An intriguing double-page painting (fig. 1) appears near the beginning of a manuscript made in 1339 that contains a collection of Arabic and Persian alchemical texts. The odd formal features of the painting, as well as the elusive inscriptions on it, confront the viewer with visual and textual puzzles. This paper seeks to explain these puzzles in terms of the intellectual and artistic traditions that were familiar to the anonymous painter and calligrapher who made the manuscript, and in terms of the purpose of the painting. The painter and calligrapher combined broad cross-cultural traditions with other references that were specific to the cultural context in which the painting was made: the Islamic lands under Mongol rule. This combination conveyed the purpose of the painting, which, I argue below, was to persuade the viewer of the legitimacy of alchemy.

When viewed in isolation, the painting initially seems very strange. The formal relationship between the two pages on which it appears is puzzling. Each side is framed by a different architectural device: the right side by a pointed arch and the left side by a post-and-lintel construction with a dome. A masonry wall with large blue and peach stones runs directly across the gutter where the two pages join, but it is interrupted in front of a large figure holding a tablet, and again at the doorway at the far right. Just below the wall, a continuous blue strip unites both pages. On the right page, nine eagles fly through the wall supporting the arch and towards the left side of the painting. Above these eagles, a woman looks towards the left side from an open window, and below them, four men gesture towards the left. The eagles, woman, and men all direct the viewer’s attention towards a figure who is jarringly different in scale and style: he looms so much larger than the men on the right that one of their faces is barely as big as one of his knees. Whereas the smaller figures find their closest parallels in fourteenth-century Jalayirid Persian manuscripts, the larger figure on the left resembles a medieval author portrait of a Christian evangelist. He sits on a chair and wears a heavily draped garment, and his head, slightly inclined, is perfectly round, as if his thick hair has been painted into the outline of a halo. He holds a tablet with an odd assortment of symbols, which include a pair of birds interlocked like yin and yang, mysterious gold and white circles, and a silver crescent moon. (This moon is now difficult to see against the black ground of the tablet because its silver pigment, tarnished with age, has darkened; but it is barely visible, directly between the pointed beard of the evangelist-like figure and the white circle beneath his beard. Also somewhat difficult to see are three faint rays of gold that descend from the two gold circles at the top of the opposite side of the tablet.)

The inscriptions surrounding this tablet comment on its symbols in an elusive manner, adding textual puzzles to the visual ones. The inscription toward the gutter above the tablet reads “They are two vapors: the light and the heavy. They are the steam and the smoke. They are the dry and the moist. The smoke is the dry; the steam is the moist. The smoke is the soul [al-nafs]; the steam is the spirit [al-rūḥ], and it is the moist.” The inscription above the tablet on the upper left presents the following confusing numerological statement: “Water, air, and fire: therefore they have drawn it as three, to indicate thereby that it is one, within which is three. They became five in number. And the five is from two. Thus, they have said that the earth is of two substances and the water is of two natures. And they drew it as five.” Below the two interlocking birds at the lower right of the tablet, another inscription reads “The female is the spirit [al-rūḥ], extracted from the male, carrying it, flying away with it.” Damage to the last long inscription, written at a steep angle near the outer red post, has made the middle part illegible. The first part reads “The explanation of this black earth deems that it was white…” After several words, among which only the word for “crescent moon” is legible, this inscription continues.
Fig. 1. The Silver Water painting. Compilation of alchemical texts, probably Baghdad, 1339. Topkapı Palace Library, A. 2975, fol. 28r–3a. (Photo courtesy of the Topkapı Palace Museum, Istanbul)
Haram in the year 740 (July 19, 1339). Although there of the manuscript on the eleventh of Muharram al-
unnamed scribe records that he finished that section on folio 65a of the manuscript (fig. 2). There, the date, since they are in the same hand as the colophon centur
the Islamic lands under Mongol rule in the first half of the fourteenth century. The inscriptions on the painting secure its cultural context in which he worked: the Islamic lands
difficult to label in a single phrase. Some of the painter's references belong to extremely broad cross-
discussions clearly place it in the eastern Islamic sphere under Mongol rule, and very likely, as both Ernst J. Grube and Stefano Carboni have suggested, in Baghdad. Examination of the calligraphy shows that a single scribe wrote out not only the inscriptions on the painting and the text to which the colophon is attached, but also all of the other texts in the manuscript. The scribe and the painter (who is henceforth identified as the “Silvery Water painter”) may or may not have been the same person; it is not possible to determine this. What is definite is that as a material object, the entire manuscript was produced at approximately the same time, even though the various texts that follow the painting were originally composed over a period of centuries.

The painting’s purpose of legitimizing alchemy is not obvious at first glance, and its persuasive impact is not instantaneous. Rather, it depends on extended consideration in conjunction with the text of the manuscript. The significance and impact of the painting unfold gradually as the text leads the reader through it in a specific temporal sequence. As one reads, one becomes aware of three different levels at which the painting relates to the text. First, it illustrates the allegorical story, which directly precedes it in the manuscript, of how ancient alchemical knowledge was preserved on a tablet and then rediscovered in an ancient Egyptian temple. Second, it serves as a frontispiece for the manuscript as a whole. It authenticates the entire manuscript by successfully manipulating the connotations of an artistic tradition of author-portrait frontispieces, which by the fourteenth century were already well established in Islamic book culture. Third, in the black tablet of symbols it contains, the painting presents a pictogram of the secrets of alchemy discussed in the text. Its full persuasive impact depends on the cumulative layering of these three levels of relationship between it and the accompanying manuscript text, as well as on the viewer’s ability to recognize the artistic and cultural references to which the fourteenth-century painter alluded at each of these three levels.

Whereas the purpose of the painting can be succinctly defined as the affirmation of the legitimacy of alchemy, the artistic and intellectual traditions through which the painter expressed that purpose are more difficult to label in a single phrase. Some of the painter’s references belong to extremely broad cross-cultural traditions, while others belong to the specific cultural context in which he worked: the Islamic lands under Mongol rule in the first half of the fourteenth century. The inscriptions on the painting secure its date, since they are in the same hand as the colophon on folio 65a of the manuscript (fig. 2). There, the unnamed scribe records that he finished that section of the manuscript on the eleventh of Muharram al-Haram in the year 740 (July 19, 1339). Although there is no documentation of where it was produced, stylistic considerations clearly place it in the eastern Islamic sphere under Mongol rule, and very likely, as both Ernst J. Grube and Stefano Carboni have suggested, in Baghdad. Examination of the calligraphy shows that a single scribe wrote out not only the inscriptions on the painting and the text to which the colophon is attached, but also all of the other texts in the manuscript. The scribe and the painter (who is henceforth identified as the “Silvery Water painter”) may or may not have been the same person; it is not possible to determine this. What is definite is that as a material object, the entire manuscript was produced at approximately the same time, even though the various texts that follow the painting were originally composed over a period of centuries.

The text that guides the reader through the painting, the first of several different texts in the manuscript, was composed in the tenth century, predating the painting by four centuries. Its author, Ibn Umayl, wrote it in three distinct parts: an allegorical introduction, which bears no separate title; a poem entitled Risālat al-shams il-a al-hilal (The Letter from the Sun to the Moon); and a commentary, al-Mā’ al-warāqī wa-
al-ard al-najmiyya (The Silvery Water and the Starry Earth). Somewhat confusingly, the three parts together are known by what is properly the title only of the third part, because the third part depends on and always includes the previous two. I therefore refer to the third part as “the commentary,” and follow established usage in referring to the whole text by the abbreviated title, al-Mā’ al-warāqī. As Manfred Ullmann has noted, the paired terms of the full title echo the designations of mercury and sulfur in Greek: Mercury was referred to as “watery silver” [sic], and white sulfur as “starry earth.” Ibn Umayl’s title therefore alludes to what modern scholars call the mercury-sulfur theory of alchemy.

Al-Mā’ al-warāqī became a classic of Islamic alchemy, and manuscripts of Arabic commentaries on it were still being produced as late as the nineteenth century. It had been translated into Latin in the twelfth or thirteenth century, and the translation was widely disseminated among alchemists in Europe. It is impossible to understand the painting in the 1339 manuscript without reference to the tenth-century text and in turn impossible to understand al-Mā’ al-warāqī without reference to the cross-cultural traditions of Hermetic alchemy to which it belongs. Yet it is also crucial to consider how the interpretation of the painter,
henceforth identified as the Silvery Water painter, differs from visual interpretations of the same text created at other times and places.

