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# Alchemical *tafs#r*: Qur'anic Hermeneutics in the Works of the Twelfth-Century Moroccan Alchemist Ibn Arfa' Ra's

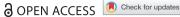
#### Richard Todd

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## Alchemical tafsīr: Our'anic Hermeneutics in the Works of the Twelfth-Century Moroccan Alchemist Ibn Arfa<sup>c</sup> Ra<sup>c</sup>s

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#### **ABSTRACT**

Beside the codenames and esoteric symbols inherited from Graeco-Egyptian antiquity, the later Arabic alchemical tradition also adopted motifs drawn from the Qur'an: from the blessed olive tree of the famous Light Verse (Q 24.35) to the burning bush and Moses' staff. This interweaving of scripture and alchemical theory is especially noticeable in one of the major works of the post-Jābirian corpus, Shudhūr al-dhahab (Shards of Gold) by the Moroccan poet Ibn Arfa' Ra's (fl. sixth/twelfth century), as well as in Ibn Arfa' Ra's's self-penned commentary, Hall mushkilāt al-Shudhūr (The Solution to the Obscurities in the 'Shards').

But was the use of such motifs simply a literary device or did Ibn Arfa' Ra's claim to discern a hidden alchemical meaning embedded in the gur'anic text? Focusing on this unexplored strand of the Islamic exegetical tradition, this article examines the premises put forward by Ibn Arfa<sup>c</sup> Ra<sup>c</sup>s in support of an alchemical reading of scripture.

#### ARTICLE HISTORY

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#### **KEYWORDS**

Arabic alchemy; Qur'an; tafsīr; esoteric hermeneutics; sufism; Ibn Arfa' Ra's

Además de estas cosas, Melquíades dejó muestras de los siete metales correspondientes a los siete planetas, las formulas de Moisés y Zósimo para el doblado del oro, y una serie de apuntes y dibujos sobre los procesos del Gran Magisterio, que permitían a quien supiera interpretarlos intentar la fabricación de la piedra filosofal.<sup>1</sup>

#### Introduction

Composed by the Moroccan poet of Andalusian origin Ibn Arfa' Ra's (fl. sixth/twelfth century), Shudhūr al-dhahab (Shards of Gold) is a dīwān of alchemical verse that has traditionally been regarded as one of the most important and influential works in the Arabic alchemical corpus.<sup>3</sup> Prized as much for its poetic form as for its theoretical content, the

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<sup>1</sup>García Márquez, Cien años de soledad, 86–7.

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<sup>&</sup>lt;sup>2</sup>On the relatively little that is known about Ibn Arfa<sup>c</sup> Ra<sup>2</sup>s's life, see Forster and Müller, 'Identity, Life, and Works'; Todd, 'Alchemical Poetry'.

<sup>&</sup>lt;sup>3</sup>See, for example, al-Jildakī (d. 743/1342 [?]), *Kitāb al-Miṣbāḥ*, fols 3b–4a; Ibn Khaldūn, *Muqaddimat Ibn Khaldūn*, 1227; English trans.: Ibn Khaldūn, Mugaddimah, 3: 269.

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Shudhūr has received plaudits from alchemists and non-alchemists alike. Indeed, severe critic of alchemy though he was, the celebrated Muslim historian Ibn Khaldūn (d. 808/ 1406) famously described the Shudhūr as 'some of the most wonderfully innovative poetry ever written, despite its consisting of incomprehensible riddles and enigmas'.<sup>5</sup>

In addition to its general theoretical and literary standing, the Shudhūr also marks a key development in the Islamization of Arabic alchemy's symbolism and conceptual apparatus. Whilst still heavily reliant on the rumūz or symbols, and their associated mythology, which the Arabic tradition inherited from alchemy's Graeco-Egyptian and Byzantine past, Ibn Arfa' Ra's takes the novel step of adding to this repertoire a new set of motifs drawn from the Qur'an. Like the established rumūz, these qur'anic motifs are intended to serve both as codenames and as symbolic emblems of chemical substances and processes, at once hiding alchemy's secrets from the uninitiated whilst revealing them to the adepts of the art.

#### **Qur'anic motifs in Shudhūr al-dhahab**

Interspersed among the traditional alchemical symbols that populate Ibn Arfa' Ra's's poetic landscape – such as the king, wolf, dog, eagle, dove, dove, crow, and dragon are - are numerous references to the qur'anic 'hallowed valley', 13 the 'blessed olive tree', 14 Moses' staff, 15 and the 'tree on Mount Sinai that bears oil and a seasoning/tincture'. 16 Often such emblems are cited individually: the hallowed valley (al-wādī al-muqaddas), for example, from which, in the qur'anic narrative, Moses first perceives the burning bush, 17 makes several isolated appearances throughout the Shudhūr. 18 Thus, in the  $h\bar{a}$ ivva or ode with the rhyming letter  $h\bar{a}$ , our author writes:

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On the Eastern side is a holy valley.
Quenched by the tears of rain, its pastures smile. 19
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At times, as in the following verses from the khā'iyya, the hallowed valley is cited in conjunction with the qur'anic tree that bears duhn (oil) and sibgh (seasoning/tincture), <sup>20</sup> two terms - as we shall see - that play a fundamental role in Ibn Arfaʿ Raʾsʾs alchemical

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<sup>4</sup>See al-Kutubī, Fawāt al-wafāvāt, 2: 181.
<sup>5</sup>lbn Khaldūn, Muqaddimat Ibn Khaldūn, 1198; English trans.: Ibn Khaldūn, Muqaddimah, 3: 229.
<sup>6</sup>Ibn Arfa<sup>c</sup> Ra<sup>c</sup>s, Shudhūr, p. 112 (poem 6, line 1).
<sup>7</sup>lbid., 132 (poem 9, line 37), 211 (poem 27, line 12).
<sup>8</sup>Ibid.,132, (poem 9, line 37), 211 (poem 27, line 12).
<sup>9</sup>lbid., 103 (poem 4, line 17).
<sup>10</sup>lbid., 103 (poem 4, line 16), 260 (poem 35, line 23), 279 (poem 40, line 30).
<sup>11</sup>lbid., 103 (poem 4, line 16), 116 (poem 7, line 8).
<sup>12</sup>lbid., 135 (poem 10, line 16), 211 (poem 27, line 9), 279 (poem 40, line 31).
<sup>13</sup>Q 28.30.
<sup>14</sup>O 24.35.
<sup>15</sup>Q 20.18; 28.31.
<sup>16</sup>Q 23.20.
<sup>17</sup>Q 20.10–12; 28.30.
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<sup>&</sup>lt;sup>18</sup>Ibn Arfa<sup>c</sup> Ra<sup>c</sup>s, *Shudhūr*, 106 (poem 5, line 8), 134 (poem 10, line 2), 188 (poem 23, line 5), 278 (poem 40, line 26). In his major commentary on the Shudhūr, the prominent fourteenth-century alchemist Aydamir al-Jildakī interprets the hallowed valley as a coded reference to the purified matter at the bottom of the cucurbit or alchemical vessel. See al-Jildakī, Ghāvat al-surūr, fol. 149a. On al-Jildakī, see Forster and Müller, 'al-Jildakī'; Harris, 'In Search of 'Izz al-Dīn'. <sup>19</sup>Ibn Arfa<sup>c</sup> Ra<sup>2</sup>s, *Shudhūr*, 278 (poem 40, line 26).

All translations of Arabic texts are my own unless stated وفي الجانب الشرقي واد مقدّس سقاه الحيا دمعا فاضحك مرعاه otherwise.

<sup>&</sup>lt;sup>20</sup>The tafsīr tradition tends to interpret the term sibgh in this context (Q 23.20) as something into which bread is 'dipped' or 'immersed' – immersion being comprised in the root meaning of the verb in question, which is why it is also used to

theory, denoting solutions that contain the elements air and fire, respectively. Noteworthy in this regard is Ibn Arfa Ra's's tendency to conflate this tree with the burning bush.

