In Code We Trust. The Concept of *Rumūz* in Andalusī Alchemical Literature and related texts

Abstract

In the medieval Arabic tradition of the so-called occult sciences, the concept of *ramz* (symbol, code) has acquired an important role in the way the authors were considering and reading the texts of their predecessors and writing their owns. This term, closely related to the notion of secret, covered various ideas of code: from allegories and allusions to codenames and secret alphabets. Above all, the alchemists made *ramz* a real topos of their literature. In this paper, we focus on the *Rutbat al-hakīm* of Maslama b. Qāsim al-Qurtubī (written in 339-342/950-953) and some of its main sources, such as the corpus of texts attributed to Jābir b. Hayyān, Ibn Wahshiyya's *Filāḥa Nabaṭiyya*, the *Rasā 'il Ikhwān al-Ṣafā'* and the *Risāla Jāmi 'a*. We argue that Maslama produced a detailed definition of *ramz*, conceived a true typology of it, and proposed his own key to reading the alchemical *ramz*. This rich development is not found in any of the other texts that we have examined here. This observation confirms that Maslama b. Qāsim al-Qurtubī, far from being a simple transmitter of Eastern ideas and practices to the Western Arab world, was an original and innovative milestone in the transfer of knowledge.

Introduction

Maslama b. Qāsim al-Qurṭubī, whose role as transmitter of occult sciences in al-Andalus has recently been significantly re-evaluated, was a rather peculiar traditionist who lived in Cordoba in the tenth century. He is known to have undertaken a long journey throughout the Islamicate East in c. 317–c. 325/929–937, and to have likely brought back with him a series of works of an esoteric nature.¹ Once returned to al-Andalus, Maslama wrote his two masterpieces, the *Rutbat al-ḥakīm* (the *Scale of the Sage*), an alchemical text which is very possibly the first alchemical treatise ever written on the soil of al-Andalus, and the *Ghāyat al-ḥakīm* (the *Aim of the Sage*), a work on astral

¹ Callataÿ/Moureau 2017.

magic which enjoyed great fame in the Latin world under the name of *Picatrix*.² As an expert in esoteric materials, the author of the *Rutbat al-hakīm* and the *Ghāyat al-hakīm* addresses the concept of *ramz* (pl. *rumūz*), i.e. code or symbol, repeatedly across his works. This article focuses on the concept of *ramz* in these two works, and in other apparently closely related texts which are surely to be counted among his chief sources: the *Rasā'il Ikhwān al-ṣafā'* (the *Epistles of the Brethren of Purity*), a ninth or tenth century encyclopaedia of philosophy and sciences of Shī'ite provenance, and which came to be highly influential in al-Andalus;³ *al-Risāla al-Jāmi'a* (the *Comprehensive Epistle*), a work that also circulated under the name of the Ikhwān al-ṣafā' although its exact relation with the rest of the Ikhwānian corpus remains a matter of controversy today; *Filāḥa Nabațiyya* (the *Nabatean Agriculture*), a text of debated origin on agriculture and various other matters, which purports to be a translation made by Ibn Waḥshiyya (d. 318/930–1) of a 'Chaldean text' in the first half of the tenth century;⁴ and the corpus of texts attributed to Jābir b. Ḥayyān, a collection of texts dealing principally with alchemy, possibly written around the ninth century.⁵

Rumūz in general

In 1995, Wolfhart Heinrichs published for the second edition of the *Encyclopaedia of Islam* an article on *ramz* in rhetoric and its related uses,⁶ in which he provided a general definition of the word based on various texts. He distinguished three main meanings of *ramz*: *ramz* as a code, *ramz* as a symbolic action, and *ramz* as a 'siglum' (Heinrichs's terminology) in the simplest sense of the word. Since only the first type of *ramz* is used extensively in the above-mentioned texts, the other two will not be discussed in this article. *Ramz* as a code can itself be divided into two subsets: codenames, symbols and allegories on the one hand, and secret characters and secret alphabets on the other hand. *Ramz* in alchemical texts refers, in most cases, to these two methods.

 $^{^2}$ On the hypothesis of attribution of these two works to Maslama b. Qāsim al-Qurțubī, which is the most convincing hypothesis at the moment, see Fierro 1996.

³ See in particular Callataÿ 2013; Callataÿ 2014-2015.

⁴ On this, see Hämeen-Anttila 1999; Hämeen-Anttila 2006; Travaglia 2009; Hämeen-Anttila 2011. Edition: Fahd 1993.

⁵ Among the abundant literature on this, see in particular Kraus 1942–1943.

⁶ Heinrichs 1995.

Rumūz in the Rutbat al-hakīm

It is first and foremost in the *Rutbat al-hakīm* (339–342/950–953) that Maslama b. Qāsim al-Qurṭubī describes his conception of *ramz*. Indeed, the fourth *maqāla* of the *Rutba* - i.e. around 57% of the book - is entirely dedicated to *rumūz* and their resolution ($f\bar{t}$ *l-rumūz wa-fakkihā wa-ma 'rifatihā*). This section also contains Maslama's claim to have written a complete epistle on the resolution of *rumūz*,⁷ but no work attributed to Maslama has been preserved with this title or content.⁸ In the *Rutba*, Maslama aims at providing a method for resolving *rumūz*, since resolving all of them would take too long.⁹

Maslama gives two definitions of the word *ramz* in the *Rutba* that illustrate two different aspects of the concept. The first appears in the introduction of the book: "As for the code, it is only similies that is used for this science in order to hide it from those who are stupid and ignorant and to show it to the experienced and the intelligent."¹⁰ The second aspect presents another feature of *ramz*: "Know that the *ramz* only informs one about something, either without its expression or without its aspect."¹¹ This second definition stresses the role of *ramz* as a way of transmitting information, which is central to Maslama's perception of it. Indeed, he considers *ramz* to be that which the sages use to transmit their knowledge - but only to the wise - without unveiling it to the average man.¹² Thereby another aim of *ramz* is highlighted: *ramz* implies that whoever understands it has a subtle mind (*dhihn*), and therefore it allows one to discriminate between the "pure soul" (*al-nafs al-zakiyya*) and the "stupid soul" (*al-nafs al-balīda*).¹³ However, one should not think that *ramz* is merely hiding or veiling things, since Maslama insists that *ramz* requires somebody who understands it, otherwise it would be a useless "unintelligible speech" (*kalām ghayr ma'qūl*).¹⁴ The

⁷ Rutbat al-hakīm, ed. Madelung, 95: وإذ قد أفردنا في هذا رسالة تامة موعبة على الكلام كيف رُمزت جميع العلوم وما معنى الرمز In this article, we quote from the preliminary edition of Wilferd Madelung (2017), who edited the text from only three witnesses. We are currently preparing a critical edition of this text.

⁸ The text might, however, be a text by another author, since Maslama also claims to be the author of the *Epistles* of the Brethren of Purity in the *Rutba* (*Rutbat al-hakīm*, ed. Madelung, 19). On this, see also Callataÿ, forthcoming.

⁹ Rutbat al-hakīm, ed. Madelung, 128, 156-157.

وأمّا الرمز فإنّما هو أمثال تضرب على ذلك العلم ليخفى عن الجاهل البليد ذلك العلم ويظهر ¹⁰ Rutbat al-ḥakīm, ed. Madelung, 20: وأمّا الرمز فإنّما هو أمثال تضرب على ذلك العلم ليخفى عن الجاهل البليد ذلك العلم ويظهر

اعلم أنّ الرمز إنّما هو الإنباء عن الشيء إمّا بغير لفظه أو وجهه :¹¹ Rutbat al-ḥakīm, ed. Madelung, 96

¹² Rutbat al-hakīm, ed. Madelung, 97.