To this end, I use three related images as comparative lenses for viewing the Silvery Water painting. One of these comes from a fifteenth-century manuscript of a text entitled *Aurora Consurgens*, which comments on the Latin translation of *al-Ma‘warraqī*. The manuscript includes a painting illustrating Ibn Umayl’s allegory (fig. 3). Another is a frontispiece of a book printed in 1622, which introduces the Latin translation of *al-Ma‘warraqī* (fig. 4). The third is a diagram of the tablet from a sixteenth-century Arabic manuscript of *al-Ma‘warraqī* (fig. 5). Comparison of the Silvery Water painting with these related images—an allegorical illustration, a frontispiece, and a diagram of the tablet—highlights what is exceptional in the Silvery Water painter’s own interpretation of Ibn Umayl’s text. Some aspects of his interpretation could conceivably have appeared in another context, but in other ways his interpretation specifically reflects the Perso-Mongol cultural climate in the first half of the fourteenth century. In this period, relations of the eastern Islamic lands with both Europe and China were greatly intensified.
Fig. 3. The rediscovery of alchemical knowledge. *Aurora Consurgens*, Vienna or Salzburg, early fifteenth century. Zentralbibliothek Zürich, ms. Rh. 172, fol. 3r. (Photo: after Obrist, *Débuts*, fig. 49. Reproduced with permission of the Zentralbibliothek Zürich)
Fig. 4. Frontispiece to volume five of Zetzner’s *Theatrum Chemicum*, Argentorati, 1622. (Photo: after Stapleton and Husain, *Edition of the Latin Rendering*, p. 146)
ALLEGORICAL ILLUSTRATION

Ibn Umayl begins the allegory as follows:

With Abu al-Qasim 'Abd al-Rahman, the brother of Abu al-Fadl Ja'far al-Nahwi, and then another time, with Ibn al-Husayn 'Ali b. Ahmad b. 'Umar, known as al-'Adawi, I entered into Abu Sir, the Prison of Yusuf, known as Sidr wa-Abu Sir.\(^{15}\)

The Silvery Water painter emphasizes this location with an inscription over the doorway at the far right, reading, "The ancient Egyptian temple [bisthā'] Sidr wa-Abu Sir."\(^{16}\) Abū Sir or, as it appears in other manuscripts, Busir, refers to several places in Egypt.\(^{17}\) Other medieval Islamic allegories also often relate that alchemical knowledge was located in Egyptian soil.\(^{18}\) For example, the Kitāb sirr al-khalīqa (Book of the Secrets of Creation) of Balinus (Apollonius of Tyana) begins with an account of how the author encountered at Tuwana, Egypt, a statue of Hermes with an inscription saying that the secrets of creation were below the statue’s foot. Balinus dug under the statue and opened a subterranean chamber. He entered it and encountered an old sage grasping an emerald tablet with those secrets.\(^{19}\)

The topos of the rediscovery of alchemical knowledge through archaeological excavation in ancient soil had clear implications for the legitimacy of that knowledge, suggesting that the secret knowledge the alchemists sought must exist, since it had existed before. Long ago, it had been known by the ancient sages, and particularly by the father of alchemy, Hirmis al-Muthallath (Hermes Trismegistus);\(^{20}\) therefore, it must be possible to know this secret knowledge again.\(^{21}\) Yet the difficulty of rediscovering it was only to be expected, given the long passage of time since it had last been known. Furthermore, it was fitting that the knowledge of alchemy should be hidden in the earth, since it was the earth that most effectively produced gold. A widespread alchemical idea, found not only in Islamic and European but also in Chinese alchemy, was that metals gestated in the earth like the fetus in the womb.\(^{22}\) All metals had the potential to be born as gold, but most were born too soon or were otherwise unable to achieve their healthiest state and were therefore born as other, baser metals. The attempt of alchemists to transform base metals into gold was only an attempt to replicate and accelerate what naturally occurred in the earth, which was therefore the most suitable place for alchemical knowledge to be located. The myth that alchemical knowledge was preserved in the earth expressed the idea that, while humanity’s grasp of alchemical secrets was fleeting, the earth’s grasp of the same secrets endured.

The particular geographical localization of alchemical knowledge in the earth of ancient Egypt had usefully ambiguous connotations in the medieval Islamic context. One aspect of this localization was that it gave mythic expression to part of the history of Islamic alchemy, which, like alchemy in the medieval West, had actual roots in Hellenistic Egypt.\(^{23}\) Yet it is worth noting that other roots of Islamic alchemy in China were generally not mentioned in these allegories.\(^{24}\) For legitimizing purposes, in most periods of Islamic history it made more sense to emphasize the origins of alchemy in Egypt. Ancient Egypt was distant, foreign, and mysterious in time, yet geographic Egypt lay in the heart of the Islamic world, plausibly accessible in space. The balance it struck in the imagination between mystery and plausibility remained a reliable constant. The accessibility of China, in contrast, vacillated with historical shifts in political and commercial relations along the Silk Route.

The Silvery Water painter emphasizes the Egyptian location in the style of the door at the bottom right. The geometric panelling of the door contrasts sharply with the more delicate white budding-leaf shapes that climb up the doorway, and with the larger-scale, light green tendrils that spiral loosely on the pediments above the main arch. The doorway and tiled pediments most obviously suggest the contemporary architectural decoration of the Perso-Mongol cultural sphere in which they were painted. In contrast, the dark, heavy pattern on the door is also compatible with the architecture of the Mamluk dynasty that ruled Egypt at the same time, and may be compared to a surviving fourteenth-century Mamluk door (fig. 6).\(^{25}\) In the painting, the inscription over the door invites the viewer to follow Ibn Umayl on the journey he made into the temple. By providing a door that looks Mamluk, the fourteenth-century painter marks this stage of the imaginative journey as similar to a plausible physical journey, in which the traveler may traverse space but not time.

In the allegory, Ibn Umayl specifies that the temple he entered was the Prison of Yusuf. Yusuf’s place in Islam was firmly established; the twelfth sura of the Qur’an relates the story of how he was sold into slavery in Egypt, imprisoned, and eventually released when
Fig. 6. Pair of doors. Egypt, fourteenth century. Wood and ivory, 197 cm x 90 cm. Benaki Museum, inv. no. 9281. (Photo: courtesy of the Benaki Museum, Athens)
he successfully interpreted the Pharaoh’s dream. In the Qur’anic telling, the importance of Yusuf’s ability to interpret is emphasized: God allowed him to be sold into slavery specifically so that he could learn the interpretation of stories.\(^{26}\) A study by B. H. Stricker makes clear that the Prison of Yusuf was a particular ancient Egyptian temple to which people from medieval Cairo made excursions and pilgrimages.\(^{27}\) The medieval Islamic name for the temple attests to its status as an ancient monument whose place in Islamic culture was secured by the accretion of new myths. Because it was recognized as ancient and culturally different, yet associated with a story found in the Qur’an, the Prison of Yusuf represented the place within Islamic culture that the defenders of alchemy claimed for alchemy itself. The medieval Islamic intellectuals who opposed alchemy rejected it as un-Islamic and false. Its defenders claimed it was a form of the wisdom of the ancients that, along with the rest of philosophy, had been confirmed by Islam.\(^{28}\) In depicting the Prison of Yusuf, the painter does not visually specify the building type but does indicate that it belongs in an Islamic milieu by providing it with a dome and an iwan.

The allegory of Ibn Umayl continues:

> I went towards a temple. The seekers (al-mu`libiyyun)\(^{30}\) opened it, and on the ceiling of the entry hall, I saw a picture of nine eagles with open wings, as if they were flying, and with outstretched and open claws. In the claw of each of the eagles was something like a fully drawn bow that soldiers have.\(^{31}\)

In the Silvery Water painting, the eagles are not affixed onto the ceiling but seem to be flying through the wall. Using the colors of brown, pale jade green, and white, the painter divides the nine birds into three sets of three. His decision to distinguish these three sets of birds by color is provocative because, alchemically, the transformation of colors marked the transformation of metals and other substances. The birds outside the temple are brown; after they fly through the wall and enter the temple precinct their color lightens to pale jade green, and as they approach the sage, who literally holds the secret, they turn white. The painter’s treatment of these birds seems inspired by the third section of al-Ma’ \(\text{al-\varaqi}`\), the commentary. There, Ibn \'Umayl frequently refers to the division of nine parts of water into three thirds, sometimes associating this division with color.

> His statement, “After the disappearance of the Blackness, the Gold will turn again into a Silvery Stone” is because the Blackness will become manifest on this “White Pure Earth” at the entering of the first three out of the nine parts of the “Divine Water,” and it is one-third of the nine. Then it will be whitened and the blackness will disappear.\(^{32}\)

Thus the progression of the birds from dark brown to white gives visual form to the idea of alchemy as a process of purification in successive stages.