Ours is a deep-rooted tree on Mount Sinai, Its branches rising above its heights. Its fire shines from the holy valley, Seen for parasangs by seekers of light.<sup>21</sup>

Occasionally, however, the various scriptural motifs are woven together to form extended allegories, as exemplified, most notably, by the opening verses of the  $t\bar{a}^2iyya$ , in which our poet casts himself in the guise of the prophet Moses:

We prospered and grew rich by virtue of The blessed middle olive tree of oil. For neither wormwood nor for arak would we trade<sup>22</sup> The tree whose fire was flickering above The Mount while we were seeking it below. We came to it, our patience worn through toil, So arduous the journey we had made, And took a brand reserved for those who know Expansive joy and soul-constricting sorrow. Then by the holy valley we returned, Descending by the West side of its hollow. So fragrant was its perfume we would say That in our hand a staff of incense burned. We cast the staff into its shade and lo! A spotted serpent slithering away.<sup>23</sup>

Many, therefore, of the qur'anic motifs in the Shudhūr relate to the story of Moses, a figure who had long been portrayed as a master alchemist, not only in the literature of the early Arabic alchemical tradition but in that of the Graeco-Egyptian tradition too.<sup>24</sup> In the Shudhūr's Mosaic motifs, then, there remain, admittedly, echoes of alchemy's Late Antique heritage. However, what makes Ibn Arfa' Ra's's invocation of the figure of Moses different from that of his predecessors in the Muslim world - such as the anonymous author of the Turba Philosophorum (Mushaf al-jamā'a), a wellknown early Abbasid pseudepigraphic work in which Moses appears alongside a

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denote baptism. By extension, sibgh also means 'dye' or 'tincture'. It is in this sense that the term is used in the Jābirian
corpus (see infra, n. 90); and it is this sense in particular that Ibn Arfa' Ra's seems to be interpreting it.
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غنينا فلم نبدل بها الشيح والخمطا
                                    بزيتونة الدهن المباركة الوسطى
تشب لنا وهنا ونحن بدي الارطا
                                    صفونا فانسنا من الطور نارها
على السير من بعد المسافة ما اشتطا
                                         فلما اتيناها وقرب صبرنا
من الناس من لا يعرف القبض والبسطا
                                            نحاول منها جذوة لا ينالها
                                      هبطنا من الواد المقدس شاطئا
الى الجانب الغربي نمتثل الشرطا
لطيب شذاها تحرق العود والقسطا
                                       وقد ارج الارجاء منها كانها
اذا هي تسعى بيننا حية رقطا
                                  وقمنًا فالقينا العصا في ظلالها
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<sup>&</sup>lt;sup>21</sup>Ibn Arfa<sup>c</sup> Ra<sup>2</sup>s, *Shudhūr*, 134 (poem 10, lines 1–2). وفوق ذراه الشم منها شمارخ لنا شجر من طور سيناء راسخ ومُن دُونها للمستضيء فراسخ يضيء من الوادي المقدس نارها

<sup>&</sup>lt;sup>22</sup>Like olive oil, wormwood (shīḥ) and arak (ārāk or khamṭ) have been commonly used in the Muslim world for their medicinal qualities, as an antiparasitic and for dental hygiene, respectively.

<sup>&</sup>lt;sup>23</sup>Ibn Arfa<sup>c</sup> Ra<sup>2</sup>s, *Shudhūr*, 188 (poem 23, lines 1–7).

The imagery of the fire on the Mount, the holy valley, the burning brand, the staff, and the serpent is based chiefly on Q 20.9-20; 28.29-31.

<sup>&</sup>lt;sup>24</sup>See Patai, Jewish Alchemists, 31.

coterie of Greek philosophers<sup>25</sup> – is his adoption of terms and phrases drawn specifically from the text of the Qur'an.

Having briefly taken stock of these scriptural elements, the following questions naturally arise: how exactly does Ibn Arfa' Ra's conceive of the relationship between qur'anic symbol and alchemical theory? Are the scriptural motifs simply literary devices, chosen arbitrarily, or does our poet envisage a deeper connection between the qur'anic text and the art of transmutation? And if the latter, does his engagement with scripture constitute a form of exegesis or tafsīr? If we restrict ourselves, for the time being at least, to the internal evidence of the Shudhūr alone (as distinct from its commentaries), the response to these questions is not entirely clear cut.

On the one hand, there is reason to venture that Ibn Arfa' Ra's, in search of an apt metaphor, simply chose the qur'anic motifs arbitrarily, and put them to allegorical use in much the same way as he did elsewhere in the Shudhūr with the stock imagery and tropes of pre-Islamic poetry, especially the atlāl or abandoned encampment motif, which features in the *nasīb* or conventional prelude to the pre-Islamic Arabic ode, and which Ibn Arfa' Ra's uses to symbolize the alchemical processes of putrefaction and distillation. 26 After all, since his appropriation of nasīb motifs is undoubtedly a purely literary device, without any serious suggestion of an intrinsic bond between deserted Bedouin encampments and the alchemical opus, one might surmise, based only on the evidence in the Shudhūr, that this is true of his adoption of scriptural emblems as well.

In this respect, moreover, it is also worth recalling that qur'anic allusions (talmīh) or direct quotations (tadmīn) were an established part of the set of stylistic embellishments known as badī (stylistic innovation),<sup>27</sup> the use of which is a characteristic feature of Ibn Arfa' Ra's's poetry. 28 Indeed, just as classical Arabic poetry's greatest exponent of badī', Abū al-Tayyib al-Mutanabbī (d. 354/965), had famously likened himself, in one of his verses, to the qur'anic prophet Sālih, 29 so Ibn Arfa' Ra's likens himself to Moses in the tā'iyya section of the Shudhūr; and on this score it is noticeable that in his biographical entry on Ibn Arfa' Ra's in the Fawāt al-wafāyāt, Ibn Shākir al-Kutubī (d. 764/1363) not only singles out this allegorical use of the qur'anic story of Moses as compelling evidence of Ibn Arfa' Ra's's poetic mastery, but does so without any hint of disapproval at the poet's audacity (a common feature of Arabic poetic licence) or any suggestion that the scriptural references should be read as anything other than a literary device.<sup>30</sup>

On the other hand, though the *Shudhūr* does not explicitly identify scripture per se as a source of alchemical doctrine, it does clearly identify qur'anic and biblical prophets, from Adam and Seth to Noah and Idrīs, as the custodians par excellence of alchemical knowledge:

This is Adam's [alchemical] preparation, In essence, summed up by a master poet.<sup>31</sup>

<sup>&</sup>lt;sup>25</sup>See Waite, *The* Turba philosophorum, 138 (44th dictum). On the *Turba philosophorum*, see Plessner, 'Place of the *Turba* philosophorum'.

<sup>&</sup>lt;sup>26</sup>See Todd, 'Classical Poetic Motifs', 668–75.

<sup>&</sup>lt;sup>27</sup>On badī', see Arberry, Arabic Poetry, 21–6; van Gelder, 'Badī'.

<sup>&</sup>lt;sup>28</sup>See Todd, 'Classical Poetic Motifs', 679–80.

<sup>&</sup>lt;sup>29</sup>See al-Mutanabbī, *Al-ʿUrf al-ṭayyib*, 3: 8.

<sup>&</sup>lt;sup>30</sup>See al-Kutubī, *Fawāt al-wafāyāt*, 2: 181.

<sup>&</sup>lt;sup>31</sup>Ibn Arfa<sup>c</sup> Ra<sup>2</sup>s, *Shudhūr*, 262 (poem 35, line 46). باوضح ايجاز لافصح ناظم فهذا على الاجمال تدبير ادم



This is the preparation and the stone Bequeathed to us by Noah, Idrīs, and Fāligh. 32

And the *Shudhūr* also makes the very general claim – in conscious imitation of the Abbasid poet Abū al-'Atāhiya's (d. 211/826) famous verse declaring the ubiquitous evidence of God's oneness<sup>33</sup> – that all things (and hence, presumably, the Qur'an included) betoken the art in some way:

In everything the art has a sign Bearing witness to the art When summoned by the mind.<sup>34</sup>

#### Alchemical tafsīr in Ḥall mushkilāt al-Shudhūr

On balance, therefore – and these latter considerations notwithstanding – the *Shudhūr* itself does not provide a definitive answer to the question of whether Ibn Arfa' Ra's saw a hidden alchemical sense *embedded* in the qur'anic text. Fortunately, the *Shudhūr* is not the only source to which we may turn in this regard. Among the many commentaries to which the *Shudhūr* has given rise is one, entitled *Ḥall mushkilāt al-Shudhūr* (*Solution to the Shudhūr's Obscurities*), that is by Ibn Arfa' Ra's himself, though it takes the form of a dialogue with his student, a certain Abū al-Qāsim al-Anṣārī. Although there have been grounds in the past to doubt its authorship (no extant manuscript of *Ḥall mushkilāt*, for instance, dates from earlier than the seventeenth century), recent exhaustive research by Juliane Müller and Regula Forster – who have identified a clearly recognizable reference to Ibn Arfa' Ra's's commentary in the writings of the thirteenth-century alchemist al-Sīmāwī<sup>35</sup> – has convincingly tipped the weight of evidence in favour of *Ḥall mushkilāt*'s authenticity, making it an invaluable witness to Ibn Arfa' Ra's's engagement with scripture as well as to the intellectual processes behind his poetry more generally.