لتلطف الأذهان وتُعرف النفس الزكيّة من النفس البليدة :Rutbat al-hakīm, ed. Madelung, 95

¹⁴ Rutbat al-hakīm, ed. Madelung, 96.

person who knows what is behind the *ramz* and understands it is a "discerning learned person" (*`ālim nabīh*), and is deemed on a par with the people who coded the text.¹⁵

Maslama provides anecdotes to illustrate his definitions. The first one is an example of *ramz* by signs (*ishāra*) and is taken from the Qur'ān, quoting the story of Zakariyyā.¹⁶ Zakariyyā, the father of Yaḥyā, was told by God that the sign that he would have a son was that he "would not be able to speak to people for three days except by *ramz*" (*Qur'ān* 3:41). If Zakariyyā were to have met anybody during these three days, Maslama explains, he would have had to make gestures to let him know that he was unable to speak: someone stupid would have thought Zakariyyā was ill or insane, whereas somebody experienced (*niḥrīr*) would have understood.

The second anecdote is an example of *ramz* by speech $(kal\bar{a}m)^{17}$ and is taken from a "chronicle of the Arabs".¹⁸ A one-eyed tribesman is taken by a rival tribe during a war. While being held in their camp, he realises that this rival tribe is preparing an attack on his own tribe and plans to send a message to his fellow tribesmen. He asks his enemies to allow him to send a message to give some orders to his fellows about his business. The enemies agree and present him a black slave to deliver the message. Having asked his fellows to treat their captive from the rival tribe well, since he himself was being treated well (a *captatio benevolentiae*, in Maslama's view), he says: "Let them unsaddle my reddish she-camel, they have ridden her for too long, and let them ride my brownish camel, he is tough for not having been ridden. Ask the ploughman about me and how much I ate *hays* with you¹⁹." The slave goes to his tribe and relays the message. The fellows of the one-eyed man think that the one-eyed man has gone crazy for he had no reddish she-camel nor brownish camel, and they come to ask the ploughman who says: "Your cousin gave you some good advice: he tells you to leave the easy valley and to go to the tough, black, and inaccessible mountain, because the troops (of your enemies) come in a mix of people and tribes, and you do not have the capacity to resist them." Then, the tribe flee to the mountain and are saved.

¹⁵ Rutbat al-hakīm, ed. Madelung, 95–96.

¹⁶ Rutbat al-hakīm, ed. Madelung, 96–97.

¹⁷ This kind of *ramz* is considered higher status than the *ramz* by signs, since more people understand signs (*Rutbat al-hakīm*, ed. Madelung, 97).

¹⁸ Rutbat al-hakīm, ed. Madelung, 97–98.

¹⁹ In Madelung's edition, we read: ؛ وسلوا عن خبري الحراث بأنّه ما أكلتُ معكم حنشاً؛ (*Rutbat al-ḥakīm*, ed. Madelung, 98). This reading does not make sense. According to various old manuscripts, we propose to read: وسلوا عن خبري الحارث بأيّة *Hays* is a dish made with dates mixed with butter, curdled milk and a little flour; this mixture alludes to the mixture of men and tribes as referred to in the passage.

In addition to these two means of using *rumūz*, Maslama also focuses on *ramz* by images (*suwar*), paying special attention to the *Mushaf al-suwar* (*Tome of Images*) attributed to Zosimos.²⁰ He explains that some people believe that these images were drawn only to adorn the book, to ensure its easier transmission, but Maslama does not agree and asserts that these images are the "origins/mines/minerals of the science of that book" (*ma ʿādin ʿilm dhālika al-kitāb*), and that they refer to the alchemical stone. He asserts that he has described these pictures in a *Risāla fī l-Bunyānāt wa-l-nawāmīs²¹* (*Epistle on the buildings and laws*), where he linked the illustrations of the *Muṣḥaf al-ṣuwar* to the images in the temple of Birbā in Ikhmīm (Panopolis, where Zosimos was born). According to Maslama, these images are clearer and more useful than written books.

In short, Maslama highlights the fact that all the demonstrative (*burhāniyya*) and divine (*ilāhiyya*) sciences are coded:²²moreover, not only science is coded, but also poetry. Indeed, as Maslama tells us, poets use *rumūz* in their works too, in what they call the "verses of the meanings" (*abyāt al-maʿānī*), namely enigmatic verses that leave room for interpretation;²³ they consider those who are able to understand these verses on a par with their own community. Poets are familiar with the art of the riddle (*lughz*) and the puzzle (*muʿamman*). Yet, the science of codes *par excellence* is alchemy, so much so that people give it the name *ramz* as such, and unjustly denigrate it.²⁴ This is why the *Rutbat al-ḥakīm*, which is devoted to alchemy, is concerned with *rumūz* at length.

All the Ancients used *rum* $\bar{u}z$ in their works, and so does Maslama: the reader may therefore consider Maslama's own book useless, as he himself admits. However, Maslama introduces another important aspect of *ramz* here: *ramz* depends on the language and the era, requiring, therefore, adaptation which is what Maslama purports to do in the *Rutba*, and why his work is not at all useless.²⁵ For instance, the Greek code (*ramz* $y\bar{u}n\bar{a}n\bar{n}$) is very different from the Arabic code (*ramz* '*arabi*'), and needs to be translated.²⁶ As for the epoch, scholars must compare the *rum* $\bar{u}z$ of

²⁰ Rutbat al-hakīm, ed. Madelung, 113–114.

²¹ Madelung reads *Risāla fī l-Nabātāt wa-l-nawāmīs* (*Rutbat al-ḥakīm*, ed. Madelung, 114), but the manuscript tradition and the context prompt us to choose the reading suggested above.

²² *Rutbat al-hakīm*, ed. Madelung, 95:

اعلم أنَّ القوم ذكروا أنَّ جميع العلوم البر هانيَّة والإلهيَّة إنَّما هي مرموزة، ولولا ذلك ما كانت علماً بوجه.

²³ *Rutbat al-hakīm*, ed. Madelung, 95.

²⁴ Rutbat al-hakīm, ed. Madelung, 95–96.

²⁵ Rutbat al-hakīm, ed. Madelung, 19.

²⁶ Rutbat al-hakīm, ed. Madelung, 20.

the Arabs with the *rumūz* of the Ancients and see whether they agree.²⁷ Among the Greek sages mentioned by Maslama, one finds Hermes, Democritus, Maria, Ostanes, Agathodaimon, Plato, Aristotle, Balīnūs, Zosimos. Among the Arabs, he gives preeminence to two scholars, namely Jābir b. Ḥayyān and Abū Bakr al-Rāzī, but he also cites other thinkers such as Ibn Waḥshiyya.²⁸

Maslama also emphasises that the tradition is essentially unique: even if they seem to be at variance with one another, in reality all the Ancients agree. Indeed, although the words are different and numerous (*kutub mukhtalifa, kalām mukhālif, ikhtalafat alfāzuhum*), they all agree since their subject (*mawdū*) is unique, their meaning (*ma nan*) is unique, their result (*natīja*) is unique.²⁹ Maslama compares this with numerous different trees all giving a unique fruit.³⁰ One can perceive this unity if one reads the words of the sages with a subtle mind (*latufa dhihnuka*).³¹

Maslama divides $rum\bar{u}z$ into three categories: adorning something $(taml\bar{l}h wa-tahs\bar{n}n)$, hiding something $(ikhf\bar{a}')$, and showing something $(izh\bar{a}r)$.³² 1) Adornment is that which is referred to aseloquence $(bal\bar{a}gha)$ and *belles-lettres* (adab). This kind of *ramz* consists in making a discourse more beautiful in order to facililtate its transmission as people will find it attractive.³³ It is used in both prose and poetry, and Maslama gives examples of books intended to transmit tenets of worldly administration $(siy\bar{a}s\bar{a}t \ al-duny\bar{a})$ in this way: *Kalīla wa-Dimna*, the *Kitāb Tha'la* (the *Book of the Vixen*),³⁴ the *Kitāb Wazra* (the *Book of Wazra*),³⁵ and the *Kitāb Sindibād* (the *Book of Sindbad*). Alchemists sometimes use this kind of *ramz*, when they speak of "making the hot cold", "making the big small", "putting the high low", etc.³⁶ 2) The second kind of *ramz* consists in hiding

²⁷ Rutbat al-hakīm, ed. Madelung, 27.