The birds in the Silvery Water painting are strikingly unlike those in the Aurora consurgens painting, where they appear menacing and aggressive and are all blue—a color that, according to Barbara Obrist, is reserved throughout that manuscript for motifs that symbolize quicksilver,\(^{33}\) or mercury. As in other published Western depictions of the scene (fig. 4), they aim their arrows either directly at the sage or at the party of figures gesturing towards him. Their bows signify their capability and strength.\(^{34}\)

In the Silvery Water painting, in contrast, the birds have an almost lyrical quality. Their bows are only faintly indicated, trailing delicately from their feet. The gentle curve of each bow, ending with a loop, is echoed in the arrangement of the nine birds in formation. The painter’s decision to depict the birds in such an unthreatening manner might be linked to the Mongol understanding of nine as a lucky number.\(^{35}\)

In the allegory, Ibn Umayl goes on to describe what else he saw in the temple:

> On the wall of the gallery, to the right and left of anyone entering the temple, were pictures of people standing, of most perfect form, wearing a variety of clothes, and extending their fingers and hands towards the inside of the temple, towards the thing that was near the pillar of the gate of the hall. They were pointing to the idol who sat in the interior of the temple.\(^{36}\)

The figures who gesture towards the sage, here specifically identified as an idol, are described, as were the birds, as pictures found inside the temple. Presumably, then, the text alludes to ancient Egyptian wall
paintings. Yet, in a way that parallels his treatment of the architectural setting, the artist has made no indication of the pre-Islamic, culturally foreign status of these gesturing figures. Rather, he has dressed them in turbans and indicated tiraz bands on their sleeves.

The detail of tiraz bands is frequently seen in manuscript paintings from Iraq and Syria before the Mongol invasion, but then becomes less common. Although it is not clear exactly where these bands originated, they loosely suggest the culture of caliphal Islam that had been centered at Baghdad. Many that appear after the fall of Baghdad, and consequently of the caliphate, in 1258 are in manuscripts made in areas to the west or south, where Mongol culture had a comparatively slow or indirect impact. In post-conquest paintings made near the centers of Mongol power, their appearance often suggests cultural continuity stretching back to the ancient roots of Iranian or Islamic culture. In the paintings of the Great Mongol Shāhnāma (Book of Kings) of the 1330s, they are worn by some of the most ancient kings, such as Iskandar. In the paintings in the Jami’ al-tawārīkh (Compendium of Chronicles) manuscript of 1307–14, the bands tend to appear in scenes depicting stories of the prophets. There, the prophets who preceded Muhammad, such as Noah and Moses, are shown in Islamic dress, indicating that they were Muslims in the literal sense of submitting to God’s will, even if they were from the pre-Islamic era. In contrast, the cultural difference of non-Muslims, from the ancient giant ’Uj to the Chinese emperors, is made visually clear, and their lack of tiraz sleeve bands is one indication of this difference.

In the Silvery Water painting, therefore, the costumes with tiraz bands worn by the figures on the right are significant. The painter had other stylistic options available to him, as is clear from his depiction of the idol. By representing the smaller men as Muslims in a contemporary architectural setting, the artist invites the contemporary Muslim reader to identify with them. Whatever access they have to the secrets of the temple, the reader may also hope to gain.

The idol on the left, by contrast, is clearly foreign, and it is difficult to place him in time. Bishr Farès suggests that he resembles a Syrian-Byzantine idol. Surprisingly, the drapery folds of his green robe seem stylistically closer to drapery in the manuscript painting of England and France around 1200 than to geographically less remote Byzantine examples. The formal similarities between the Hermes/sage figure in the Silvery Water painting and the image of God holding the cosmos in a French moralizing Bible of the early thirteenth century are striking (fig. 7). It seems extremely unlikely that the Silvery Water painter could have intended such a heretical allusion. Yet, although this suggestion must remain purely conjectural, it is possible that the painter came across a similar image, in which the depiction of the cosmos showed celestial bodies. The painter may have considered the depicted “author” of such a cosmos a suitable model for his purposes because he, too, had to show an author of an object visualized in terms of suns and moons. Alternatively, he may have chosen such a model because he wanted a particularly “foreign” style. Perhaps the full hair and beard in such a painting reminded him of ancient classical statues and effectively connoted for him the great antiquity of the sculptural idol he was trying to represent.

What could explain the Silvery Water painter’s access to such a model? The Ilkhanid court exchanged embassies with the English and the French, whose communications, since they saw this relationship largely through the prism of the Crusades, often had a religious dimension. The English and the French sent monks and chaplains in their embassies to the Mongol court because they wanted to win the Mongols’ allegiance to the Christian cause; the Mongols on their part sent Christian monks from the East to Europe, presumably because they thought that the Europeans were likely to receive them favorably. Furthermore, the Dominican order was well established at various Mongol capitals, such as Sultaniya, Tabriz, and Maragha. Since these monks presumably traveled with Bibles and possibly other books, there would have been ample opportunity for the transport of books in general, and of Bibles in particular, from Northern Europe to the Mongol Islamic lands.

The stylistic elusiveness of the sage/idol figure in the Silvery Water painting is appropriate, given that legends surrounding Hirmis Muthallath, or Hermes Trismegistus, with whom the sage in the allegory would certainly have been identified, made him an elusive figure. According to tradition, Hermes Trismegistus had inscribed the secrets of alchemy on an emerald tablet and preserved it underground so that future generations might seek it out. In different cultural contexts, he represented different amalgams of individuals. According to a Hellenistic model, he represented the identification of Hermes with Mercury and
Fig. 7. The Creator forming the world with a compass. *Bible moralisée*. Paris, ca. 1208–18. Wien, Österreichische Nationalbibliothek, Cod. 1179, fol. 1v. (Photo: courtesy of the Österreichische Nationalbibliothek, Vienna)
with the Egyptian god Thoth. In one widely disseminated Islamic model, he was three individuals, of whom the first—identified with both Akhnukh (Enoch) and Idris—built the ancient Egyptian monuments and preserved knowledge within them to protect it from the Great Flood. The other two individuals with whom Hermes Trismegistus was identified in the same tradition both lived after the flood and spent at least part of their lives in Egypt. These were combined into the single figure of Hirmis Muthallath, who is specifically quoted in Ibn Umayl’s text so many times that an entire article has been devoted to those quotations. The Silvery Water painter managed to powerfully suggest the antiquity and foreignness of this composite figure, without identifying him with any specific time or place.

The Aurora Consurgens painting shows no such stylistic distinction between the observers and the sage. Obrist suggests that the painter portrays the sage as alive, implying the vitality of alchemy itself. Not only does the Aurora Consurgens painter seem to avoid presenting the sage/Hermes figure as the idol with which he is identified in the text, but even more surprisingly, he introduces another unmentioned idol: the flask of gold at the center of the painting, elevated to idol status by its placement on the column. The figures at the right pay more attention to this flask than to the sage—that is, more attention to the ultimate goal of alchemy, as represented by gold, than to the secrets of how to reach it.

In the allegory, Ibn Umayl describes the idol as follows:

He was situated to the left hand of whoever desired to enter the Hall, facing the person who entered from the gallery. He was in a chair like the chairs of physicians, which was separate from the idol.

In the Islamic lands, Europe, and China, the broad goals of alchemy often extended beyond the perfection of metals into gold, to the purification of the human body. Thus it is absolutely appropriate that the father of alchemy should have sat on a physician’s chair, and the Silvery Water painter has obligingly provided one, the straight golden lines of which stand out clearly against the blue and green polygonal tiles of the floor. In the Aurora Consurgens painting, in contrast, the sage/Hermes figure sits on the floor. Since chairs were common furniture in medieval Europe, the association of the chair with medicine apparently lost its resonance there.

The allegory continues with Ibn Umayl’s description of the tablet:

In his lap, resting on his arms, his hands extended on his knees, was a stone slab (bal thanks), separate from him. The length of it was about one cubit, and the breadth about one span. The fingers of both his hands were bent behind the slab, as if holding it. The slab was like an open book (mushaf) exhibited to all who entered as if to suggest that they should look at it.

By explicitly comparing the sage’s tablet to a book, Ibn Umayl presents him as an authority from whom it is appropriate to learn. According to Islamic Neoplatonism, the wisest of the ancients had arrived by reason at truths that were compatible with Qur’anic revelation. These wise ancients would have readily proclaimed their acceptance of Islam had it been available to them. By choosing green, the Prophet Muhammad’s favorite color, for the sage’s robe, the Silvery Water painter suggests that the sage was such a man. At the same time the color of the robe also recalls the green of the emerald tablet on which Hermes inscribed his secrets.

ALLEGORICAL ILLUSTRATION AND FRONTISPICE

It is interesting that what Ibn Umayl says he saw in the temple was not the sage himself but an idol—almost certainly a sculptural representation of the sage—and not actual observers, but images of observers. To understand the relevance of Ibn Umayl’s encounter with the visual images in the allegory, one must first recognize the culturally established type to which his description refers. Within the allegory, when Ibn Umayl enters the ancient temple, what he encounters is a monumental author portrait, displaced from its usual physical context of a page in a book and rendered partly three-dimensional in an architectural space. Though the images of the birds are superfluous to the identification of this image type, the other images described correspond to it neatly.

