو اعلم بالغييب  
 P W فافهم ذلك | add. | K فاحفظ ذلك | كتمه | C2 | add.

your eyes and turn your face away!”, then fumigate with the substance and pronounce the names. Say: “Show me, oh spiritual entities everything that was asked to me and what was sought from me!”; then order him to open his eyes and he will see this with his own eyes. These are the words you will utter: “*hntā mntā mnġā ‘lywn hānīṭ sm‘ā š‘īṭ!* Oh One who has the beautiful Names, the elevated characteristics, the light, the splendour, and the magnificence, have mercy upon me with your angels so that they shall answer me obediently and do this and that. Answer me, immaterial and holy spirits, for the truth of the one Who says to the skies and the earth *‘Come ye together, willingly or unwillingly.’ They said ‘We do come together in obedience’* (Qur. 41:11)!” So this guy and others in the party will see everything they asked from him, with the Permission of God, may He be exalted.