Not only does  $Hall\ mushkilat$  shed light on the alchemical meanings concealed beneath the  $Shudh\bar{u}r$ 's scriptural motifs, but it also affirms – in some instances at least – that such meanings are intrinsic to the qur'anic terms in question. Indeed, in his commentary Ibn Arfa' Ra's's alchemical reading of scripture extends well beyond the individual emblems included in his poetry to cover entire qur'anic passages and, in one case, as we shall see, a whole sura. As for the grounds on which such interpretations are justified, our author returns to the idea, expressed in the  $Shudh\bar{u}r$ , that all things betoken the art in some way. Thus, in the preamble to his verse-by-verse exegesis of  $S\bar{u}rat\ al-Rahm\bar{u}n$  (Q 55), he writes:

Read *Sūrat al-Raḥmān* and the Divine Truth (*ḥaqq*) will appear to you (*yatajallā ʿalayka*), and [the guardian angel of paradise] Riḍwān will open for you the gates to the [heavenly] gardens. This takes the form of your being adorned with these [philosophical] sciences

<sup>&</sup>lt;sup>32</sup>lbid., 213 (poem 27, line 29).

فهذا هو التدبير والحجر الذي ورثناه ادريسا ونوحا وفالغا

<sup>&</sup>lt;sup>33</sup>'In everything there is a sign indicating that He is one' (*fi kulli shay`in āyatun tadullu ʿalā annahu wāḥid*). See Abū al-ʿAtāhiya, *Ashʿāruhu wa-akhbāruh*, 104.

<sup>&</sup>lt;sup>34</sup>lbn Arfa<sup>c</sup> Ra<sup>2</sup>s, *Shudhūr*, 139 (poem 12, line 4).

وفي كل شيء للصناعة اية متى استشهدتها فكرة المرء تشهدي

<sup>&</sup>lt;sup>35</sup>See Forster and Müller, 'Identity, Life and Works', 376–9.

and being beautified with all the arts ( $jam\bar{i}^c$  al- $fun\bar{u}n$ ), whereby you grasp what they [i.e. the alchemists] have said [openly] and what they have expressed symbolically ( $ramaz\bar{u}$ ) [...] All this I shall expound to you [...] and you shall understand what is intended thereby, and grasp what has been conveyed. For in everything it [i.e. alchemy] has a sign that points you to it, an idiom that expresses it, and a testament that bears witness to it, which is why it has been called both a divine wisdom and a natural art.  $^{36}$ 

In his outline, then, of the rationale for an alchemical interpretation of the qur'anic chapter in question, Ibn Arfa<sup>c</sup> Ra's alludes to a concept he expresses elsewhere in *Ḥall mushkilāt*, namely that insofar as both revealed law (*sharī a*) and nature (*ṭabī a*) are expressions of the divine wisdom that underpins and pervades God's creation, they 'do not differ from one another',<sup>37</sup> a notion that evokes the Stoic doctrine of the fundamental identity of *nomos* and *physis*.<sup>38</sup> Hence, as the vehicle of revealed law, the Qur'an is also by that very token, so our author suggests, a window on the 'mysteries (*asrār*) of nature', which include the secrets of alchemy.<sup>39</sup>

At the same time, to emphasize alchemy's religious distinction in relation to other natural sciences and arts, Ibn Arfa<sup>°</sup> Ra<sup>°</sup>s expands, in *Ḥall mushkilāt*, on a doctrine we have already encountered in the *Shudhūr*, namely the idea that alchemy has a special connection with the biblical and qur'anic prophets, a claim often made in Arabic alchemical literature. <sup>40</sup> Originally revealed to Adam through divine inspiration (*waḥy*), as a sort of consolation for his banishment from paradise, the secrets of alchemy – and in particular the crucial roles assigned to mercury and sulphur <sup>41</sup> – were inherited, so we are told, by Adam's son Seth <sup>42</sup> and were then passed down through the generations. <sup>43</sup> Ibn Arfa<sup>°</sup> Ra<sup>°</sup>s writes:

Adam, peace be upon him, [...] was the first to be inspired with this wisdom, [this] hidden art, and matchless pearl, which only the few attain. For when He, the Sublime and Transcendent, cast Adam down from the garden [of paradise] He substituted by way of recompense everything [that Adam had lost]; and among all that [God] substituted for him was knowledge of the art.<sup>44</sup>

This, however, according to our author, is not to say that alchemy was transmitted to mankind as a whole without restriction. On the contrary, Ibn Arfa' Ra's is keen to stress alchemy's esoteric character – a character, moreover, that he appears to ascribe to any wisdom (*ḥikma*) truly worthy of the name:

44Ibn Arfa' Ra's, Hall mushkilāt, fol. 59b

<sup>&</sup>lt;sup>36</sup>lbn Arfaʿ Raʾs, *Ḥall mushkilāt*, fol. 77b. Juliane Müller has recently prepared a critical edition of *Ḥall mushkilāt*. See lbn Arfaʿ Raʾs, *Kitāb Ḥall mushkilāt al-Shudhūr*. *In the transmission of Abū al-Qāsim Muhammad b. ʿAbd Allāh al-Ansārī*.

<sup>&</sup>lt;sup>37</sup>Ibn Arfa<sup>c</sup> Ra<sup>c</sup>s, *Hall mushkilāt*, fol. 22b.

<sup>&</sup>lt;sup>38</sup>For more on the Stoic conception of natural law, see Horowitz, 'Stoic Synthesis'.

<sup>&</sup>lt;sup>39</sup>See Ibn Arfa<sup>c</sup> Ra<sup>2</sup>s, *Hall mushkilāt*, fols 22b, 76b.

<sup>&</sup>lt;sup>40</sup>See, for example, Ibn Umayl, 'Three Arabic Treatises', 103; al-Tughrā'ī, *Kitāb Mafātīḥ al-raḥma*, fols 27b–28a.

<sup>&</sup>lt;sup>41</sup>See Ibn Arfa<sup>c</sup> Ra<sup>c</sup>s, *Hall mushkilāt*, fol. 59b.

<sup>&</sup>lt;sup>42</sup>See Ibid.

<sup>&</sup>lt;sup>43</sup>As with Moses, the alchemical tradition has tended to portray Solomon as a master alchemist too. Seeing confirmation of this in the text of the Qur'an, Ibn Arfa<sup>c</sup> Ra<sup>c</sup>s writes: 'Narrating the story of Solomon – upon whom be peace – [God] Most High has said: "And We made the source of dripping [metal] to flow for him" [Q 34.12]. The "source" ('ayn) is gold, and the "dripping [metal]" (qitr) is molten copper (al-nuhās al-mudhāb), which is magnesia; for they have said that the semblance of copper is like unto a human being that has a spirit, soul and body. So, understand these testimonies and be attentive' (Ibn Arfa<sup>c</sup> Ra<sup>c</sup>s, Hall mushkilāt, fol. 68a). For an example of Solomon's inclusion in the list of prophet-alchemists, see the Kitāb Mafātih al-raḥma (The Book of the Keys of Mercy) by the renowned twelfth-century Seljuk vizier and poet, Mu'ayyad al-Dīn al-Tughra<sup>c</sup>ī (d. 515/1121) (al-Tughra<sup>c</sup>ĭ, Kitāb Mafātih al-raḥma, fol. 28a).

Such is the story of our father Adam – peace and blessing be upon him – as told by the throng ( $jam\bar{a}'a$ ) [of alchemist-philosophers]. I have expounded and interpreted it for you. The origin, therefore, of this science was [divine] inspiration (wahy), whereafter it was taken up and discussed by people. On account of its nobility (sharaf) and great value, the folk (qawm) [i.e. the alchemist-philosophers] kept it secret ( $tak\bar{a}tamahu$ ), such that it became a [form of esoteric] wisdom (fa- $s\bar{a}ra$  hikmatan) as it was found among none but the few ( $afr\bar{a}d$  al- $n\bar{a}s$ ). Indeed, were it to be known and understood by everyone, it would thereby fall outside [the category of] wisdom, like all [commonplace] things made current among people.

As for the few who have succeeded in gaining access to alchemy's mysteries, Ibn Arfa' Ra's reports that the *qawm* or tribe – a term he uses to denote the alchemists in general – have traditionally proposed different theories regarding the ways in which this is possible, ranging from an unsolicited divine favour (or in some cases a curse) to a propitious spiritual disposition. He writes:

The folk have differed over its nature and how it is possible to attain it. Some have said, 'It is a miracle ( $kar\bar{a}ma$ ) from God the Sublime through which God ennobles whomsoever He wills from among His creation and provides sustenance to whomsoever He wishes from among His servants.' [Similarly] it has been said that it is His gift – Sublime is He – which He grants to whomsoever He wills, either as a boon ( $ni^*ma$ ) or by way of vengeance (niqma). Others have said, 'It is the preserve of the prophets ( $anbiy\bar{a}$ ') and whoever most resembles them among those characterized by a spiritual nature ( $r\bar{u}h\bar{a}niyya$ )', which is why whoever acquires it is called a sage ( $hak\bar{i}m$ ). It is for this reason, too, that the person who attains it, and acts through it, is usually a pneumatic ( $r\bar{u}h\bar{a}n\bar{i}$ ) who professes the doctrine of resurrection and afterlife affirmed by all other religious communities (milal) and religions. <sup>46</sup>

The idea that alchemy is especially suited to the category of individuals that Christian Gnosticism classified as 'pneumatics' – or those in whom spirituality prevails over attachment to the material world – is one to which Ibn Arfa' Ra's returns when discussing what he deems to be the two basic ways of acquiring alchemical knowledge and of obtaining the elixir. The first such approach, so he asserts in *Ḥall mushkilāt*, is essentially spiritual and relies on *kashf* or mystical 'unveiling', <sup>48</sup> a concept that has traditionally played a key role in Sufism. <sup>49</sup> Ibn Arfa' Ra's suggests, however, that, while this method may have been common in earlier times, it has become too difficult for the alchemists of his epoch. <sup>50</sup> Hence, he favours instead the second approach, that of *ḥikma* or philosophical study, <sup>51</sup> which involves a preparatory grounding in the medieval curriculum of arts and sciences, from mathematics and astrology to medicine and metaphysics. <sup>52</sup>

<sup>&</sup>lt;sup>45</sup>lbid., fol. 61a.