Ibn Umayl’s description emphasizes the points of correspondence between what he sees in the temple and the author-portrait type; he is clearly determined to make sure that the reader understands the reference. Late antique author portraits generally depict an evangelist sitting in a chair, holding his gospel. In the medieval and early modern Islamic and European frontispieces that developed from this tradition,
authors other than evangelists also held their books. Ibn Umayl not only explicitly specifies that the sage sits in a chair but goes on to belabor the point that the slab is like an open book. Later, he refers to the figures who gesture towards the sage as al-mutâlîbiyyûn. This term has posed a challenge for translators, but by implication it refers to people who seek something, and it comes from the same root as the word for student, tâlib, a seeker after knowledge. As Eva Hoffman explains, in both late antique and Islamic author-portrait frontispieces, the author’s students sometimes appear with the author. In the Silvery Water painting, the narrative of the allegory is reconciled with the description of the frontispiece, so that both are visible together. The figures referred to as al-mutâlîbiyyûn, who gesture towards the sage, not only are dressed in a manner appropriate for students but also occupy the space on the page generally associated with them.

Given the conventional implications of author portraits, the monumental one that Ibn Umayl encounters in the allegory implies both that the sage was the authentic author of the tablet and that the tablet itself was an authentic presentation of its author’s knowledge. In addition, the unusual physical context of the monumental, partly sculptural portrait—which Ibn Umayl encounters in the architectural space of the temple described in the allegory, rather than in the codicological space of the book where the reader later encounters a representation of it—emphasizes the exceptional way in which the secrets of alchemy were supposedly preserved. Rather than having been written down in a manuscript, the secrets were engraved on a tablet kept in an ancient temple, highlighting the antiquity of the knowledge itself while simultaneously emphasizing the reliable manner of its preservation.

Even without any accompanying image, the text itself would have brought an author portrait to the mind of a reader in both the Islamic East and the European West, since the two regions shared the same late antique artistic heritage. Although the Aurora Consurgens painter did not exploit this reference, the Silvery Water painter and the maker of the 1622 frontispiece did. They responded to the literary allusion to a frontispiece in the allegory with images that functioned as actual frontispieces. (Another published example, dated 1605, shares the basic compositional layout of the 1622 frontispiece.)

The resulting visual layering, the images of the image containing an image, paralleled the textual layers of commentaries on commentaries and related texts that appeared in alchemical manuscripts. For example, the 1339 manuscript opened with the Silvery Water painting and with Ibn Umayl’s al-Mâ‘ al-warraqi, which included the introductory allegory; a poem that elaborated on the tablet described in the allegory; and a commentary on the tablet, allegory, and poem. The manuscript then continued with several other short texts, all related in various ways to the first. These represented other writings by Ibn Umayl, by his sources, and by his successors in the alchemical tradition. Similarly, Aurora Consurgens had two parts: in the first, quotations from the Bible, framed as alchemical allegories, were supplemented by passages from Ibn Umayl, while the second was simultaneously a commentary on the first part and on Ibn Umayl’s treatise. His treatise was also the main source of the second part.

Although this habit of layering texts was not unique to alchemy, it had a special significance for alchemists because of what they saw as their path to uncovering the secrets of material and spiritual purification. Like medieval scholars in general, they revered the knowledge of past authorities; but for alchemists in particular, the line of past authorities and the cumulative layers of commentaries to them and about them were the path to the ancient sages who had once, long ago, possessed this secret knowledge. The layers of commentaries and interrelated texts can thus be seen as the alchemists’ peculiar archaeology of knowledge.

The distinctions between textual layers often collapsed. Ibn Umayl’s al-Mâ‘ al-warraqi was both the main source of the second half of the Aurora Consurgens and also the object of its commentary. A similar collapsing of distinctions occurred at a visual level, in images of the allegorical author portrait. While the traditional physical context for an author portrait was the manuscript, the author portrait in the allegory was not bound within a manuscript but found on and between walls; yet numerous images of that allegorical author portrait were images in books.

In their conventional physical context within bound books, the placement of both Western and Islamic author portraits was significant, indicating that the image pertained to whatever text followed. As evangelist portraits typically introduced gospels, author portraits appeared as frontispieces to texts by the authors they depicted. The clearly deliberate placement of the Silvery Water painting near the front of
the 1339 manuscript implied an authorial connection, if an indirect one, between the sage depicted and the book as a whole, and thereby acknowledged the importance of Hermes to alchemy in general. The painting appears on folios 2b and 3a, immediately after the allegory it illustrates, on 1b and 2a: one obvious place for it, but not the only one. In several other Arabic manuscripts of the same text that depict the image held by the sage but not the entire allegory, diagrams of the image appear later, near poetic couplets pertaining to them. Ibn Umayl’s text implies that this later location was the default location for any image of the tablet. He says:

I have drawn a picture for you of that tablet and of these figures and images that were on it, in its proper place in that poem under the couplets that refer to these images.70

In the 1339 manuscript, however, there is no image of the tablet under the poetic couplets that refer to it. Instead, the painter and calligrapher have deliberately placed a painting that includes the tablet immediately after the prose allegory, and early enough in the text block so that it appears in the conventional frontispiece location of an author portrait.

In the 1622 frontispiece, the author portrait is emphasized and the narrative of the allegory de-emphasized. The large body of the sage is at the center of the image. The tablet he holds is hinged to resemble an open book. There are ten birds, as mentioned at the end of the Latin version of the commentary,71 rather than the nine of the narrative allegorical introduction. Birds and observers mentioned in the allegory flank the sage, and like the perspectival beams and floor tiles above and below him, they act as formal devices for framing him. The image has no temporal direction that corresponds to the unfolding of the narrative. Whereas the Aurora Consurgens painting, like Latin, reads from left to right, and the Silvery Water painting, like Arabic and Persian, reads from right to left, the 1622 frontispiece is meant to be perceived at once and from the center. The figure’s monkish costume distinguishes him from the observers, further drawing the viewer’s attention to him.

Hoffman has explained that in Islamic book culture, the frontispiece formula, in which the author and his work are depicted, was often used to introduce texts by classical or late antique authors.72 The unconventional style in which the Hermes figure is depicted not only draws attention to him but also emphasizes his antiquity. The Silvery Water painter uses the frontispiece type to emphasize both the ambiguous position of the classical heritage in Islamic learning and the ultimate authority of the text in the manuscript. Both the theme of cultural difference in the genealogy of knowledge and the conventions for expressing it visually were already part of the specifically Islamic tradition of author-portrait frontispiece painting as it had developed by the thirteenth century. One precedent for emphasizing this point through stylistic difference is a frontispiece in a thirteenth-century Arabic manuscript of De Materia Medica of Dioscorides, which Hoffman analyzes in detail (fig. 8).73 She shows that in this painting, the image of Dioscorides on the right seems to have been copied from a middle-Byzantine painting of the Evangelist Matthew, and is thereby stylistically marked as pre-Islamic. Dioscorides extends his arm to beckon two figures, who approach him carrying books. These figures, identified as his students presenting their copies of his text for approval, wear turbans and robes with tiraz bands that mark them as Muslim. As Hoffman demonstrates, the image gives visual form to the idea of Islamic scholars as heirs to the classical tradition.

In the thirteenth-century Dioscorides frontispiece, the author depicted represents the author of the text of the manuscript, and the book depicted represents that manuscript. In the Silvery Water painting, this is not the case. The sage/Hermes figure is not the direct author of the texts in the manuscript, but rather the authority behind the direct authors—the Ur-author, so to speak. He is the one whose knowledge the authors, and particularly Ibn Umayl, aspire to reveal. What he holds is not the text that follows but rather a tablet with images that are supposedly understandable in conjunction with that text.

ALLEGORICAL ILLUSTRATION, FRONTISPIECE, AND PICTOGRAM

The substitution of a tablet with images for a book with text, as dictated by the frontispiece image type, is partly explained by the ambiguous nature in Hermetic tradition of the original emerald tablet, which according to some accounts had images but according to others had text. As Obrist explains, this ambiguity makes sense, given that the original, having been written by the builder of the pyramids, would presumably have been engraved with hieroglyphs; there-
fore, the question of whether it was text or image was not, and could not be, resolved. For Ibn Umayl, the emerald tablet is much like a pictogram containing ancient images readable as symbols. In his allegory he surrounds the tablet with pictures and hieroglyphs, which of course are simultaneously text and image.