²⁸ Rutbat al-hakīm, ed. Madelung, 26-27, 156.

²⁹ Rutbat al-hakīm, ed. Madelung, 26, 38-39, 101, 130.

³⁰ *Rutbat al-hakīm*, ed. Madelung, 130.

³¹ *Rutbat al-hakīm*, ed. Madelung, 26.

³² Rutbat al-hakīm, ed. Madelung, 99.

³³ Rutbat al-hakīm, ed. Madelung, 99.

³⁴ This title points in all likelihood to Sahl b. Hārūn's *Kitāb Thaʿla wa-ʿAfrā* (Zekari 1995, 839). Madelung reads كتاب ثعلبة (*Rutbat al-ḥakīm*, ed. Madelung, 99), but we found the title كتاب ثعلبة in various old manuscripts.

³⁵ Madelung reads کتاب وردهٔ but most of the manuscripts have کتاب وزره , which we choose to keep. This very likely alludes to a book quoted in al-Mas⁶ūdī⁷s *Murūj al-Dhahab* (the *Golden Meadows*) where a work called کتاب فرزه likely alludes to a book quoted in al-Mas⁶ūdī⁷s *Murūj al-Dhahab* (the *Golden Meadows*) where a work called موسيماس is cited as a book of stories about kings and viziers of India. (al-Mas⁶ūdī, *Murūj al-dhahab*, ed. Barbier de Meynard et al., vol. 2, 406, § 1416). Indeed, in an older edition of this text, we have found the reading کتاب وزره و سماش (al-Mas⁶ūdī 1283/1866: vol. 1, 297), and the book may have circulated under this title. Yet, the original reading in the *Rutbat al-hakīm* might have been کتاب وزره instead of کتاب وزره (on this book, see Abbott 1949, 156).

³⁶ *Rutbat al-hakīm*, ed. Madelung, 99. Maslama also explains the alchemists' expressions "make the cold hot", "make the small big", "make the narrow large", and "make the short long" (*Rutbat al-hakīm*, ed. Madelung, 100–101):

something completely. This method, since it entirely conceals that which is implied, is not useful and hence Maslama calls it *ramz fārigh* or *ramz 'aqīm*, useless code.³⁷ Maslama's contemporaries tried in vain to understand what is hidden behind these useless *rumūz*, but their efforts were in vain since there is nothing to find when everything is hidden.³⁸ Sometimes, alchemists use the useless *rumūz*, which deceive the ignorant.³⁹ 3) The last method is what Maslama calls the manifestation (*izhār*) of something. Alchemists use this approach in most cases. When using this *ramz*, they usually say what they need to say, but mix it with lots of useless information, offering a complicated mixture that the reader must filter. Maslama calls it the *ramz mufīd* (useful code).⁴⁰

Since Maslama focuses on alchemy in the *Rutbat al-hakīm*, he does not neglect to mention that to which *rumūz* refer in alchemical works. In these texts, he says, *rumūz* always indicate two ideas, and only two: the stone (*hajar*), corresponding to theory (*'ilm*); and the operation (*tadbūr*), corresponding to practice (*'amal*).⁴¹ 1) In an alchemical context the stone means the material from which the elixir is made, irrespective of whether or not it is a stone. When alchemists want to hide the true name of the stone, they use alternative names,⁴² which is why *rumūz* for the stone are plentiful (*kathīr*).⁴³ These names must, however, refer to aspects or properties of the stone,⁴⁴ otherwise the code becomes a *ramz fārigh*, hence the necessity of knowing the natures of natural things (*tabā 'i' al-ashyā ' al-tabī 'iyya*) for those wishing to accomplish the alchemical work.⁴⁵ The names that alchemists use to designate the stone can be divided into two categories: names that the common people know; and names that the common people do not know and which the sages use as an agreement (*ittifāq*).⁴⁶ 2) The operation is the series of processes that must be conducted in the alchemical work. To conceal it, alchemists have most usually made recourse to the method of combining a lot of unnecessary elements with the real principles, mixing the useless with the useful.⁴⁷ This is why the *ramz* for the operation is long (*tawīl*), longer than the *ramz* of the stone

this means that they have set the propaedeutic sciences (al- ' $ul\bar{u}m \ al$ - $riy\bar{a}diyya$), that are hard, as a ladder to the two conclusions, alchemy and astral magic ($k\bar{i}miy\bar{a}$ ' and $s\bar{i}miy\bar{a}$ '), which are easy.

³⁷ Rutbat al-hakīm, ed. Madelung, 107–108.

³⁸ *Rutbat al-hakīm*, ed. Madelung, 108–109, 171.

³⁹ Rutbat al-hakīm, ed. Madelung, 181–182.

⁴⁰ *Rutbat al-hakīm*, ed. Madelung, 101-102, 108.

⁴¹ Rutbat al-hakīm, ed. Madelung, 101.

⁴² Rutbat al-hakīm, ed. Madelung, 129.

⁴³ Rutbat al-hakīm, ed. Madelung, 101.

⁴⁴ Rutbat al-hakīm, ed. Madelung, 40, 129.

⁴⁵ Rutbat al-hakīm, ed. Madelung, 129.

⁴⁶ Rutbat al-hakīm, ed. Madelung, 129.

⁴⁷ Rutbat al-hakīm, ed. Madelung, 129, 171.

(which is plentiful, *kathīr*), since the description of the modality (*kayfīyya*) is longer than that of the quiddity (*māhiyya*).⁴⁸ Revealing how things can get even more complicated, Maslama emphasises that these codes - namely the code for the stone and the code for the operation - can, and often do, become conflated, so that many people confuse the code for the stone with the code for the operation, and vice versa.⁴⁹

Rumūz in the *Ghāyat al-ḥakīm*

Unsurprisingly, the *Ghāyat al-ḥakīm* also provides us with material relevant for the topic under discussion. In the prologue, Maslama frames the terms of debate by asserting that in the *Ghāya* he is pursuing the same objective as he did in the *Rutba*. That is to say, he is going to unveil and disclose the secrets of the sciences which ancient philosophers did their utmost to conceal in their books 'by way of symbols and cryptic formulas that only sages of their kind are able to understand'.⁵⁰ In fact, as every reader quickly realizes, the *Ghāya* itself looks like just another grimoire that "leave people buried under thousands of symbols", to use an expression favoured by Maslama in another place.⁵¹ Far from revealing or elucidating secrets, it appears that he deliberately composed his work in such a way as to ensure that these secrets are kept away from those deemed unworthy. The use of symbols evidently contributed to this objective, as did the absence of any "discernible guiding principle" in the book.⁵²

Symbols are everywhere in the *Ghāya*, and there is little interest in citing multiple examples of their use. More informative for our purpose is a passage where Maslama provides us with a proper definition of *ramz*. This is in *maqāla* III, *faşl* 4, a chapter for which our author mentions the *Kitāb Makhzūn* (the *Treasured Book*) as his main source, a text by an otherwise unidentified Jaʿfar al-Baṣrī. The whole chapter strikes the reader by the exclusively Islamic nature of its contents and,

⁴⁸ Rutbat al-hakīm, ed. Madelung, 101.