<sup>&</sup>lt;sup>46</sup>Ibn Arfa' Ra's, *Ḥall mushkilāt*, fol. 61a.

<sup>&</sup>lt;sup>47</sup>The influence of Gnosticism is evident in the works of one of the earliest authorities in the canon of alchemical literature, Zosimos of Panopolis (third/fourth century CE), a figure often invoked by Ibn Arfa Ra's in Hall mushkilāt. On Zosimos, see Principe, Secrets of Alchemy, 15–21. See also Sherwood Taylor, 'Visions of Zosimos'; Mertens, Zosime de Panopolis.

<sup>&</sup>lt;sup>48</sup>See Ibn Arfa' Ra's, *Hall mushkilāt*, fol. 75b.

<sup>&</sup>lt;sup>49</sup>On the concept of 'unveiling' and its significance in Sufism, see Gardet, 'Kashf'.

<sup>&</sup>lt;sup>50</sup>See Ibn Arfa<sup>c</sup> Ra<sup>c</sup>s, *Hall mushkilāt*, fols 75b–76a.

<sup>&</sup>lt;sup>51</sup>On the use, from the twelfth century onwards, of the term *hikma* as a label for a post-classical fusion of Islamic philosophy and theology, see Griffel, *Formation of Post-Classical Philosophy*.

<sup>&</sup>lt;sup>52</sup>See lbn Arfa' Ra's, *Ḥall mushkilāt*, fols 53a, 74b–75b. On medieval Islamic classifications of physical and metaphysical sciences, see de Callataÿ, 'Encyclopaedism'; idem, 'Dividing Science'.

That said, Ibn Arfa Ra's's avowed preference for the methodology of hikma does not automatically mean that he conceives of the philosophical approach as lacking in spirituality. On the contrary, he stresses the notion that Hermes<sup>53</sup> and the ancient philosophers were able to commune with the higher spirits by abstracting themselves from the material world;<sup>54</sup> and on one occasion in Hall mushkilāt he encourages his student, Abū al-Qāsim, to emulate their meditational practices by concentrating his mind until it becomes 'pure light'.55

Nor, for that matter, does Ibn Arfa' Ra's's preference for hikma over kashf mean that his work is devoid of the influence of Sufism. In addition to quoting verses<sup>56</sup> by the celebrated Egyptian mystic Dhū al-Nūn al-Miṣrī (fl. third/ninth century),<sup>57</sup> a figure whom the Arabic alchemical tradition regarded as a master alchemist too, 58 Ibn Arfa' Ra's also employs Sufism's distinctive terminology and idioms in several passages in Hall mushkilāt – as, for example, when he refers to the 'verifiers among the folk of both philosophy and the [Sufi] way' (muhaqqiqi ahl al-hikma wa-al-tariqa),<sup>59</sup> and when he defines divine science (al-'ilm al-il $\bar{a}h\bar{i}$ ) or metaphysics as the 'science of annihilation ( $fan\bar{a}$ ') in the [divine] essence (dhāt), which is the [spiritual] station (maqām) of the perfect among the gnostics ('arifin)'.60

Eminently indicative, too, of Sufism's influence on Hall mushkilāt – and especially significant from the point of view of the present study - is the hermeneutical method on which Ibn Arfa' Ra's tends to rely when interpreting scripture in the light of alchemical theory, namely that of the ishāra or esoteric allusion, a method traditionally associated with Sufi exegesis.<sup>61</sup> Based on the premise that the outward, literal sense of the sacred text comprises subtle hints or indications that point the spiritually attentive reader to an esoteric meaning hidden beneath the exoteric surface, the ishārī method of interpretation had - by the era in which Ibn Arfa' Ra's lived and wrote - become a common feature of Sufi tafsīr, as exemplified most famously by Abū al-Qāsim al-Qushayrī's (d. 465/1072) mystical commentary, the *Latā'if al-ishārāt*.<sup>62</sup>

Ibn Arfa<sup>c</sup> Ra<sup>c</sup>s's reliance on the concept of the subtle scriptural allusion is especially evident in his commentaries (in Hall mushkilāt) on both the Light Verse and Sūrat al-Rahmān. In an exegetical style that appears to anticipate the formulaic equivalences

<sup>&</sup>lt;sup>53</sup>In *Hall mushkilāt* (fol. 30b), Ibn Arfa<sup>c</sup> Ra<sup>c</sup>s refers to Hermes as 'Hermes the prophet (*al-nabī*), peace be upon him'. As Kevin van Bladel has shown, the medieval Islamic tradition tended to equate Hermes with the qur'anic prophet Idrīs. See van Bladel, Arabic Hermes, 164-8.

<sup>&</sup>lt;sup>54</sup>See Ibn Arfa<sup>c</sup> Ra<sup>2</sup>s, Ḥall mushkilāt, fol. 61b.

<sup>&</sup>lt;sup>55</sup>lbid., fol. 56b.

<sup>&</sup>lt;sup>56</sup>See ibid., *Ḥall mushkilāt*, fol. 14a.

<sup>&</sup>lt;sup>57</sup>On Dhū l-Nūn's life and work, see Mojaddedi, 'Dhū l-Nūn al-Miṣrī'.

<sup>&</sup>lt;sup>58</sup>See, for example, Ibn Umayl, 'Three Arabic Treatises', 36, 45, 46, 58, 62, 79; al-Qurtubī, *Kitāb Rutbat al-hakīm*, fol. 31a. <sup>59</sup>lbn Arfa<sup>c</sup> Ra<sup>c</sup>s, *Hall mushkilāt*, fol. 23a.

<sup>&</sup>lt;sup>60</sup>lbid., fol. 75b.

<sup>&</sup>lt;sup>61</sup>On the use of the *ishārī* method in Sufi exegesis, see Nguyen, *Sufi Master*, 124, 126, 132–4.

<sup>&</sup>lt;sup>62</sup>For a comprehensive study of al-Qushayri's commentary, see ibid. It is worth observing, in another example of the historical interaction between alchemy and Sufism, that one of al-Qushayri's famous Sufi predecessors, 'Abd al-Rahmān al-Sulamī (d. 412/1021) – who was, likewise, the author of a well-known mystical tafsīr – ascribes the origins of the ishārī method to the eighth-century Imam Jafar al-Sādig (d. 148/765), a figure often portrayed as an alchemical authority in Arabic alchemical literature (see, for example, al-Tughrā'ī, Kitāb Mafātīḥ al-raḥma, fol. 28a). On al-Sulamī's attribution of the ishārī method to Jaʿfar al-Ṣādiq, see Nguyen, Sufi Master, 126. It is to be noted, too, that the ishārī method is a prominent feature of the tafsīr composed by a contemporary of Ibn Arfac Racs, the theologian Fakhr al-Dīn al-Rāzī (d. 606/1209). See, for instance, al-Rāzī's commentary on the opening verses of Q 55 (al-Rāzī, Tafsīr, 29: 82-3).

that would often characterize later Sufi *tafsīr*, <sup>63</sup> our author holds, for example, that, in the image of the blessed olive tree, which features in the Light Verse, <sup>64</sup> there is a 'hint and allusion' to the alchemist's 'silvery *aqua permanens'* (*al-mā' al-khālid al-waraqī*) <sup>65</sup> – i.e. the solution from which the elixir is obtained and which, like an olive tree with its flammable oil, comprises both fire and water within itself – whilst its depiction as 'neither Eastern nor Western' is an *ishāra* to the solution's elemental equilibrium. <sup>67</sup>