Next to the seated one, in the hall (riwāq) where the image was situated, were pictures of different things and lines in the hieroglyphic script.

In one sense, since the tablet is the object in which the secret is supposedly revealed, its discovery is the climactic conclusion of the excavation. The tablet is clearly visible in the Silvery Water painting, in the early fifteenth-century Aurora Consurgens image, in the 1622 printed frontispiece, and in the diagram from the sixteenth-century Arabic manuscript. The half of the tablet first described in the text appears, in the corresponding image, on the side that would be read first: in the Arabic and Persian manuscripts, the right side; and in the Latin books, the left.

In the Silvery Water painting, the masonry wall with peach and blue stones breaks dramatically away in front of the tablet, emphasizing that the viewer is granted direct access. Since each of the numerous layers of images in the allegory and painting that frame the tablet leads somewhere, the expectation that the tablet should likewise lead somewhere is firmly established. That “somewhere” is clearly identified in Ibn Umayl’s claim that it contains the secret of alchemy.

Yet in another sense the tablet requires an entirely new excavation into the layers of alchemical meaning. It presents the secret through yet another set of
allegories, this time astrological and numerological, according to Ibn Umayl’s description, which begins as follows:

The tablet in his lap was divided into two halves by a line down the middle. On one half of it towards the bottom was a picture of two birds having their breasts to one another. On one of them both wings were cut off, and the other had both wings. Each of them held fast to the tail of the other by its beak, as if the flying bird wished to fly with the mutilated bird, and the mutilated bird wished to keep the flying bird with itself. These two birds of the same kind, which held each other back, became a single circle, a symbol of “Two in One.”

In the Silvery Water painting, the two interlocking birds clearly belong to the same species as the nine birds on the right. Although the wings of one are spread open and the wings of the other clipped, both birds are depicted in the same scale; the feet of each one reach for the other in the same way; and each bites the other’s tail to the same degree. In the Silvery Water painting, the carefully balanced image of the two birds, interlocking with Escher-like precision, recalls the Chinese symbol of yin and yang.

I know of no other representation of the tablet that presents the two birds as yin and yang. In the Aurora Consurgens painting, the birds are unevenly matched: the upper, blue bird clearly overpowers the smaller white one. In the 1622 printed frontispiece, the birds are of the same scale, but their pose does not suggest a circle. In the Arabic diagram, where the abstracted symbol of the birds appears at the lower right, they appear like two links of a ring that circumscribes an empty inner space.

The suggestion that the Silvery Water painter intended the two birds on the tablet to resemble yin and yang is not so far-fetched as it might at first seem. In Chinese alchemy, pairs of ingredients were, in the words of Nathan Sivin, “yin and yang with respect to each other.”

Furthermore, yin and yang were at the basis of Taoist “inner alchemy,” whose adepts aimed for purification of their own bodies, minds, and spirits, and which flourished in this period. Because of the Mongols, cultural exchange between the Islamic world and China was particularly vibrant, and a well-studied account of a Chinese alchemist’s travels in Islamic Central Asia dates from this period.

Ibn Umayl may or may not have understood the two interlocking birds as yin and yang; a conclusion on this point must await more studies about Islamic-Chinese cultural relations in the tenth century. Yet an early fourteenth-century reader, whose opportunities to see the yin and yang symbol can easily be imagined, would quite plausibly have recognized that symbol in Ibn Umayl’s description of the two birds as a circle that symbolized “Two in One.” The commentary would also have supported this interpretation, since it describes the birds as male and female.

The inscription on the sixteenth-century Arabic diagram also labels them as male and female, but the inscription just below the birds on the Silvery Water painting goes further, emphasizing their mutual dependence: “The female is the spirit [al-rūḥ] extracted from the male, carrying it, flying away with it.” The image itself leaves little doubt about the painter’s interpretation of Ibn Umayl’s words.

As yin and yang, the two birds connote several additional associated polarities: not just male-female, but also dark-light, dry-moist, and hot-cold. The same polarities pertain to the planets, which in medieval Western, Islamic, and Chinese alchemy were symbols of different metals, although the symbolic associations varied across traditions and within each tradition.

In the allegory, the description of the tablet continues:

At the head of the flying one was a circle and, above these two birds, at the top of the tablet close to the fingers of the image, was the representation of the crescent moon. At the side of the moon was a circle, similar to the circle near the two birds at the bottom.

In the Aurora Consurgens rendition of the tablet, the painter has included a crescent and a circle above the birds and a circle below them. All three of these objects share a dark color, creating an affinity between them. The crescent and the adjacent circle are also similar in scale, suggesting that the artist interpreted them as two moons, and inscriptions on the Arabic diagram identify them as such. As for the 1622 print, it has neither colors nor inscriptions to indicate their relationship. In the Silvery Water painting, however, the circle above the birds is gold; the tiny crescent directly to its left—now tarnished, dark, and difficult to see—was once bright silver. The painter has interpreted these as the golden sun and the silver crescent moon. The inscription above them emphasizes the polarities they represent, as metals and as planets. “They are two vapors—the light and the heavy. They
are the steam and the smoke. They are the dry and the moist. The smoke is the dry; the steam is the moist. The smoke is the soul [al-nafs]; the steam is the spirit [al-rūḥ], and it is the moist.” Ibn Umayl’s poem, Risālat al-shams ilā al-hilāl, also presents the sun and moon in terms of polarities. There, the moon proclaims: “I am the soft cold moon/ And you are the hot rigid sun.”

Within alchemy generally, the male-female polarity was linked to the idea that metals were born of the earth. In accordance with this idea, alchemy was also understood as a process of conjugal reproduction involving the union of male and female. The female figure peering from the window in the right half of the Silvery Water painting is not mentioned in Ibn Umayl’s allegory. She may, however, have been included to emphasize this male-female polarity that was poetically expressed in the Risālat al-shams ilā al-hilāl. Her inclusion with the male figures in the painting also offers an indirect link to the Persian text on the gestation and birth of metals from the earth on folio 76a of the manuscript.

Ibn Umayl’s allegory continues without direct comment on the remaining circle of the first side of the tablet. In the diagram from the sixteenth-century Arabic manuscript, an inscription on this circle explains that it is the source of the two birds, which are the male and the female. In the Silvery Water painting, this circle also bears an inscription, but unfortunately the pigments have eroded to illegibility. In the allegory, Ibn Umayl’s description of the first half of the tablet concludes as follows:

The total was five—three at the bottom, that is, two birds and the circle, and, above, the figure of the crescent moon and the other circle. This explanation of how the first half of the tablet adds up to five is clear.

Ibn Umayl then proceeds to describe the second half of the tablet—the side to the reader’s left in the images from Islamic manuscripts, and to the right in the images from Latin books. As for the first half, he describes its astrological symbols in numerological terms that are supposed to add up to five.

On the other half, at the top of the tablet, close to the fingers of his hands, was a picture of a sun with two rays, as if they were a symbol of “Two in One.” Next to them was a picture of another sun, with one descending ray. These are three things: I mean, three lights. The rays of the “Two in One” descend down towards the bottom of the tablet, to a black circle, of which one-third is divided off. Thus it became two-thirds and one-third. One-third of it had the form of the crescent moon because the interior of it is white, not filled with black. The black circle surrounds it. This picture of the two of them is the picture of “Two in One.” That which is at the bottom is “One of Two.” Those two are the black circle and the crescent moon, which is a portion of it. And [there are] two suns at the top, I mean the picture of “Two in One,” and the single sun, which is the picture of “One in One.” So these are also five things.

How the second side of the tablet as described adds up to five is very confusing until one realizes that the text poses the same addition problem twice, with the different terms of the sum presented in two different orders. First, the problem is posed as follows: The two rays emanating from the first sun, and the one ray emanating from the other sun, should be added the two parts of the circle below (these uneven parts are, first, the one-third, and, second, the two-thirds): 2 + 1 + 2 = 5. Then, starting with the sentence, “That which is at the bottom is ‘One of Two,’” the problem is stated again in reverse order. In the Arabic diagram of the tablet, the symbols on the second side are labeled with numerals. In each case the first numeral indicates the numerical value of the symbol, confirming this reading of the problem (fig. 5). The sun with two rays is labeled “2 in 1;” the sun with the single ray is labeled “1 in 1;” and the circle below is labeled “2 in 1.” The parts of the second (right) side of the diagram in the Aurora Consurgens painting can also be counted as five in this way, by counting the divisions of the lower circle by color—one silver part and one gold part—instead of counting the two silver and one gold faces. In the printed 1622 frontispiece, the rays are not indicated.