⁴⁹ Rutbat al-hakīm, ed. Madelung, 101–102.

⁵⁰ Ghāyat al-ḥakīm, ed. Ritter, 2. خلدوا في الكتب بالرموز والتعميات لئلا يفهمها الا الحكيم مثلهم.

⁵¹ Ghāyat al-hakīm, ed. Ritter, 341: القوم المدفونة تحت آلاف الرموز.

⁵² On this latter issue, see M. Plessner (in Ritter/Plessner 1962: XXXIX): "This matter of writing may well be intentional, whether to make the magical sections appear less suspect by interlarding them with theoretical passages, or to make certain doctrines seem less strange by administering them in small doses, or to demonstrate the equal validity of the magical and philosophical material, or for a combination of all three reasons. At all events, a similar method of presentation is apparent in one of the principal sources of *The Aim of the Sage*, the encyclopaedia of the Brethren of Purity (*Ikhwān al-Ṣafā*')."

indeed, it finds no counterpart in the Latin *Picatrix*.⁵³ In the original Arabic, after having painstakingly reviewed the correspondences between the numerical values of the opening letters of the Qur'ān and the seven planets, Maslama embarks on the calculation of the duration of Islam, by using those of the opening letters that are specifically associated with Venus, the planet of the Arabs.⁵⁴ Occurring in this very particular context, the definition of *ramz* is given in the following terms:

This is a wonderful formulation and code. Indeed, a code is a word for which the external appearance does not matter but which has a hidden meaning. In short, it is an expression endowed with two sides, one known and one veiled, regarding a matter or a piece of wisdom. Thus, it is said that the Qur'ān is [both] hidden and apparent. These are two subordinate properties, for the apparent may be apparent for one thing and hidden for another. Yet it cannot be apparent and hidden in one single respect: rather it will be apparent with respect to perception and hidden in another respect. Being apparent or being hidden will depend on perceptions. This is why God Most-High is "hidden" when He is sought for through the perception of the senses or the chest of chimeras and "apparent" when He is sought for from the chest of reason via the path of inference.⁵⁵

To further illustrate the paradoxical nature of symbols, Maslama elaborates in the same chapter on the well-known image of man's inability to comprehend God as resulting from the overabundant

⁵³ See Pingree 1986: 102–103. It will be observed that the Latin translator has limited himself to providing the chapter with a title, namely, "How secrets can be understood only by those familiar with that science" (*Qualiter secreta nisi in hac sciencia ab assuetis intelligi non possunt*), and a five-line justification of why he has not deemed it of sufficient interest to include its content. Significantly, he does not refer to anything Qur'ānic or Islamic, but only to the fact that "ancient sages who have dealt in their books with magic sciences and nigromancy have written in the most obscure way they could" (*sapientes vero antiqui qui in magicis scienciis et nigromancia fuere locuti in eorum libris quantum plus potuere obscure scripserunt*). For a comparison of the Latin *Picatrix* with its Arabic original see Boudet/Coulon 2017; Burnett 2017.

⁵⁴ Although other examples of this kind of speculations exist in Arabic literature – most famously al-Kindī's *Risāla* on the duration of the rule of Islam, which Maslama mentions in the same chapter –, it is this passage from the *Ghāya* that Ibn Khaldūn has in mind when he reports his own disapproval of such theories (Ibn Khaldūn, *Muqaddima*, vol. 6, 28). The edition of al-Kindī's epistle is provided in Yamamoto/Burnett 2000: vol. 1, 525–543 (Appendix III). For references on Venus as the planet of the Arabs, see Michot 2000, 181–182. See also Callataÿ, forthcoming.

وهذا من عجيب الوضع والرمز اذ الرمز كلام ليس على ظاهره وله باطن معنوى فهو :170–676 ⁵⁵ Ghāyat al-ḥakīm, ed. Ritter, 169 بالجملة لفظ نو جهتين مشهورة ومستورة لمصلحة أو حكمة ولذلك ما قيل ان للقرآن باطنا وظاهرا وهذان الوصفان من المضافات فان الظاهر قد يكون ظاهرا لشىء وباطنا لشىء ولا يكون من وجه واحد ظاهرا وباطنا بل ظاهرا من وجه وبالاضافة الى ادراك وباطنا من وجه آخر فان الظهور والبطون انما يكون بالاضافة الى الادراكات ولذلك ما كان الله تعالى باطنا ان طلب من ادراك الحواس وخزانة الخيال وظاهرا ان ال

light proceeding from the Creator. This idea Maslama may have found in various works, but he most likely derived it from the *Rasā`il Ikhwān al-ṣafā*'.⁵⁶

Rumūz in the Rasā'il Ikhwān al-şafā'

The Brethren of Purity themselves never seem to have tired of harmonising the discourse of ancient philosophers with the wisdom of religious and prophetic revelations. Statements in this sense are found all throughout in the $Ras\bar{a}$ 'il, and it is in this context, and against this particular background, that mention of *rumuz* is made most frequently. A typical example is the following admonition to the reader, with which *Epistle 17 (On Generation and Corruption)* concludes:

So endeavour, O my brother – may God help you and us through a spirit coming from Him – in the search for what the prophets of God – God's blessings be upon them – hinted at ($ash\bar{a}rat$) in the books revealed in their languages, whose meanings were taken from angels – be peace upon them – with regard to the description of the grace of the Holy Gardens and the happiness of their inhabitants, and to the quality of the Fire and the unhappiness of its inhabitants; [and endeavour also in the search] for what the philosophers and the wise men hinted at ($ash\bar{a}rat$), too, in their symbolic tales ($f\bar{i}$ marm $\bar{u}z\bar{a}tihim$) with regard to the description of the world of spirits and the praise of its inhabitants, and [with regard] to their denigration of the world of bodies and their disregard for its inhabitants. Perhaps you will be able to conceive with your intelligence ('aql) of

⁵⁶ See *Rasā* '*il Ikhwān al-ṣafā*', ed. al-Bustānī, vol. 3, 22: "Likewise, the power of man's intellect is intermediate: of intelligible things [*al-ashyā*' *al-ma* ' $q\bar{u}la$] he is able to conceptualize only those that are intermediate between the two extremes in terms of sublimity (*jalāla*) and secrecy (*khafā*'). Indeed, amongst intelligible things, there are those which it is not possible for man's intellect to perceive and to become acquainted with by science (*idrākuhu wa-iḥāṭa al-'ilm bihi*), due to their sublimity and the intensity of their manifestation, of their evidence, and of their clearness, such as the sublimity of the Creator: man's intellect is not able to perceive Him nor to acquaint itself by science with what He is in essence, [and this is] due to His sublimity, the intensity of His manifestation and the clearness of His evidence, not to the secrecy of His essence nor to the intensity of His concealment (*kitmāni-hi*)." The intimate relation of Maslama's twin works with the Ikhwānian corpus has been an important topic of recent scholarship. See in particular Fierro 1996; Callataÿ 2013; Kacimi 2013; Callataÿ 2014-2015; Madelung 2014-2015; Callataÿ/Moureau 2015; Callataÿ/Moureau 2017.

what they represented and you will experience in the purity of your substance what they experienced in the purity of their substance.⁵⁷