Noteworthy, too, in his treatment of the Light Verse is the fact that, like the well-known commentaries on this verse by Avicenna (d. 428/1037) in both *Al-Ishārāt wa-al-tanbīhāt*<sup>68</sup> and *Fī ithbāt al-nubuwwāt*<sup>69</sup> and by al-Ghazālī (d. 505/1111) in *Mishkāt al-anwār*, <sup>70</sup> Ibn Arfa 'Ra's approaches the qur'anic lamp metaphor from a predominantly microcosmic point of view, interpreting its key terms as allusions to human faculties, which suggests that he is likely to have been influenced by one or more of these hermeneutical antecedents. For his part, our author seeks to justify his microcosmic interpretation by claiming that, in the hierarchical imagery of the lamp metaphor, it is possible to discern allusions to the traditional symbolic depiction of the philosopher's stone as a human or 'philosophical child' endowed with a body, spirit and soul<sup>71</sup> – an approach which, admittedly, seems to owe more to Avicenna and al-Ghazālī than to the qur'anic text itself. Having set out this premise, he writes:

And [God] Most High has said: 'God is the light of the heavens and the earth; the likeness of his light is as a niche wherein is a lamp; the lamp is in a glass; the glass as though it were a glittering star kindled from a blessed tree; an olive that is neither Eastern nor Western, whose oil (zayt) would well-nigh shine even if it were not touched by fire; light upon light; God guides to His light whom He will; God strikes similitudes for humankind; and God is of all things cognizant.'<sup>72</sup> Its meaning is God is the illumination 'of the heavens', [by which] He means the heavens are the spirits ( $arw\bar{a}h$ ) and the [mercurial] waters, 'and the earth', meaning the body and sediment. 'The likeness of His light is as [the] niche' [of] the psychic spirit ( $al-r\bar{u}h$ ,  $al-nafs\bar{a}n\bar{\imath}$ ) 'wherein is a lamp', meaning the vital spirit ( $al-r\bar{u}h$ ,  $al-hayaw\bar{a}n\bar{\imath}$ )." 'The lamp is in a glass', [by which God] Most High means the subtle

<sup>&</sup>lt;sup>63</sup>See, for example, al-Kāshānī's (d. ca. 736/1336) *Ta`wīlāt al-Qur`ān*. On al-Kāshānī's exegetical approach, see Sands, *Sūfī Commentaries in the Qur`ān*, 76–7; Todd, 'Qūnawī's Scriptural Hermeneutics', 306–7.

<sup>65</sup> Ibn Arfa<sup>c</sup> Ra<sup>c</sup>s, Hall mushkilāt, fol. 67b. The depiction of aqua permanens as 'silvery water' (mā 'waraqī) is chiefly associated in the Arabic tradition with the alchemical poetry of Ibn Umayl al-Tamīmī (fl. fourth/tenth century). See Ibn Umayl, Three Arabic Treatises'. See also Ruska, 'Studien zu Muḥammad Ibn Umail.

<sup>&</sup>lt;sup>67</sup>Ibn Arfa<sup>c</sup> Ra<sup>2</sup>s, *Ḥall mushkilāt*, fol. 67b.

<sup>&</sup>lt;sup>68</sup>See Heath, 'Ibn Sīnā's Qur'anic Hermeneutics', 217–18, 220–6. For a historical overview of classical and post-classical commentaries on the Light Verse, see Başol-Gürdal, *Allah ist das Licht*, 103–46.

<sup>&</sup>lt;sup>69</sup>See Heath, 'Ibn Sīnā's Qur'anic Hermeneutics', 217–18, 220–6.

<sup>&</sup>lt;sup>70</sup>See al-Ghazālī, *Mishkāt al-anwār*, 137–9; see also Heath, 'lbn Sīnā's Qur'anic Hermeneutics', 221.

<sup>&</sup>lt;sup>71</sup>In the introductory passage to his commentary on the Light Verse, Ibn Arfa' Ra's writes: 'Then it [i.e. the matter of the stone] enters the secret preparation (*al-tadbīr al-maktūm*) known as "deficiency and separation" (*al-naqs wa-al-infiṣāl*). [In this phase] it is referred to as proximate sensorial matter (*al-mādda al-qarība al-muḥassasa*) and magnesia. When this work is brought to completion it is referred to as the philosophical egg (*baydat al-hukamā*), the philosophers' stone (*ḥajar al-falāsifa*) and lead-copper (*ābār nuḥās*). This, then, is the philosophical child (*mawlūd al-hukamā*) [lit. the sages' infant]. It is raised and nurtured to maturity, whereupon it is called the 'elixir of the folk' (*iksīr al-qawm*).' (Ibn Arfa' Ra's, *Ḥall mushkilāt*, fol. 67a.) See also ibid., fol. 23b: 'The folk [i.e. the alchemists] all agree in calling their stone a "human being". They liken it to a human being with a soul, spirit, and body.' On the concept of the philosophical child in Western alchemy, see Abraham, *Dictionary*, 148–50.

<sup>&</sup>lt;sup>72</sup>Q 24.35. Arberry's translation (Koran Interpreted), with minor modifications.

<sup>&</sup>lt;sup>73</sup>Rooted in Galen's pneumatology and introduced to the Muslim world chiefly through the intermediary of Hunayn ibn Ishāq's (d. 260/873) Madkhal fi a I-tibb (An Introduction to Medicine), the vital and psychic spirits were deemed to be seated in the heart and brain, respectively. The function of the vital spirit was to transmit heat and vitality to the

body (al-jasad al-mulaṭṭaf). 'As though it were a glittering star', exceptionally bright, sparkly and luminous, 'kindled from [the] tree' [of] the divine emanation (al-fayḍ al-ilāhī) and light. In the 'blessed tree' there is an allusion (ta'rīḍ) and pointer (ta'rīḍ) to the silvery and permanent water. 'Neither Eastern nor Western', which is an allusion to its equilibrium (t'tidāl), 'whose oil would well-nigh shine even if it were not touched by fire' of the elemental ('unṣuriyya) kind, which is why, in another part [of the diwan], I said: 'even if it were not touched by the fire of lamps'.' Light upon light', I mean [the light of] the tree's oil (zayt) and [the light of] the effusion (fayḍ) that occurs by dint of the [intelligible] form's aptitude (tti' dād al-ṣūra) for luminosity.

While the Light Verse contains the sole qur'anic mention of the *zaytūna mubāraka* or blessed olive tree, the exegesis cited above is not Ibn Arfa' Ra's's only explanation of this tree's alchemical symbolism. Commenting in *Ḥall mushkilāt* on the opening verses of his *ṭā'iyya* ode – which contains, as we have seen, a reference to the 'blessed middle olive tree of oil' – the *Shudhūr*'s author expands upon the basic idea that the blessed olive tree represents the alchemist's 'divine water' or *aqua permanens*:

Abū l-Qāsim said, 'I told [him] "Master – may God keep you with us always – I have understood; so tell me what you mean when you say in your poetry 'We prospered and grew rich by virtue of the blessed middle olive tree of oil [...]" Wherefore he – may God rest his soul – said that "the blessed middle olive tree of oil is the divine spiritual water (al- $m\bar{a}$ ' al- $il\bar{a}h\bar{i}$  al- $r\bar{u}h\bar{a}n\bar{i}$ )<sup>77</sup> that most of the folk [i.e. the alchemists] have praised and celebrated. It is the operative poison (al-samm al-mudabbir)<sup>78</sup> composed of two natures, viz. the nature ( $tab\bar{i}$ a) of water and that of fire, which is why I termed it 'middle' ( $wust\bar{a}$ ). [In doing so] I also adopted the words of [God] Most High when He says 'a blessed tree; an olive that is neither Eastern nor Western; its oil would well-nigh shine even if it was not touched by fire; light upon light.'<sup>79</sup> And I followed, likewise, the example of the chief of the sages and father of the philosophers [Hermes] insofar as he likens the [divine] water to a tree when he says, 'I have raised up for you, from the Western side of the temple ( $birb\bar{a}$ ), a tree whose roots are water and whose fruit is fire.'<sup>80</sup> Here the oil (duhn) is an expression

rest of the body via the arteries, whereas the psychic spirit transmitted motor impulses and received sense data via the nervous system. The psychic spirit localized in the brain's 'anterior ventricle' was conceived of as the repository in which images abstracted from sense data were stored. See Temkin, 'On Galen's Pneumatology'.

<sup>&</sup>lt;sup>74</sup>In both the *Ishārāt* and *Fī ithbāt al-nubuwwāt*, Avicenna reads the Light Verse as an extended metaphor for the faculties and stages of human intellection. Hence, the niche represents man's material intellect whilst the fire represents the separate active intellect that imparts to the human mind the light of cognition, and so forth. (See Heath, 'Ibn Sīnā's Qur'anic Hermeneutics', 223). Though clearly influenced by Avicenna, al-Ghazālī, for his part, interprets the terms in the Light Verse as representing what he identifies as the five hierarchical degrees of the human spirit, though there is, to be sure, a certain amount of overlap with Avicenna's noetic reading insofar as al-Ghazālī interprets the lamp as the 'intellectual spirit' and the tree as the 'cogitative spirit'. (See al-Ghazālī, *Mishkāt al-anwār*, 137–9). By interpreting the niche and lamp as modalities of the human spirit, Ibn Arfa' Ra's thus appears more indebted to al-Ghazālī than to Avicenna. Likewise, Ibn Arfa' Ra's's equating of the glass with man's 'subtle body' is consistent with al-Ghazālī's reading of the glass as the 'imaginal spirit'. However, there seem to be echoes of Avicenna's commentary, too, in Ibn Arfa' Ra's's reference to emanation, which Avicenna equates with the 'touch' of fire. (See Heath, 'Ibn Sīnā's Qur'anic Hermeneutics', 223)

<sup>&</sup>lt;sup>75</sup>Ibn Arfa<sup>c</sup> Ra<sup>c</sup>s, *Shudhūr*, 130.