In the Silvery Water painting, it is indeed possible to count five things on the left side of the tablet by adding the three faint golden rays extending from the suns to the two parts of the sphere below them. The inscription to the left of the tablet, near the red pole, includes a reference to “two and the third” that seems to refer to the division of the lower sphere into one section of two-thirds and a second section of the remaining one-third. But the inscription above the left side of the tablet seems to complicate the matter. Disconcertingly, it reads, “Water, air, and fire. Therefore they drew it as three, to indicate thereby that it is one, within which is three. They became
five in number. And the five is from two. Thus, they have said that the earth is of two substances and the water is of two natures. And they drew it as five.”

The key to this puzzling inscription is to recognize that the calligrapher alludes in quick succession to three different ways of reckoning the tablet’s numerological significance, without attempting to reconcile them. Each of these apparently contradictory ways of counting the tablet has its own basis in the allegory or commentary.

First, the calligrapher interprets the entire left side of the tablet, which has two suns and one circle below, as an expression of three in one. This reflects the idea, mentioned repeatedly in the commentary, that the divine water is of three natures. Then he goes on to mention that the same three pictorial elements also add up to five. As explained above, this has a basis in the description of the tablet in the allegory, according to which the two rays of the first sun, the one ray of the second sun, and the two parts of the circle below make five. Finally, in the expression “five is from two,” the calligrapher alludes to the idea that there are two sides of the tablet, each equaling five. This idea is connected to the saying “The earth is of two substances and the water is of two natures,” which Ibn Umayl interprets in the commentary as referring generally to the idea of two parts of a single whole, and specifically, to the two parts of one whole alchemical operation, represented by the single tablet divided into two halves:

“The earth is of two substances and the water is of two natures.” That is the operation of the “whiteness” and the “redness,” and it is one operation. They have called it two operations. Do you not see that the first operation [“the whiteness”] is from five—two above and three below; and the second operation, “the redness,” is from five—three above and two below? So the operation of “the whiteness” is the first half—it is first. And the operation of “the redness” is the second half. It is one operation. They have called it the two operations, in accordance with what I have portrayed, just as the sage drew it.92

The connection between the statement “Five is from two” and the reference to the two natures of water appears again in a short passage included just after the introductory allegory in the 1339 manuscript but omitted from other manuscripts of the text. This passage also refers to the triple nature of water. It reads:

This pertains to the explication of the pictures. Water, air, fire—they named it water of two natures, because the five is from two, I mean from male and female,93 and their counterparts, which are salting (al-tamlih) and the three... suns. They are all one thing. It is one water within which are three natures—water, air, and fire. So he portrayed it as three; he indicated it by this. And this is the triple water. That is, that it is one, and it is two, and it is three.94

The initial objection that the numerological inscription above the left side of the tablet is internally self-contradictory becomes irrelevant, given that the ultimate substance, the divine water, has simultaneous numerological values of one, two, and three: it is one water, yet has been called a water of two natures (as Hermetic secrets are expressed on the two halves of a single tablet) and also has the three natures of water, air, and fire. In this context, where symbols have multiple referents, it is conceivable that the calligrapher may have decided to emphasize the parallels between the divine water and the sun with two rays on the tablet. In the commentary, Ibn Umayl says that one word may have two or three meanings, and that water is fire.95 The sun with two rays has multiple values—as a constituent of three it is one, and as a constituent of five it is two. All that is left to make this sun parallel to the comment that the divine water “is one, and two, and three” is to give this sun the value of three, and perhaps this is why it is inscribed with the word for “three.”

In the sixteenth-century Arabic diagram, the two sides of the tablet are labeled simply “first operation” and “second operation.” These labels are clear, but they obscure the idea of parts constituting a single whole. The more complex inscription by the Silvery Water calligrapher at the upper left of the tablet is based on the idea that the numerological values of the tablet and its parts are in flux.

The ultimate identity of the singular and the plural was, after all, the core theme of alchemical thought. Base metals could become gold because the numerous metals of the world were ultimately of one essential substance. Hirmis/Hermes, the father of alchemy, had an identity of three-in-one. Metals, planets, people, and everything else were connected by a universal sympathy of matter. Within the Islamic Neoplatonic framework that formed a broad intellectual backdrop for Islamic alchemy, everything in the world, including planets and metals, had emanated from a single source. Since separate things were ultimately
unified, they could merge, collapse, divide internally, and transform; this was the basic idea upon which the legitimacy of alchemy ultimately depended.

In the allegory, Ibn Umayl concludes the numerological discussion of the tablet by announcing a momentous coincidence, resounding with unspecified significance:

The total is ten, according to the number of those [nine] eagles and the [one] black earth! The finality and apparent transparency of this conclusion seem somehow to confirm the deep import of Ibn Umayl’s voyage through the temple, the authority of the sage whose representation he encounters, and the validity of the tablet itself. The sentence reverberates through the cumulative effects of the various roles of the Silvery Water painting vis-à-vis the text—as allegorical illustration, author-portrait frontispiece, and pictogram, all of which work together to legitimate the claim that the manuscript holds the secrets of alchemy.

Indeed! The finality and apparent transparency of this conclusion seem somehow to confirm the deep import of Ibn Umayl’s voyage through the temple, the authority of the sage whose representation he encounters, and the validity of the tablet itself. The sentence reverberates through the cumulative effects of the various roles of the Silvery Water painting vis-à-vis the text—as allegorical illustration, author-portrait frontispiece, and pictogram, all of which work together to legitimate the claim that the manuscript holds the secrets of alchemy.

It is no accident that the final answer to the series of sums is ten. In the system we now call “base ten,” which was of course the system then in use, ten is not only ten units of one, but also a single unit of ten. The initial numerological building blocks of the tablet are symbols of one and of two in one, which ultimately resolve into a single unit of ten. The tablet’s complex numerology continuously fluctuates between singularity and plurality. Ten, being both ten units of one and one unit of ten, represents this fluctuation between singularity and plurality in a way that other numbers, such as nine or twelve, do not.

The imagery of the Silvery Water painting, like the unusual inscriptions upon it, can be seen as a meditation on the whole text that eloquently expresses this theme. The painting expresses the painter’s layered interpretations of al-Mih al-waraqi, just as the inscriptions on the painting express the calligrapher’s layered interpretations of the tablet. The Silvery Water painter had to find a way to give the reader of the manuscript direct access to the pictogram of the tablet without compromising his simultaneous presentation of sage-as-author and of an allegory including other figures in the temple. The posture of the sage/Hermes figure, particularly the repainting of his legs, shows how the painter has wrestled with the formal conflict posed by the two audiences of the tablet. The sage’s proper right knee, now bent inwards towards the gutter, was originally positioned so that the sage would have more fully faced the viewer of the manuscript. In the painter’s revised version, the sage’s lower body is oriented towards the audience mentioned the allegory, but from the waist up he faces Ibn Umayl’s audience—the readers of the book—and reveals the tablet to them. This was an innovative and somewhat risky solution, given that the subjects in author-portraits were conventionally usually shown from either the front or the side, but not both. The distinctive style of the figure, the way he presents the tablet like a book, and the chair on which he sits nevertheless ensure that he remains clearly identifiable as an author type. In the end, the painter was able to produce an image that operates simultaneously as allegorical illustration, frontispiece, and pictogram. All these layers give the painting a density of meaning that suggests through its very richness the legitimacy of alchemy.

Ibn Umayl comments on the purpose of the image of the tablet as follows:

Since historical sources yield very few explicit discussions of the role of images in Islamic painting, this is a remarkable passage. Modern scholarship maintains that the role of images in Islamic scientific manuscripts is didactic: that the images are meant to explain and teach the knowledge most essentially contained in the text. Here an author of a text containing an image (in many manuscripts just the diagram of the tablet) tells us that the image contains knowledge and requires extensive explication in words. If the role of the image is didactic, it is not didactic in the usual sense: it does not explain, clarify, or remind. To learn from this manuscript is to grapple with its puzzles, and the image of the tablet is the core, the essence, of those puzzles.

Yet even as a puzzle, the most important function of any image of the tablet Ibn Umayl describes is to legitimate alchemy by holding out the promise that
its secrets exist. The Silvery Water painting as a whole enhances this underlying purpose; by depicting discovery, it legitimizes the claim that there is indeed a discoverable secret. This was the foremost argument that Islamic alchemists used to defend their art in words. The Silvery Water painter gave the argument its visual expression.

CONCLUSION

When compared to three other closely related images, the Silvery Water painting stands out in two ways. First, it operates simultaneously and with exceptional consistency as allegorical illustration, author-portrait frontispiece, and pictogram. Second, it showcases the different cultural strands within Islamic alchemy as it existed under Mongol rule in 1339.