The view expressed here is very straightforward and does not require much explanation. Imperceptible to the eye, the realities of the Hereafter can be apprehended by the human soul that has managed to actualise the potentiality of its pureness and intelligence. Prophets and philosophers agree with one another when speaking of these realities by way of "allusions" (*ishārāt*) and "symbols" (*rumūz*, *marmūzāt*), two words that are found side by side in countless passages of the same nature throughout the Ikhwānian corpus. The same holds true for the physical realities of the world around us. Anticipating the modern conception of Nature as a book to be read and understood, the Ikhwān tend to call every physical law a symbol or a sign of the Creator's omniscience and omnipotence. In a well-known passage from *Epistle 45* on "the ultimate books" which were meant to have inspired their own view of the world, the Ikhwān describe 'the books of nature' (*al-kutub al-tabī* 'iyya) as:

the forms of existents in the way spheres are presently structured, dealing with the divisions of the zodiac, the movements of the stars, the scale of their celestial bodies, the vicissitudes of time and change in the elements, the different kinds of animals, plants, and minerals, and the various things made by man. All these forms and writings point to subtle concepts and delicate secrets whose superficial sense is understood by the populace; however, they are unable to appreciate their real inner subtleties among the works of Almighty God.⁵⁸

Also noticeable in the *Rasā*'*il* are passages concerned with religious rituals and symbols and which, as in the following example taken from *Epistle 20 (On Nature)*, provide the authors with an occasion to develop their universalistic approach:

فاجتَهد يا أخي، أيَّنَكَ الله وليَّانا بروح :(translation Baffioni) 181–57 Rasā 'il Ikhwān al-ṣafā', Epistle 17, ed. Baffioni, 180–181 (translation Baffioni) منه، في طلب ما أشارت إليه أنبياءُ ألله، صلواتُ الله عليهم، في الكُتُب المُنَزَّلة على ألسَنَتِهم، المأخوذةِ معانيها عن الملائكة، عليهم السلام، من وصف نعيم منه، في طلب ما أشارت إليه أنبياءُ ألله، صلواتُ الله عليهم، في الكُتُب المُنَزَّلة على ألسَنَتِهم، المأخوذةِ معانيها عن الملائكة، عليهم السلام، من وصف نعيم الجِنان وسعادةِ أهلِها، وصفةِ النير إن وشقاؤةِ أهلِها، وما أشارت إليه أيضاً الفلاسِفةُ والحُكماءُ في مَرموز اتهم من وَصف عالم الأرواح، ومَدْح أهلِها، وذَمِّهم عالَمَ الأجسادِ، وسُوء تنائهم على أهلِها، فعلَّك تتصوَّرُ بعقلك ما تصوَّرُ وه وتشاهِدُ بصفاء جَوهرك ما شاهَدوا بصفاء خوهرهم.

⁵⁸ Rasā'il Ikhwān al-safā', Epistle 45, ed. Mayer et al., 98–99 (translation Netton):

وهي صوّر أشكال الموجودات بُما هي عليه الآن من تركيب الأفلاك وأقسام البروج وحركات الكواكب ومقادير أجرامها، وتصاريف الزمان، واستحالة الأركان، وفنون الكاننات من الحيوان والنبات والمعادن، وأصناف المصنوعات على أيدي البشر. كلّ هذه صور وكتابات دالّات على معان لطيفة وأسرار دقيقة يرى الناس ظاهرها ولا يعرفون معانى بواطنها من لطيف صنعة الباري تعالى.

On this passage, see Callataÿ 2004.

Each human nation in its houses of worship, its traditions of obligations, and its sacrifices in its temples of prayer, has models, allusions, and symbols forged for those who describe them with regard to the meaning hinted at by Abraham, the Friend [of God].⁵⁹

In fact, a closer examination of terms like *ishārāt*, *rumūz*, *kināyāt*, and many others such as marāmī (purposes), āvāt (signs) or tanbīhāt (admonitions) reveals that our philosophers ascribed them all more or less the same metaphorical function throughout, and indeed used this vocabulary in a very loose manner and with a high degree of interchangeability – a fact that sharply contrasts to Maslama's terminology. This metaphorical language is found all over the place in the Rasā'il, and is one of the most characteristic hallmarks of the Ikhwanian corpus to address "those with eyes to see", as was recently stressed in a recent article on the hidden meaning of the famous animal fable in *Epistle 22.60*

Since it is entirely devoted to magic, we would expect *Epistle 52*, the last one of the corpus that has come down to us in manuscripts,⁶¹ to offer us more remarkable evidence on *rumūz*, but in fact this epistle, in all its known versions, turns out to be rather disappointing. It may be the case that the long version of this epistle - the version from which Maslama quotes extensively in the $Gh\bar{a}ya$ - includes one reference to the symbolic formulations of the sages of the past, a reference which occurs, notably, in one of the very few sections concerned with alchemy.⁶² Yet, the passage does not contain much more than generalities and a few second-hand quotations on the alchemical art and only serves to illustrate how unfamiliar the authors of that version of the epistle - who may not have been the same as the authors of the rest of the corpus - were with alchemy.

⁶⁰ Callataÿ 2018.

⁶¹ For reasons that will be explained in the introduction of our forthcoming edition (Callatay et al., forthcoming), we are inclined to regard this long version as a work which was not part of the original plan of redaction of the Rasā'il. ⁶² Rasā'il Ikhwān al-şafā', Epistle 52, ed. al-Bustānī 1957, vol. 4, 413. On this passage, see Marquet 1988, 32-

Rumūz in the Risāla Jāmiʿa

The *Risāla Jāmi* 'a (the *Comprehensive Epistle*) presents itself both as a summary of, and a commentary on, the *Rasā* 'il, purporting to explain for the initiates the most essential points of each epistle. The decipherment of symbols is naturally at the core of this approach, as the text makes clear:

[on the naming of "The Comprehensive [One]"] Since we have named this epistle "The Comprehensive [One]", we need to bring together in it the meanings of the words in a short and abridged manner. We elucidate in this epistle what we have made incomprehensible in the other epistles that have preceded it. And since we assigned to each of our epistles the custody of a particular meaning [taken] from the noble sciences and the fine wisdoms, we have reserved for each a chapter which is the objective and the purpose of the whole epistle, the epistle serving as a building for the chapter and the chapter as a foundation for the epistle. We have composed this chapter in a coded manner so that nobody can access it nor find his way to it except he who has cleaned his soul, and has modelled himself on the morals of the sages.⁶³

Although it is far from evident which parts of which specific epistles are meant to correspond to these 'cryptic chapters' of the Ikhwānian corpus, the $J\bar{a}mi$ 'a includes at least one passage that illustrates the point in a very remarkable manner. This passage is concerned with the famous animal fable from *Epistle 22*, and more particularly, with the symbolic representation of the category of domestic beasts. In *Epistle 22* domestic beasts play a major role as they embody the mistreatments inflicted by humans on animals like no other species can. At some point in the trial opposing the representatives of both sides, we learn from the jinnī sage of the tale that "the beasts will have to remain in captivity and servitude until the revolution of the conjunction has expired, and [until] the

⁶³ al-Risāla al-Jāmi 'a, ed. Ghālib, 91:

[[]في تسمية الجامعة]: ولما سمينا هذه الرسالة بالجامعة، وجب علينا أن نجمع فيها معاني القوّل بوجيز الكلاًم واختصار الوصف، ونبين فيها ما أعجمناه في غيرها من الرسائل المقدمة بين يديها. ولما أودعنا كل رسالة صنفناها في معنى يختص بها من العلوم الشريفة والحكم اللطيفة، جعلنا فيها فصلاً هو الغرض والمراد من الرسالة كلها، وهي مبنية عليه وهو الأساس لها، وجعلناه مرموزاً لا يكاد يطلع عليه ولا يهتدي إليه إلاً من تهذبت نفسه، وتخلقت بأخلاق الحكماء.