<sup>&</sup>lt;sup>76</sup>Idem, *Hall mushkilāt*, fols 67b–68a.

<sup>&</sup>lt;sup>77</sup>On the alchemists' 'divine' (or 'mercurial') water, see Abraham, *Dictionary*, 125.

<sup>&</sup>lt;sup>78</sup>On the traditional portrayal of the alchemists' 'divine water' as a medicinal poison that cures the starting material of its ailments and impurities, see ibid., 16, 20, 208.

<sup>&</sup>lt;sup>79</sup>Q 24.35.

<sup>&</sup>lt;sup>80</sup>In alchemical symbolism, the 'Western side' is associated with the cold, moist spirit or philosophical mercury. The appearance of the sun (a symbol of the hot, dry soul or sulphur) on the Western side denotes the union of philosophical mercury and sulphur. Ibn Arfa' Ra's writes: 'On the Western side is a sun which, when it appears, shows the way from Mount Sinai to a towering peak' (Ibn Arfa' Ra's, *Shudhūr*, 229, poem 30, line 31). Though Lahouari Ghazzali's edition opts for *sharqī* ('Eastern'), the variant *gharbī* ('Western') in the Tehran manuscript (see ibid., 229 n. 14) seems preferable here as it accords with Ibn Arfa' Ra's's commentary on this verse: 'By the "Western side" I mean the direction of the spirit, and

of ('ibāra 'an) the resultant [alchemical] tincture (sibgh), which is why we said, 'We have prospered and would not trade it – meaning the olive tree – for wormwood or for arak', 81 for it has a fruit and its fruit has an oil (zayt). Thus, for us, the tree is the [divine] water, its fruit is the [philosophers'] earth, and the oil derived therefrom is the [alchemical] soul (nafs)". 82

Thus, although at first sight the olive tree may seem an unlikely symbol for a liquid solution, the ensuing explanation makes it clear that such symbolism is based not on outward appearances, but on the idea that the tree, with its moisture-imbibing roots and flammable oil, represents the paradoxical union of water and fire that is a defining feature of the alchemist's *aqua permanens*, a solution deemed to contain philosophical mercury (symbolized by water) and philosophical sulphur (symbolized by fire)<sup>83</sup> as well as (in Jābirian theory) the pure forms of the elements water, fire and air.<sup>84</sup>

Significant in this connection is Ibn Arfa Ra's's tendency in the *Shudhūr* and *Ḥall mushkilāt* to equate the *zaytūna mubāraka* with both the burning bush and the qur'anic 'tree (*shajara*) on Mount Sinai that bears oil (*duhn*) and tincture (*ṣibgh*)'. For our author, therefore, all three arboreal motifs allude to the same fundamental compound, namely *aqua permanens*, a claim he seeks to bolster by quoting Hermes Trismegistus, but which also appears influenced, as we shall see, by the significance attached to the terms *duhn* and *ṣibgh* in the Jābirian corpus.

According, then, to the Jābirian theory of artificially produced elements, to which Ibn Arfa' Ra's clearly subscribes,  $^{85}$  the aim of the repeated distillation ( $taqt\bar{\imath}r$ ) of the alchemical starting material in the first part of the opus is to produce pure forms of the four elements – water, air, fire and earth – through artificial means, viz. by isolating the elements' constituent natures or qualities.  $^{86}$  These artificial elements or 'cornerstones' ( $ark\bar{a}n$  plural of rukn) $^{87}$  thus serve as the building blocks from which the transformative elixir is made in the next stage of the opus, known as the 'second operation' (al- $tadb\bar{\imath}r$  al- $th\bar{\imath}an\bar{\imath}$ ).  $^{88}$  The first such element produced by this process is, so we are told, the aqueous rukn, traditionally referred to as 'virgin's milk'.  $^{89}$  This is followed by the airy and fiery

that therein is a sun, namely the soul, which, when it appears – or in other words comes into manifest existence with the appearance of colours and tinctures (aṣbāgh) at the start of the second operation (al-tadbīr al-thānī) – shows the way from Mount Sinai, meaning the body, to a towering, i.e. lofty, peak, namely the elevated spirit (al-rūḥ al-musta ˈ-liyya)' (lbn Arfaʿ Raʾs, Hall mushkilāt, fol. 48a).

<sup>&</sup>lt;sup>81</sup>Ibn Arfa<sup>c</sup> Ra<sup>c</sup>s, *Shudhūr*, 188 (poem 23, line1).

<sup>82</sup> Idem, Hall mushkilāt, fols 28a-29a.

<sup>&</sup>lt;sup>83</sup>For the alchemists, *al-mā* ' *al-khālidī* (*aqua permanens*) combines within itself the dissolving power of the starting material's cold, moist spirit or 'philosophical mercury' (*zi 'baq al-ḥikma*) – also known as the 'operative poison' that breaks metals down into their prime matter at the start of the opus – and the coagulative power of the hot, dry soul or 'philosophical sulphur'. On the different symbolic designations of the alchemical soul and spirit, lbn Arfa' Ra's writes: 'It is said that [the stone's] spirit is its water and its soul its fire which inheres therein. And they call its spirit its quicksilver (*zi 'baq*) and its soul its sulphur (*kibrī*t), from which are engendered tinctures (*aṣbāgh*), oils (*adhān*) and flowers (*azhār*). This, then, is what is meant by the alchemical 'soul' and 'spirit'. They are siblings, one more junior in rank than the other. One is raw the other cooked, one male the other female, one Eastern the other Western, one solar the other lunar, one aqueous the other fiery, one moist the other dry, one hot the other cold, one luminous the other dark, one lofty the other lowly' (*Ḥall mushkilāt*, fol. 24a–b).

<sup>&</sup>lt;sup>84</sup>On the characteristics of *aqua permanens/al-māʾ al-khālidī*, see Abraham, *Dictionary*, 58, 134; Todd, 'Alchemical Poetry, 125–6, 136 n. 84.

<sup>&</sup>lt;sup>85</sup>See Todd, 'Alchemical Poetry', 124–6.

<sup>&</sup>lt;sup>86</sup>See Jābir b. Ḥayyān, *Dix traités*, 89–94; Kraus, *Jābir ibn Ḥayyān*, 2 : 4–5; Todd, 'Alchemical Poetry', 124–6.

<sup>&</sup>lt;sup>87</sup>See Nomanul Haq, 'Rukn'.

<sup>&</sup>lt;sup>88</sup>On the respective roles of the first and second operations in Jābirian theory, see Jābir b. Ḥayyān, *Dix traités*, 94.

<sup>&</sup>lt;sup>89</sup>On the alchemical solution known as 'virgin's milk', see Abraham, *Dictionary*, 211; Todd, 'Alchemical Poetry', 125, 136–7.

*arkān*, which Jābir tellingly refers to as *duhn* or oil and *ṣibgh* or tincture, respectively. <sup>90</sup> All three are combined, so Ibn Arfa Ra's affirms, in *aqua permanens*, which, when added to the purified earthy matter at the bottom of the alchemical vessel, completes the quaternary of elements. <sup>91</sup>

Given, therefore, both Sinai's association with Moses<sup>92</sup> and the occurrence of terms that play a crucial role in alchemical theory, it is not hard to see why a Muslim alchemist such as Ibn Arfa' Ra's might have been inclined to regard the qur'anic motif of the tree on Mount Sinai as a particularly compelling alchemical allusion. Moreover, though not always explicitly stated as such, there also seems to be a suggestion, on Ibn Arfa' Ra's's part, that where especially enigmatic qur'anic passages and emblems are concerned, it is the alchemical *ishārāt* that provide the key to unlocking their inner meaning.

This is evident, at any rate, in Ibn Arfa' Ra's's alchemical exegesis of a scriptural and theological enigma which, as he puts it, 'the whole world has striven in vain to understand',  $^{93}$  namely the qur'anic account (in *Sūrat al-Baqara* and *Sūrat Ṣād*) of the creation of Adam,  $^{94}$  in which the angels prostrate themselves before the human that God has made from  $t\bar{t}na$  or clay – a term often encountered in Arabic alchemical literature as a designation of the alchemist's starting material – whereas Iblīs refuses to do so. Our author writes:

As for Adam, God's vicegerent, peace be upon him, he betokens (huwa ' $ib\bar{a}ra$  'an) the stone that has been concealed ( $makt\bar{u}m$ ) by the clearest proof and the most perfect demonstration. For them [i.e. the alchemists] the prostration of the angels [before Adam] thus betokens the return of spirits ( $arw\bar{a}h$ ) to their bodies, whilst the accursed Iblis's non-prostration betokens the fiery soul (nafs) and tincture (sibgh), which appears and then is sublimated and rises when the spirits are immersed in the bodies at the end of the opus. Understand, therefore, these matters and subtle points, which the whole world has striven in vain to interpret and explain. I have revealed them to you, through God's grace, for they are among the symbols preserved by the folk. 95

<sup>90</sup> See Kraus, Jābir ibn Hayyān, 5.