The consistency with which the Silvery Water painting operates sets it apart from the three other closely related images considered above. The combination of allegorical illustration, author-portrait frontispiece, and pictogram is clearly suggested in Ibn Umayl’s text, which stages an encounter with an architectural, painted, and sculpted author-portrait mentioned in the allegory and also describes an image-within-an-image. Two of the other representations considered here, the Aurora Consurgens painting and the 1622 printed frontispiece, visually express aspects of this combination, but not with the comprehensiveness of the Silvery Water painting. The Aurora Consurgens painting presents the image-within-the-image but is not a frontispiece. The 1622 print depicts the author-figure with a hinged, book-like tablet, within a frame suggested by the allegory, but both the illustration of the allegory and the depiction of the symbols on the tablet seem secondary. The success with which the Silvery Water painter combined these three layers of relationship to the text in a formally appealing image may offer insight into how and why it remained an object of interest beyond its original context.

Another distinctive aspect of the Silvery Water painting is the degree to which the painter showcases the different cultural strands of Islamic alchemy; he reveals a clear awareness of its heritage in the traditions of pre-Islamic Egypt and of its connections with Chinese alchemy. Even as his painting claims a legitimate place for non-Islamic traditions within Islamic culture, it clearly differentiates between what is Islamic and what is not.

In the century following the Mongol conquest, cultural traditions from East and West merged and collided on a daily basis. Prior to the conquest, the population in the eastern Islamic lands already formed a diverse society that included Persian-speaking Turks and Arabic-speaking Persians who studied translations of Indian and Hellenistic books. To this, the Mongols added not only themselves, but also other ethnic groups (from as far away as China) that they resettled in Islamic cities. Western Europeans also moved to the new Mongol capitals. For individuals who lived in this violent era, reconciling these diverse traditions was often key to survival. The situation in Iraq was particularly precarious in 1339, when the Ilkhanid dynasty that had ruled from Iran was dissolving, and Hasan-i Buzurg, a member of the Jalayirid family descended from a Mongol tribe, was establishing his own base at Baghdad. Not only was the power structure in transition, but Iraq, which had been ruled as a province since the third quarter of the thirteenth century, suddenly found itself the political center of an upstart dynasty hoping to take advantage of the troubles of its predecessor. Produced in and for an unstable world that was forced to struggle to reconcile colliding cultural, artistic, and intellectual traditions, the Silvery Water painting legitimized alchemy, partly by showcasing the various different cultural strands within Islamic alchemy in a manner that implied their ultimate compatibility while recognizing their differences. This purpose could easily be applied retroactively to the words in Ibn Umayl’s commentary, written at a very different historical moment:

You see their differences of expression, but yet the meaning is one.

In the year 1339, when the Silvery Water painting was being produced, the controversy that surrounded alchemy was very much alive in Islamic intellectual life. Ibn Taymiyya, whose voluminous and influential writings included attacks on the occult sciences in general and on alchemy in particular, had died only a decade earlier, in 1328. His student, Ibn Qayyim al-Jawziyya (d. 1349), who also wrote against alchemy, was still active. Meanwhile, Izz al-Din Aydamir al-Jildaki (d. 1342 or later) and others were writing new alchemical texts and commentaries. When Islamic alchemists defended their art in words, their foremost argument was that the secret of alchemy must exist, because it had once been known. There-
fore, despite serious challenges, the argument continued, hope must remain that the secret might be rediscovered. Through its elaborate interactions with the text, at the levels of allegorical illustration, author-portrait frontispieces, and pictogram, the Silvery Water painting communicates the same idea. It introduces a visual dimension to our understanding of a debate that has so far been studied only in terms of its verbal expression. In so doing, it serves as a particularly compelling example of the close relationship between painting and intellectual life in the eastern Islamic lands in the first century of Mongol rule.

Harvard University
Cambridge, Massachusetts

NOTES

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1. The manuscript, Topkapı Palace Museum, Istanbul, A. 2075, contains 79 folios. The painting, on fols. 2b–3a, measures a total of 14.5 x 21.0 cm. The manuscript has been catalogued in Fehmi Edhem Karatatay, Topkapı Saray Müzesi Kütüphaneleri Arşivesi Yazarlar Kataloğu, vol. 4 (Istanbul, 1962), cat. no. 8717, p. 392. See notes 66–67 below for a more extensive description of the short texts at the end of the manuscript.


3. For a discussion of the similarities and distinctions between al-nafs and al-rūḥ, including an analysis of these terms as philosophical concepts according to the author Qusta b. Luqa (d. 912), see The Encyclopedia of Religion, s.v., “Soul. Islamic concepts.”

4. My thanks to Wheeler Thackston, who helped me read this inscription.

5. Carboni, “Synthesis,” pp. 222–23, fig. 271; Grube, Persian Painting in the Fourteenth Century, pp. 18–19, fig. 4; Grube, “Kalilah wa Dimma”: 491–507, p. 497, fig. 7. In support of this attribution, I would add the observation that, like the stylistic properties of the painting, the preponderance of Arabic in a manuscript that also includes Persian further suggests the province of Iraq. The inclusion of a few passages in the manuscript in Persian points to lands in the eastern half of the Islamic world that were under Mongol domination, where Persian was then emerging as the major literary language. Yet the fact that the bulk of the text is in Arabic suggests the province of Iraq, where, at least in the first century of Mongol rule, cultural continuity with the pre-Mongol past seems to have been stronger than in other lands under Mongol rule. Much more remains to be said on this issue, but for evidence of cultural continuity in Iraq immediately following the conquest, see Marianna Shreve Simpson, “The Role of Baghdad in the Formation of Persian Painting,” in Art et société dans le monde iranien, ed. Chahyvar Adle (Paris: Éditions Recherche sur les Civilisations, 1982): 91–116; and Keith Weissman, “Mongol Rule in Baghdad, Evidence from the Chronicle of Ibn al-Fuwati: 656 to 700 A.H. /1258 to 1301 C.E.,” (Ph.D. diss., University of Chicago, 1990).

6. Within the text block, the calligrapher has used different scripts as he switches among the various kinds of texts in Arabic prose, Arabic poetry, and Persian prose. Yet the transitions between these different scripts are sometimes gradual rather than abrupt, and the examination of particular letters in the different texts indicates that they are all the work of the same hand.

7. For all three interrelated texts, see Muhammad bin Umail, Three Arabic Treatises on Alchemy, Arabic edition of the texts by M. Turab ‘Ali, published in one volume with H. E. Stapleton and M. Hidayat Husain, “Excursus on the Writings and Date of Ibn Umail with Edition of the Latin Rendering of the Māʿ al-waraq,” Memoirs of the Asiatic Society of Bengal 12, 1:1–213. A. 2075 was not among the manuscripts consulted for this edition, but the full introductory allegory as it appears there (A. 2075, fols. 1b–2a) has been transcribed and published by Fuat Sezgin, “ʿUcamcmʿat ar-rasaʿal,” İslam Tarihkitleri Enstitüsü Dergis: Review of the Institute of Islamic Studies 2, 2–4 (1958): 231–256, pp. 244–45. As compared to the ‘Ali edition, a few lines of Risālat al-shams iš al-ḥilāl appear in a different order in A. 2075. And as in one of the five manuscripts consulted by ‘Ali, the section of prose published on pp. 51 and 52, as well as several of the short poems, is not included in the commentary in A. 2075.


9. The term “mercury-sulfur” is a loose designation, since it is not clear exactly what chemical substances (if any) were being


12. Zentralbibliothek Zürich, ms. Rh. 172, fol. 3a. Barbara Obrist has analyzed this painting with reference to Ibn Umayl’s text and has published it in color in Les débuts de l’imagerie alchémique (14e–15e siècles) (Paris: Le Seycmore, 1982), pp. 189–208, fig. 49.


15. A. 2075 fol. 1b, lines 2–4; Sezgin, "Macm¸{at," p. 244, lines 17–20. Published translations of the introduction include Stapleton and Husain in ‘Ali, Three Treatises, pp. 119–21 (English); Ruska, "Studien," pp. 311–13 (German); and B. H. Stricker, "La Prison de Joseph," Acta Orientalia (1942): 101–137, pp. 101–105 (French). For translation of all passages from the allegory, I have used the existing translation by Stapleton and Husain, making adjustments as necessary. I have called attention to significant changes of meaning. Incriptions and quotes from parts of the A. 2075 manuscript other than the introduction are my translations unless otherwise noted.


17. 'Ali, Three Treatises, p. 1; see EI2, s.v., “Bûsir or Abûsîr.”


20. This figure, in the Islamic world and in Europe, was a composite of the Latin Mercury/Greek Hermes and the Egyptian God Thoth; see Faivre, Eternal Hermes. In Islamic tradition he was also identified with other individuals, the most important of whom in the present context are Enoch (Ahmûkh) and Idris. EI3, s.v., "Hirmit."EI2, s.v., "al-Kimiyā." Nathan Sivin describes a similar situation in the history of Chinese alchemy. He comments that "the issue was not progress in knowledge but regaining ancient wisdom." Encyclopedia of Religion, s.v., "Alchemy, Chinese alchemy."