In the citation, it is certainly worth emphasizing on the use of *a jama*, a verbal form frequently associated with the obscure and unintelligible language of barbarian peoples, since it clearly reveals a deliberate design to write cryptically.

Last Abode recommences to appear".64 The Jāmi'a explicitly identifies the suffering of domesticated animals at the hands of humans with the humiliation to which the "progeny of prophecy" (*dhurriyyat al-nubuwwa*) is currently subjected by the "armies of Iblīs" – a transparent allusion to the current situation experienced by the Ikhwan as Shī'ites. In his recent study of the $J\bar{a}mi$ a in the Judeo-Arabic manuscript tradition Ehud Krinis suggested with much plausibility that the expression *dawr al-girān* in this context might itself be a case of double reading:

on the exoteric level, the present historical cycle is referred to as 'the cycle of the (present) astrological conjunction' (dawr al-qirān) [instead of 'constellation', as Krinis translates], i.e., the age when the domesticated animals (representing the loyal Shī'īs) must remain in bondage under the rule of their oppressors. On the esoteric level, the same phrase can be understood as 'the cycle of the Qur'ān' (dawr al-qur'ān), referring to the age when the Muslim law, brought by the prophet of the present historical sequence, is valid and binding.⁶⁵

Rumūz in the Filāha Nabaţiyya

The Filāha Nabațiyya, another important source to Maslama b. Qāsim a-Qurtubī, does not discuss *rumūz* at length. The word scarcely appears and has a very general meaning in most cases. There is only one passage in which the author provides more explanations:

"Abū Bakr Ibn Wahshiyya says of all Nabateans that they do not usually speak clearly to express the meanings they declare and assert, but they encode $(varmuz\bar{u}n)$ their speech with a code about which the one who would deduce it needs to think for some time so that he might understand its meaning and that what they wanted [to say] in this [code] might appear to him.⁶⁶

⁶⁴ Rasā 'il Ikhwān al-ṣafā ', Epistle 22, ed. Goodman/McGregor, 80 (our translation): تَصير هذه البهائمُ في الأسر والعُبوديةِ إلى أن يَنقَضِيَ دورُ القِرانِ، ويستَأيْفَ نُشُوءُ الأخِرةِ.

⁶⁵ Krinis 2013: 315

⁶⁶ Fahd 1993: vol. 1, 372:

قال أبو بكر بن وحشية إن من عادة النبط كلهم أن لا يفصحون إفصاحا بينا للكلام بالمعاني التي يتكلمون بها ويعبرون عنها، بل يرمزون الكلام رمزا يحتاج المستفيد له أن يفكر فيه زمانا حتى يقف على معناه ويظهر له مرادهم فيه.

In his article on ramz,⁶⁷ Heinrichs described the use of ramz in another text attributed to Ibn Wahshiyya, *Shawq al-mustahām fī ma 'rifat rumūz al-aqlām* (the *Passionate Desire to Find out the Symbols of Scripts*).⁶⁸ In this text, the author describes various alphabets, among which are hieroglyphs that are interpreted as codes hiding occult knowledge on alchemy, magic or astrology, or information about hidden treasures. Although Maslama neither cites this work in the *Rutba*, nor in the *Ghāya*, he might have known of it since he often quotes from Ibn Waḥshiyya without naming a specific work.

Rumūz in the Corpus Jābirianum

In the Corpus Jābirianum, as we know it through those few editions that have been published, *rumūz* are not addressed in as much depth as in the *Rutba*.⁶⁹ Although the word *ramz* is abundantly present in the corpus, the concept is not defined systematically. Even if Maslama might have been influenced by some of the features of *ramz* that appear in Jābirian texts, one must still conclude that the corpus was probably not the main source for his understanding of *ramz*, in contrast to what we know of his alchemy, which appears deeply indebted to Jābirian treatises.

The Jābirian corpus is a multifarious collection of texts written by various authors. However, since Maslama regarded these texts as the works of a single alchemist, we shall here present tenets that come from different texts, irrespectively of their dates. Luckily enough, Maslama mentions a few titles belonging to the Jābirian collection, which helps us better appreciate the extent of his familiarity with the corpus. But this can also be misleading, since Maslama may have mentioned texts he did not have at his disposal, or only in part; alternatively, he may have not mentioned texts that he had in his hands.

In the Jābirian corpus, *ramz* is usually a code, ranging from a single word to an entire recipe. In the collection entitled *Kitāb al-Sab* ' $\bar{i}n$ (*Book of the Seventy*) - a collection known to Maslama⁷⁰ - *ramz* is heavily used, most commonly at the end of a sentence to indicate that this sentence is coded. In the *Kitāb al-Ḥajar* (*Book of the Stone*) - a treatise from the collection of the *Kutub*

⁶⁷ Heinrichs 1995.

⁶⁸ Edited Hammer 1806 and al-Tabbā[°] 1423/2003.

⁶⁹ For this investigation, we have searched through all the texts edited in Berthelot et al. 1893, vol. 3; Holmyard 1928; Kraus 1935; Lory 1988; al-Mazīdī 2006.

⁷⁰ Rutbat al-hakīm, ed. Madelung, 173.

Khamsumi'a (the *Five Hundred Books*) which Maslama quotes⁷¹ - in the *Kitāb al-Īdāḥ* (the *Book of Elucidation*) - a text from the collection of the 'Ashara Kutub Mudāfa ilā al-Sab'īn (the Ten Books Attached to the Book of the Seventy) which was also known to Maslama⁷² - and in the *Kitāb al-ʿAshara* (the Book of the Ten) - a text of the *Kitāb al-Sab'īn* - ramz is described as a way to turn people who are not alchemists, who are ignorant, away from the path of truth which will be reached by the deserving.⁷³ Although it does not limit *ramz* to designate, as with Maslama, either the stone or the operation, the author of the *Kitāb al-Sab'īn* - insist that *ramz* is used by sages to denote the stone.⁷⁴ Furthermore, in *Kitāb al-Lāhūt* (the Book of Divinity), a treatise of the *Kitāb al-Sab'īn*, we read that the stone is described according to a name which refers to certain aspects of the stone.⁷⁵

Another device commonly used in the Jābirian corpus to hide information is the famous *tabdīd al-`ilm*, the dispersion of science,⁷⁶ a technique which Maslama also mentions.⁷⁷ At times Maslama seems, tacitly, to oppose Jābir b. Ḥayyān. Indeed, Maslama dismisses the idea that *ramz* may have different levels: a close *ramz* (*ba'īd*); a middle *ramz* (*mutawassit*); and a distant *ramz* (*ba'īd*).⁷⁸ These expressions are often found in Jābirian texts.⁷⁹

Conclusion

On the basis of the above, it is possible to identify a characteristic of *ramz* which is present throughout the texts that we have studied: all of the selected authors consider code a device deliberately used by philosophers, prophets or alchemists in order to hide their knowledge from the ignorant and a touchstone intended to distinguish the intelligent. The code is reserved for an elite,

⁷¹ Rutbat al-hakīm, ed. Madelung, 173.

⁷² *Rutbat al-hakīm*, ed. Madelung, 173.

⁷³ Kitāb al-Hajar, ed. Holmyard, 33; Kitāb al-Īdāh, ed. Holmyard, 51; Kitāb al- Ashara, ed. Lory, 94.

⁷⁴ *Kitāb al-Hajar*, ed. Holmyard, 33–32; *Kitāb al-Munā*, ed. Lory, 52.