<sup>&</sup>lt;sup>91</sup>See Todd, 'Classical Poetic Motifs', 672–3.

<sup>&</sup>lt;sup>92</sup>For Ibn Arfa<sup>c</sup> Ra<sup>2</sup>s's alchemical interpretations of the qur'anic story of Moses, see for example *Hall mushkilāt*, fol. 46a-b: 'Ptolemy the sage said that the stone which God Most High inspired Moses son of 'Imran to craft into the [alchemical] elixir is that which he called a [worthless] splinter (nuqra), that is, a fragment of mineral (qit 'a min al-ma 'din). When he saw it, Korah, for his part, perceived the wisdom therein, for it was mottled (mukhtalata) from top to bottom with the colours of every [metallic] body. Wherefore he deduced that these were what are referred to as the natural qualities (tabā'i').' See also ibid., fol. 56a: 'The "shaykh of Egypt", Pharaoh, is the soul (nafs) and the "briny deep" (lujjat al-yamm) is the spirit  $(r\bar{u}h)$ , for at the end of disaggregation  $(tafs\bar{u})$  the soul is drowned in the sea of the spirit. And then shalt thou see the sea cleft asunder with the falling of the staff [a reference to Q 26.63]. By the "sea" what is meant here is the [philosophers'] earth, by the "staff" wateriness (mā 'iyya), and by "falling" [what is meant is] plunging. When I say "has been cleft asunder" (qad tafallaga), which is derived from the "breaking of day" (falaq al-subh), it is an allusion to the luminous soul's becoming manifest to the eye, even as [God] Most High has said: "He who causes day to break (fāliq alsubh) and makes night a repose" [Q 6.96]. Whosoever arrives at this station (maqām) is assured of success, such that his heart is at peace, he feels tranquil and secure therein, and he lays himself down and sleeps, thanking God and praising Him for this [blessing]. Wherefore I said [even as Moses did] "I praise God, for whoever praises God is granted success; I have gained what I hoped for and have been freed [from slavery]." This, then, is the [spiritual] station of Moses (almaqām al-Mūsawi), for the Most High has said "strike for them a dry path in the sea, fearing not overtaking, neither afraid" [Q 20.77], which falls between disaggregation and cultivation in the [alchemical process of] composition - so understand this.'

<sup>&</sup>lt;sup>93</sup>lbid., fol. 38b.

<sup>&</sup>lt;sup>94</sup>Q 2.34; 38.71-6.

<sup>&</sup>lt;sup>95</sup>Ibn Arfa<sup>c</sup> Ra<sup>c</sup>s, Hall mushkilāt, fol. 38b. In his longest commentary on the Shudhūr, Jildakī offers his own interpretation of the alchemical symbolism of Adam and Eve: 'The art's Eve (Hawā al-ṣinā a) is the spirit (rūḥ) and [its] Adam is the soul (nafs). [Standing] between them are Satanic obstacles and earthy densities (kathā if ardiyya), but within the twain are noble, luminous, subtle qualities. How triumphant, then, are those who duly act upon the soul and spirit, preparing

But is Ibn Arfa' Ra's claiming that beneath the outward, literal sense it is alchemy, and alchemy alone, that constitutes the real core of the qur'anic account in question? Given everything that has been said so far about the premises underpinning his alchemical hermeneutics this seems unlikely. While all things, according to Ibn Arfa' Ra's, may hint at the art in some way, this of itself, as he makes a point of stressing, does not mean that all things contain it. 96 Rather, what appears to be at work in his comments on the creation of Adam is the Hermetic-cum-Jābirian notion of universal sympathy, 97 whereby the cosmos at large, the mesocosm or 'alam awsat that is alchemy, 98 and the microcosm that is the human being all reflect - each after its own fashion - the same natural laws and divinely ordered processes. Thus, according to this perspective, an understanding of how such laws and processes manifest themselves in miniature in the alchemical vessel can, in turn, shed light on their workings in the cosmos as a whole, and vice versa.

In his claims, therefore, regarding the symbolic significance of the angels' prostration on the one hand and Iblīs's refusal to prostrate on the other, our author is effectively projecting the dynamics of chemical processes onto scripture in order to elucidate a point of theological anthropology - the intended inference presumably being that, just as philosophical mercury (or spirit) and sulphur (or soul) are integral to the production of the philosopher's stone, so both the mercurial  $r\bar{u}h$  and sulphurous nafs have their designated role to play in the constitution of the primordial human being.

The idea that alchemy can provide the key to scriptural enigmas is one that seems also to be active in Ibn Arfa' Ra's's commentary on Sūrat al-Rahmān, a sura he singles out as a uniquely rich repository of alchemical doctrine. Indeed, hidden in its verses - so our author asserts - are the secrets of the art in its entirety, with all its intricate preparations and stages.<sup>99</sup> Even at first glance, it is not difficult to see why this sura in particular might have struck a chord with a Muslim alchemist. The first 17 verses alone, for example, contain a rapid succession of terms that fulfil important functions in Arabic alchemy's theoretical language and symbolism. Such emblems include the sun and the moon (traditional symbols of sulphur and mercury), husban or calculation, East and West (again, rumūz of sulphur and mercury), and the mīzān or 'balance' - a term that is of major importance in the Jābirian corpus, where it denotes the science through which the alchemists calculate the specific proportion of elements and natural qualities in any given substance. 100 These are followed in later verses by mentions of fire, 101 copper, 102 and dihān or oil, from the same root as *duhn*, a term – as we have seen – commonly used in Arabic alchemical texts. <sup>103</sup>

Especially noteworthy in Ibn Arfa' Ra's's commentary on this sura is his engagement with the motifs of the sun and moon, which appear in verse 5: 'The sun and moon

them appropriately, bringing them out of the shadow of obscurity by cutting back the tangled undergrowth, then wedding them to each other through a composition that admits of no dissolution, but rather necessitates union (ittihād), whereby they become one. For this is the goal and the desired end. Understand, therefore, the meaning of these expressions, then free yourself from the impurity of darkness, and truth and wisdom will be yours' (Jildakī, Ghāyat al-surūr, fols 107b-108a.).

<sup>&</sup>lt;sup>96</sup>See İbn Arfa<sup>c</sup> Ra<sup>c</sup>s, *Ḥall mushkilāt*, fol. 68b.

<sup>&</sup>lt;sup>97</sup>See, for example, Jābir b. Hayyān, *Mukhtār rasā il*, 71; idem, *Dix traités*, 18.

<sup>&</sup>lt;sup>98</sup>On the notion of alchemy as a mesocosm, see Jābir ibn Ḥayyān, *Mukhtār rasā il*, 71.

<sup>&</sup>lt;sup>99</sup>Ibn Arfa<sup>c</sup> Ra<sup>2</sup>s, *Hall mushkilāt*, fol. 77b.

<sup>&</sup>lt;sup>100</sup>For a detailed study of the Jābirian *'ilm al-mīzān* or science of the balance, see Nomanul Haq, *Names, Natures and* Things.

<sup>&</sup>lt;sup>101</sup>Q 55.15, 35.

<sup>&</sup>lt;sup>102</sup>Q 55.35.

<sup>&</sup>lt;sup>103</sup>O 55.37.