21. For Islamic alchemy see EI2, s.v., "al-Kimiyā." For the same idea in other alchemical traditions, see The Encyclopedia of Religion, s.v., "Alchemy, Chinese alchemy."

22. AI2, s.v., "al-Kimiyā."


61. Ibn Umayl’s evident familiarity with the author-portrait frontispiece genre interestingly falls towards the beginning of the period when the classical author portrait was being assimilated into Islamic book culture, as described by Hoffman, “Author Portrait,” p. 15.

62. The current position of the image on fol. 3a is misleading because several of the folios that originally preceded it have been lost. Obst, Débats, pp. 188 and 276–77.


64. Three other images might be additional examples, but I have not had the chance to determine whether they are now or ever were positioned in books in such a way that they served as frontispieces.

65. Ibn Umayl’s sources are represented by the anonymous text on fols. 65a–66b as, “the words of Ibn Umayl, that we found in one of the copies of his book, Al-ma’ al-nafiq wa-al-’ard al-naqisyya (The Pure Water and the Stony Earth).” Later, on fols. 71b–75b, there appear some more poems by Ibn Umayl, including his al-Qudsat al-nawfira.

66. Ibn Umayl’s sources are represented by the anonymous text on fols. 66b–67b, Mukhtasar min kitāb mushaf kashf al-asmr lil-’Aṣr ‘ruda su’al Tu’idurus (An Abridgment from the Book of the Disclosure of a Man’s Secrets upon the Inquiry of Theorodorus); and by a passage attributed by the scribe to the Egyptian mystic and alchemist Dhu al-Nun al-Mas’i (d. 861), presented in Persian translation on fols. 76b–79a. The text on fols. 66b–67b has not been published but is known in other manuscripts. See Fuat Sezgin, Geschichte des Arabischen Schriftums, Band 4 (Leiden: E. J. Brill, 1971), p. 69. Ullmann, Natur, p. 190, mentions another title that presents the dialogue between Ares and the Byzantine King Theodoros: Mushaf al-hayyi. The dialogue was mentioned in numerous alchemical texts including al-Ma’ al-nawfira. In A. 2875 fol. 76b, Dhu al-Nun’s name is given in the Arabic accusative form, Dhu al-Nun, which explains his identification in the Karatay catalogue as “Abū’l-Fayṣar Ṭumān.” On this author, see Ullmann, Natur, pp. 196–97 and 392.

67. The scribe of A. 2875 included a ru’ya (dream) of Tughra’i on fols. 66b–69a, and also his untitled qaṣida of thirty verses, rhyming with the letter ra’, this follows from fols. 69a to 70b. Tughra’i was a high-ranking administrator under the Seljuks and wrote several works on alchemy, the most famous of which was Kitāb ḥaqqi al-istisḥāḥ (The Book of the Truths of the Quotations), a response to Ibn Sina’s attack on alchemy.


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64. Three other images might be additional examples, but I have not had the chance to determine whether they are now or ever were positioned in books in such a way that they served as frontispieces. (1) Farès, “Figures magiques,” offers an intriguing reference to a sketch in a manuscript dated 1218 (1803–4) of Jīlīd’s commentary on Ibn Umayl, Lajwāmī al-aγkār al-mudâyya (The Splendors of the Lasting Ideas). Ahmad Taymur describes this sketch as an inartistic image depicting nine eagles with outstretched wings, below which people point at a seated idol. Ahmad Taymur, al-Tasvir ‘inda al-‘Arab (Cairo, 1942), pp. 44, 185. (2) Obst has published a fifteenth-century illustration of Hermes with his tablet, which, according to her very plausible suggestion, may have served as a model for the seventeenth-century frontispieces mentioned above. It is now found in a manuscript that contains a cycle of alchemical illustration (Manchester, John Rylands Library, ms. Germ 1, fol. 5b); see Obst, Débats, fig. 98. (5) A similar composition, but surrounded by an elaborately populated frame, appears in another alchemical manuscript with watercolors, made between 1577 and 1583. Faivre, Eternal Hermes, pl. 11: Germanisches Nationalmuseum, Ms. 16752.

65. The scribe identifies the passage on fols. 65a–66b as, “the words of Ibn Umayl, that we found in one of the copies of his book, Al-ma’ al-naqiq wa-al-arad al-naqisya (The Pure Water and the Stony Earth).” Later, on fols. 71b–75b, there appear some more poems by Ibn Umayl, including his al-Qudsat al-nawfira.

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58.
EI2, s.v., "al-Tughrá‘í"; Mu‘ayyid al-Din Abi Isma’il al-Husayn b. ‘Ali al-Tughrá‘í, Hawá‘iq al-ristahkhd, ed. Razzuq Faraj Razzuq (Baghdad: Dár al-Rashid li-al-Nashr, 1982). The poem is not to be found in the published Diwan of Tughrá‘í. Abi Isma’il al-Husayn b. ‘Ali al-Tughrá‘í, Díwán, ed. ‘Ali Jawwad al-Tahir wa-Yahya al-Jaburi (Baghdad: Wizárat al-Islám al-Jumhuriyya al-Iraqiya, 1976). As for the continuation of the alchemical tradition after Ibn Umayl’s death, this is represented in passages by Mu‘ayyid al-Din al-Tughrá‘í (d. 515/1121). In the Karatay catalogue, this text is identified as Mukhtasar Risálat fº al-Kimiyá [sic] (The Abridgment of the Treatise on Alchemy) of Tughrá‘í. However, it is identified as Ru‘yá at the top of fol. 68b and among the inscriptions listing the contents of the manuscript on fol. 1a; and as Ru‘yá at the bottom of fol. 69a. In the text, Tughrá‘í specifies that this was a vision of sleep (fol. 68b line 5).

68. Obrist, Débuts, 186–87.
70. A. 2075 fol. 2a, lines 8–10; Sezgin, “Macmá‘at,” p. 245, lines 17–19.
73. The painting, from manuscript A III 2127 in the library of the Topkapî Palace, is published in color in Richard Ettinghausen, Arab Painting (Geneva: Skira, 1962), pp. 68–69.
75. As in the ‘Ali edition, Three Treatises, not dawwab as in the transcription appearing in Sezgin’s “Macmá‘at.”
77. A. 2075 fol. 1b, lines 13–17; Sezgin, “Macmá‘at,” p. 244, line 4.
79. Historical Dictionary of Taoism, s.v., “Inner Alchemy.”
80. Allsen, Commodity; idem, Culture and Conquest in Mongol Eurasia (Cambridge: Cambridge University Press, 2001).
82. E.g., A. 2075 fol. 15a, line 12; ‘Ali, Three Treatises, p. 21, lines 15–16.
84. A. 2075 fol. 3b, line 8; ‘Ali, Three Treatises, p. 3, line 15.
85. Obrist, Débuts, pp. 21–33, analyzes how this idea affected the iconography of alchemical images in the West.
86. The possibility that this figure might represent Maria the Jew, who belonged to a “second tier” of early alchemical authorities after Hermes, does not seem viable. Maria is mentioned in the commentary, but if the figure in the painting is Maria, then either she should be dressed in “antique” garb as is the sage/ Hermes sculpture, or else the four figures below her should represent four other specific secondary alchemical authorities. It is not clear from the commentary who these four would be.
89. A. 2075 fol. 1b, line 19–fol. 2a, line 6; Sezgin, “Macmá‘at,” p. 245, lines 7–14.
90. Obrist, Débuts, counted the faces in the bottom circle and suggested that the three faces at the bottom should be added to the two suns at the top.
91. The painter apparently decided to give an overview of the intersecting rays of the suns and their effect on the moon from the point of view of an observer in the sky. This would explain why the crescent shape in the painting is in shadow rather than illuminated. The tradition of visualizing the celestial bodies from both the earth and the sky was well established.
95. A. 2075 fol. 58a; ‘Ali, Three Treatises, p. 92.
97. li-baghf al-wáhídhi.
98. A. 2075 fol. 2a, lines 7–8, 10–12; Sezgin, “Macmá‘at,” p. 245, lines 16–17, 19–21.
99. EI2 s.v., “al-Kimiyá.”
100. The manuscript made its way into the Ottoman library, and we know that it circulated after it got there because of an Ottoman inscription at the beginning (2 pages before fol. 1a) that says, “It is the book that Zeyrek Aga checked out” (İsrâ‘üden Zeyrek Aga (ki) kitâbdur). My thanks to Gülru Necipoğlu, who read and translated this Ottoman inscription for me. Zeyrek Aga and other individuals who checked books out from the Ottoman library are discussed in a dissertation-in-progress by Emine Fetvaci.