⁷⁵ *Kitāb al-Lāhūt*, ed. Lory, 10.

⁷⁶ Kraus 1942–1943: vol. 1, XXVII–XXX.

⁷⁷ *Rutbat al-hakīm*, ed. Madelung, 40.

⁷⁸ Rutbat al-hakīm, ed. Madelung, 128.

⁷⁹ In the *Kitāb al-Zi'baq al-Gharbī* (the *Book of the Occidental Mercury*) (ed. Berthelot et al. 1893, vol. 3, 188), the *Kitāb Nār al-hajar* (the *Book of the Fire of the Stone*) (ed. Berthelot et al., vol. 3, 194), the *Kitāb al-Mulk* (the *Book of Kingship*) (ed. Berthelot et al., vol. 3, 97), three of the *Kutub Khamsumi'a*, and in the *Kitāb al-Ṣifāt* (the *Book of Attributes*) (ed. Lory 1988, 80) and *Kitāb al-ʿAshara* (ed. Lory, 94–95), two texts of the *Kitāb al-Sabʿīn*.

it is the instrument of the wise to speak to the wise and to deceive the ignorant. One of these texts, however, goes beyond this simple definition which, after all, is usual in texts of an esoteric bent. Indeed, in the *Rutbat al-hakīm*, Maslama b. Qāsim al-Qurtubī produces a detailed definition of *ramz* and conceives a true typology of it. He classifies the codes according to the mode of expression (sign, speech, image), or according to their method (embellishment, occultation, revelation). He insists on their non-universal character, and on their omnipresence in the demonstrative and divine sciences. Moreover, he proposes his own key to reading the alchemical *ramz* (the stone and the operation), and argues on this subject, with supporting quotations. This rich development is not found in any of the other texts that we have examined here: with regard to *ramz*, it is not possible to link the *Rutbat al-hakīm* and the *Ghāyat al-hakīm* to any text that may have inspired them, making it plausible that this was a personal enrichment on the part of the author. This observation confirms that Maslama b. Qāsim al-Qurtubī, far from being a simple transmitter of Eastern ideas and practices to the Western Arab world, was an original and innovative milestone in the transfer of knowledge.

Bibliography

Sources

- Baffioni, Carmela (ed. and transl.) (2013): On the Natural Sciences: An Arabic Critical Edition and English Translation of Epistles 15-21. (Epistles of the Brethren of Purity). Oxford: Oxford University Press in association with The Institute of Ismaili Studies.
- Berthelot, Marcellin / Houdas, Octave Victor / Duval, Rubens (eds.) (1893): La chimie au Moyen $\hat{A}ge$. 3 vols. Paris: Imprimerie nationale.
- Al-Bustānī, Buţrus (ed.) (1957): Rasā'il Ikhwān al-şafā'. 4 vols. Beirut: Dār Ṣādir.
- Fahd, Toufic (ed.) (1993): Ibn Waḥshiyya, *Al-Filāḥa al-Nabațiya: al-tarjama al-manḥūla ilā Ibn Waḥshiyyah*. (Publications de l'Institut français de Damas; 122–124). Damascus: al-maʿhad al-ʿilmī al-faransī li-al-Dirāsāt al-ʿArabiyya.
- Ghālib, Mustafā (ed.) (s. d.): al-Risāla al-Jāmi 'a (s. d.). Beirut: Dār al-Andalus.
- Goodman, Lenn Evan / McGregor, Richard J. A. (ed. and transl.) (2012): *The Case of the Animals Versus Man Before the King of the Jinn: A Translation from the Epistles of the Brethren of Purity*. (Epistles of the Brethren of Purity). Oxford: Oxford University Press in association with The Institute of Ismaili Studies.

- Hammer, Joseph (ed. and transl.) (1806): Ibn Wahshiyya, Ancient Alphabets and Hieroglyphic Characters Explained; with an Account of the Egyptian Priests, Their Classes, Initiation, and Sacrifices. London: Printed by W. Bulmer and Co. Celveland Row, and sold by G. and W. Nicol.
- Holmyard, Eric John (ed.) (1928): The Arabic Works of Jâbir ibn Hayyân / Muşannafāt fī 'ilm alkīmiyā' li-l-hakīm Jābir ibn Hayyān al-Ṣūfī. Paris: Geuthner.
- Kraus, Paul (ed.) (1935): Jābir ibn Ḥayyān, Essai sur l'histoire des idées scientifiques dans l'Islam. Volume I, Textes choisis / Mukhtār rasā'il Jābir ibn Ḥayyān. Paris: Maisonneuve.
- Lory, Pierre (ed.) (1988): *Tadbīr al-iksīr al-a 'zam, arba' 'ashara risāla fī ṣan 'at al-kīmiyā' / L'élaboration de l'élixir suprême, Quatorze traités de Ğābir Ibn Ḥayyān sur le Grand Œuvre alchimique.* (Publications de l'Institut français de Damas; 127). Damascus: Institut français de Damas.
- Madelung, Wilferd (ed.) (2017): *The Book of the Rank of the Sage, Rutbat al-Hakīm by Maslama b. Qāsim al-Qurtubī. Arabic Text with an Introduction.* (Corpus Alchemicum Arabicum; 4). Zurich: Living Human Heritage Publications.
- Al-Masʿūdī (1283/1866): Murūj al-dhahab wa-maʿādin al-jawhar. Bulāq.
- Al-Masʿūdī (1965–1970): *Murūj al-dhahab wa-maʿādin al-jawhar*. Edited by Charles Barbier de Meynard, Abel Pavet de Courteille and Charles Pellat. Édition revue et corrigée. 3 vols. (Collection d'ouvrages orientaux). Beirut: Publications de l'Université Libanaise.
- Mayer, Toby / Netton, Ian Richard / Traboulsi, Samer F. (ed. and transl.) (2016): On Companionship and Belief: An Arabic Critical Edition and English Translation of Epistles 43-45. (Epistles of the Brethren of Purity). Oxford: Oxford University Press in association with The Institute of Ismaili Studies.
- Al-Mazīdī, Ahmad Farīd (ed.) (2006): *Jābir ibn Ḥayyān, Rasā `il Jābir ibn Ḥayyān. Thalāthūn kitāb wa-risāla*. Beirut: Dār al-kutub al- `ilmiyya.
- Pingree, David Edwin (ed.) (1986): *Maslama ibn Qāsim al-Qurțubī, Picatrix, the Latin Version of the Ghāyat al-Hakīm*. (Studies of the Warburg Institute; 39). London: Warburg Institute.
- Ritter, Hellmut (ed.) (1933): Maslama ibn Qāsim al-Qurțubī, Ghāyat al-hakīm wa-ahaqq alnatījatayn bi-al-taqdīm. (Studien der Bibliothek Warburg; 12). Leipzig: Teubner.
- Ritter, Hellmut / Plessner, Martin (transl.) (1962): "*Picatrix*": Das Ziel des Weisen, Von Pseudo-Mağrīțī. (Studies of the Warburg Institute; 27). London: Warburg Institute.
- Al-Tabbāʿ, Iyād Khālid (ed.) (1423/2003): Minhaj taḥqīq al-makhṭūṭāt wa-maʿahu Kitāb Shawq al-mustahām fī maʿrifat rumūz al-aqlām li-Ibn Waḥshiyya al-Nabaṭī. Cairo: Dār al-fikr.
- Yamamoto, Keiji / Burnett, Charles (eds.) (2000): Abū Ma 'shar on Historical Astrology: The Book of Religions and Dynasties (On Great Conjunctions). Volume 1. The Arabic Original: Abū Ma 'shar, Kitāb al-Milal wa-d-Duwal (The Book of Religions and Dynasties). 2 vols. (Islamic Philosophy, Theology and Science; 33-34). Leiden: Brill.