[move] by a calculation.' For our author, their mention is not only a clear allusion to the twin agents of alchemical transformations - viz. the dry, coagulating soul and the moist, dissolving spirit – but is also divine confirmation of the possibility of obtaining them in the purified form required to produce an elixir. Noticeable too is his appeal to another qur'anic verse, namely Q 36.40, <sup>104</sup> in order to show that the Qur'an also alludes to the theoretical principle whereby the extraction of philosophical mercury precedes that of philosophical sulphur in the conventional progression of the alchemical opus. He writes:

When He, the Most High, says 'the sun and the moon [move] by a calculation', 105 it is both an allusion (ishāra) to, and a joyous tiding (bashāra) of the coming forth (zuhūr) of the philosophical sun and moon (shams al-hikma wa-qamarihā) after the foundation [of the opus] has been properly completed. These, then, are the sun and moon that operate in their [i.e. the alchemists'] world. They are the spirit  $(r\bar{u}h)$  and the soul (nafs) [...] 'By a calculation' at the beginning of His speech is a reference to His having said that 'it is not for the sun to reach the moon nor for the night to overtake the day; [rather] each glides in its orbit, 106 meaning that the moon goes ahead of the sun and is [chronologically] prior to it. Even thus [in alchemy] is the spirit prior to the soul and goes ahead of it, each gliding in its own orbit. 107

In the verse that immediately follows the reference to the sun and moon, Ibn Arfa' Ra's sees further allusions to alchemical souls and spirits, represented this time by what he claims, as we have already seen, to be the Hermetic symbol of the tree:

Understand, then, the words of [God] Most High [when He says], 'the plants and the trees prostrate themselves', alluding to souls, which are like trunkless plants, and spirits, like trees with a trunk. In the same vein, the ancients - especially Hermes, the father of the philosophers and the chief of the sages - called the spirit and divine [Mercurial] water a tree. 108

Having interpreted sun, moon and trees according to their established meanings as alchemical rumūz, Ibn Arfa Ra's applies – much as one might expect – the same principle to the mention of the earth (al-ard) that occurs in verse 10, construing it as an allusion to the purified matter at the bottom of the vessel, which brings forth elixirs and tinctures once its sublimated spirits and souls have returned to it:

'And He has set down the Earth for mankind.' This contains an allusion to our earth, which is referred to as the 'philosophers' earth' and the 'earth of Hermes'. 'Therein are fruits, and date palms with sheaths', 110 I mean the elixirs and tinctures (aṣbāgh) concealed in spirits (arwāh), 'and grain in the blade, and fragrant basil (rīḥān)', 111 an allusion to the soul (nafs) [appearing] in the colour of the [alchemical] compound (murakkab) when [the opus] is finished and complete, namely the colour crimson. 112

Rather more surprising – at first sight at any rate – is his assertion that the 'two seas', which feature in verse 19, are allusions to the 'two noble compounds' that are 'hair

<sup>104/</sup>It is not for the sun to reach the moon nor for the night to overtake the day; [rather] each glides in its orbit.'

<sup>&</sup>lt;sup>105</sup>Q 55.5.

<sup>&</sup>lt;sup>106</sup>Q 36.40.

<sup>&</sup>lt;sup>107</sup>Ibn Arfa<sup>c</sup> Ra<sup>c</sup>s, *Hall mushkilāt*, fol. 77b.

<sup>&</sup>lt;sup>108</sup>lbid.

<sup>&</sup>lt;sup>109</sup>Q 55.10.

<sup>&</sup>lt;sup>110</sup>Q 55.11.

<sup>&</sup>lt;sup>111</sup>Q 55.12.

<sup>&</sup>lt;sup>112</sup>lbn Arfa<sup>c</sup> Ra<sup>2</sup>s, Hall mushkilāt, fol. 78a.

and blood'. 113 The grotesqueness of this imagery is mitigated somewhat, however, by recalling that Ibn Arfa' Ra's, like other alchemists, 114 sometimes uses 'hair and blood' as codenames for philosophical sulphur and mercury. 115 As for the 'pearl and coral' that are extracted from these seas, our author interprets them as clear references to the crucial alchemical phases of albedo 116 and rubedo. 117 He writes:

When He, the Most High, says 'He let forth the two seas that meet together', 118 the two [seas] are an allusion to the meeting of the two great [alchemical] principles and noble compounds, namely hair and blood. However, 'between them is a barrier', 119 that of viscosity (kathāfa). Wherefore, if the crude and viscous characteristics impeding their union are removed, their meeting comes about. One is sweet, the other salty and bitter. As for His saying that 'from them come forth pearl and coral', 120 it is an allusion to [the alchemical phases of] whitening and reddening. 121

Finally, in the depiction of hellish torments and heavenly delights <sup>122</sup> that characterize this sura's remaining verses, Ibn Arfa' Ra's is naturally inclined to discern therein allusions to the initial purification of the stone's matter - a phase sometimes referred to in Western alchemy as the 'torment of the metals' - and the subsequent production of elixirs, respectively. He writes:

When He, the Most High, says 'the wrongdoers shall be known by their marks, and they shall be taken by their forelocks and their feet', 124 this contains an allusion to the [starting material's] viscous characteristics, darkness, blackness, and putrid oils, and to the fact that they are all thrown into the fire of hell and burn therein. As for when He says, 'for whomsoever fears the station of his Lord there are two gardens', 125 it is an allusion to the lesser and greater elixirs. 126

Here again, moreover, as was the case with Ibn Arfa Ra's's interpretation of the creation of Adam, it seems possible to detect the underlying idea that, by dint of the natural sympathy between alchemy and the world at large, the processes that take place in the mesocosm of the alchemical vessel - from dissolution and decay to purification and perfection – are apt to shed light on their microcosmic and macrocosmic equivalents in this world and the life to come.

<sup>&</sup>lt;sup>113</sup>In the Arabic alchemical corpus, hair and blood typically feature in lists of organic starting materials. See Kraus, *Jābir* ibn Hayyān, 4.

<sup>&</sup>lt;sup>114</sup>See ibid., 33 n. 3.

<sup>115</sup> See Ibn Árfa Ra's, Hall mushkilāt, fols 43b, 63a, 64a, 72a. On blood as a deckname of mercury in Western alchemy, see Abraham, Dictionary, 28-9.

<sup>116</sup>On albedo or the whitening that indicates the purification of the alchemist's starting material, see Abraham, Dictionary, 4-5; Todd, 'Alchemical Poetry', 132 n. 69, 135 n. 78, 137.

<sup>&</sup>lt;sup>117</sup>On rubedo or the alchemical material's reddening, which signals the production of an elixir capable of transmuting base metals into gold, see Abraham, Dictionary, 174–5; Todd, 'Alchemical Poetry', 132 n. 69, 137.

<sup>&</sup>lt;sup>118</sup>Q 55.19. Arberry's translation.

<sup>&</sup>lt;sup>119</sup>Q 55.20.

<sup>&</sup>lt;sup>120</sup>Q 55.22. On pearls as symbols of albedo and on coral as a symbol of the red stone or elixir in Western alchemy, see Abraham, Dictionary, 47, 142-3, 175.

<sup>&</sup>lt;sup>121</sup>Ibn Arfa<sup>c</sup> Ra<sup>c</sup>s, *Hall mushkilāt*, fol. 78a.

<sup>&</sup>lt;sup>122</sup>For Ibn Arfa<sup>c</sup> Ra<sup>c</sup>s, the alchemical symbolism applies to the pleasures of paradise too. See, for example, *Hall mushkilāt*, fol. 79b: 'When He, the Most High, says "houris cloistered in tents" [Q 55. 72], it is a reference to the spirits (arwāḥ) that are mixed and confined at the start of the opus.'

<sup>&</sup>lt;sup>123</sup>On the idea, encountered in Western alchemy, that philosophical mercury had to undergo torments in order to be purified, or 'glorified', see Principe, Secrets of Alchemy, 67. See also see Abraham, Dictionary, 202–3. <sup>124</sup>Q 55.41. Arberry's translation, slightly modified.

<sup>&</sup>lt;sup>125</sup>O 55.46.

<sup>&</sup>lt;sup>126</sup>lbn Arfa<sup>c</sup> Ra<sup>c</sup>s, *Ḥall mushkilāt*, fol. 79a.



Though Ibn Arfa Ra's's exegetical interpretations can appear forced and contrived – just as those of mystical exegetes sometimes do – it is not difficult to see why the projection of alchemical meaning onto the qur'anic text would have appealed to him, especially in cases, such as Sūrat al-Raḥmān and the qur'anic account of the creation of Adam, 127 where this seemed to offer the solution to scriptural enigmas. While confined, all told, to the margins of the Muslim exegetical tradition, <sup>128</sup> the emergence of alchemical tafsīr in the works of Ibn Arfa' Ra's is an intriguing historical development, nonetheless, confirming a willingness on the part of a medieval Muslim alchemist not only to ascribe alchemical wisdom to the prophets but also to see alchemy enshrined in scripture.

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<sup>&</sup>lt;sup>127</sup>Q 2.34; 38.71-6.

<sup>&</sup>lt;sup>128</sup>To trace the development of alchemical *tafsīr* after Ibn Arfa' Ra's would require a separate study. The following example, however, from the writings of the celebrated Andalusī mystic Muḥyī al-Dīn Ibn 'Arabī (d. 638/1240) suffices to show, at any rate, that alchemical readings of the Qur'an did not end with Ibn Arfa<sup>c</sup> Ra<sup>c</sup>s. Ibn <sup>c</sup>Arabī writes: 'If it is overwhelmed by that nature, its essence is transmuted, whence appears the form of iron, copper, tin, lead, or silver, depending on the extent of [the nature's] sway over it. Thus do you come to know the interpretation of the words of [God] Most High when He says "formed and unformed" [Q 22.5], i.e. of a perfect nature, which is none other than gold, and of an imperfect nature, which is the other metals'. See Ibn al-'Arabī, Al-Futūḥāt al-Makkiyya, 2: 268.



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