Secondary Literature

- Abbot, Nabia (1949): "A Ninth-Century Fragment of the "Thousand Nights" New Light on the Early History of the Arabian Nights". *Journal of Near Eastern Studies* 8.3: 12-164.
- Boudet, Jean-Patrice / Coulon, Jean-Charles (2017): "La version arabe (*Ghāyat al-hakīm*) et la version latine du *Picatrix*. Points communs et divergences". *Cahiers de recherches médiévales et humanistes / Journal of Medieval and Humanistic Studies* 33: 67–101.
- Burnett, Charles (2017): "Magic in the Court of Alfonso el Sabio: The Latin Translation of the Ghāyat al-Hakīm". In: De Frédéric II à Rodolphe II: Astrologie, divination et magie dans les cours (XIII^e-XVII^e siècle). Edited by Jean-Patrice Boudet, Martine Ostorero, and Agostino Paravicini Bagliani. (Micrologus library; 85). Firenze: Sismel Edizioni del Galluzzo, 37–52.
- Callataÿ, Godefroid de (2004): "Sacredness and Esotericism in the *Rasā`il Ikhwān al-Ṣafā*". In: *Al-Kitāb. La sacralité du texte dans le monde de l'Islam: Actes du symposium international tenu à Leuven et Louvain-la-Neuve du 29 mai au 1 juin 2002*. Edited by Godefroid d. Callataÿ, Daniel De Smet, and Jan Van Reeth. (Orientalia Belgica. Subsidia; 3). Bruxelles: Société belge d'études orientales, 389–401.
- Callataÿ, Godefroid de (2013): "Magia en al-Andalus: *Rasā`il Ijwān al-Ṣafā`, Rutbat al-Ḥakīm* y *Gāyat al-Ḥakīm (Picatrix)*". *Al-Qanțara* 34.2: 297–343.
- Callataÿ, Godefroid de (2014–2015): "From Ibn Masarra to Ibn 'Arabī: References, Shibboleths and Other Subtle Allusions to the *Rasā`il Ikhwān al-Ṣafā`* in the Literature of al-Andalus". In: *Labor limae: Atti in onore di Carmela Baffioni*. Edited by Antonella Straface, Carlo de Angelo and Andrea Manzo. 2 vols. (Studi Magrebini, nuova serie; 12–13). Napoli: Centro di Studi Magrebini, 217–267.
- Callataÿ, Godefroid de (2018): "'For Those with Eyes to See': On the Hidden Meaning of the Animal Fable in the *Rasā`il Ikhwān Al-Ṣafā*". *Journal of Islamic Studies* 29.3: 357–391.
- Callataÿ, Godefroid de (forthcoming): "Rutba vs Ġāya: A Reconsideration of the Impact of the *Rasā`il Ihwān al-Ṣafā`* on Maslama b. Qāsim al-Qurtubī". *Arabica*.
- Callataÿ, Godefroid de / Halflants, Bruno / Moureau, Sébastien (forthcoming): *On Magic. 2: An Arabic Critical Edition and English Translation of Epistle 52B.* (Epistles of the Brethren of Purity). Oxford: Oxford University Press in association with The Institute of Ismaili Studies.
- Callataÿ, Godefroid de / Moureau, Sébastien (2015): "Towards the Critical Edition of the *Rutbat al-ḥakīm*: A Few Preliminary Observations". *Arabica* 62:385–94.
- Callataÿ, Godefroid de / Moureau, Sébastien (2016): "Again on Maslama Ibn Qāsim al-Qurțubī, the Ikhwān al-Ṣafā'... and Ibn Khaldūn: New Evidence from Two Manuscripts of the *Rutbat al-ḥakīm*". *Al-Qanțara* 37.2: 329–372.
- Callataÿ, Godefroid de / Moureau, Sébastien (2017): "A Milestone in the History of Andalusī Bāținism: Maslama b. Qāsim al-Qurțubī's *Riḥla* in the East". *Intellectual History of the Islamicate World* 5.1-2: 86–117.

- Fierro, Maribel (1996): "Bāținism in Al-Andalus. Maslama B. Qāsim Al-Qurțubī (D. 353/964), Author of the *Rutbat Al-Ḥakīm* and the *Ghāyat Al-Ḥakīm (Picatrix)*". *Studia Islamica* 84.2: 87–112.
- Hämeen-Anttila, Jaakko (1999): "Ibn Waḥshiyya and Magic". *Anaquel de Estudios Árabes* 10: 39–48.
- Hämeen-Anttila, Jaakko (2006): *The Last Pagans of Iraq. Ibn Wahshiyya and His Nabatean Agriculture*. (Islamic History and Civilization, Studies and Texts; 63). Leiden: Brill.
- Hämeen-Anttila, Jaakko (2011): "The Nabatean Agriculture: Authenticity, Textual History and Analysis". In: Islamic Medical and Scientific Tradition: Critical Concepts in Islamic Studies. Vol. 4. Edited by Peter Pormann. London, New York: Routledge, 249–280.
- Heinrichs, Wolfhart P. (1995): "Ramz". In: *The Encyclopaedia of Islam. New Edition*. Edited by C. E. Bosworth et al. Vol. 8. Leiden: Brill, 426–428.
- Kacimi, Mourad (2013): "Nuevos datos sobre la autoría de la *Rutbat al-hakīm* y la *Gāyat al-hakīm* (o *Picatrix*)". *eHumanista/IVITRA* 4: 237–256.
- Kraus, Paul (1942–1943): *Jābir ibn Ḥayyān, contribution à l'histoire des idées scientifiques dans l'Islam.* 2 vols. (Mémoires présentés à l'Institut d'Égypte; 44–45). Le Caire: Institut français d'archéologie orientale.
- Krinis, Ehud (2013): "*Al-Risāla al-Jāmi*'a and Its Judeo-Arabic Manuscript". In: *Islam: Identité et altérité: Hommage à Guy Monnot*. Edited by Mohammad A. Amir-Moezzi. (Bibliothèque de l'École des hautes études, Sciences religieuses Histoire et prosopographie de la Section des Sciences Religieuses; 11). Turnhout: Brepols, 311–329.
- Madelung, Wilferd (2014–2015): "Maslama al-Qurtubī's Contribution to the Shaping of the Encyclopedia of the Ikhwān al-Ṣafā'". In: *Labor limae: Atti in onore di Carmela Baffioni*. Edited by Antonella Straface, Carlo de Angelo and Andrea Manzo. 2 vols. (Studi Magrebini, nuova serie; 12–13). Napoli: Centro di Studi Magrebini, 403–417.
- Marquet, Yves (1988): La philosophie des alchimistes et l'alchimie des philosophes. Jābir Ibn Hayyān et les "Frères de la Pureté". (Islam d'hier et d'aujourd'hui; 31). Paris: Maisonneuve et Larose.
- Michot, Yahya Jean (2000): "Ibn Taymiyya on Astrology. Annotated Translation of Three Fatwas". *Journal of Islamic Studies* 11.2: 147–208.
- Travaglia, Pinella (2009): "Il *Libro della Agricoltura Nabatea* nella tradizione agronomica andalusa". *Al-Qanțara* 30.2: 535–555.
- Zakeri, Mohsen (1995): "Sahl b. Hārūn b. Rāhawayh". In: *The Encyclopaedia of Islam. New Edition*. Edited by C. E. Bosworth et al. Vol. 8. Leiden: Brill, 838-840.