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The 'Book of Surprises' (Kitab al-bulhan) of the Bodleian Library

THE SUBJECT OF THIS article is an illustrated manuscript in the Bodleian Library (Kitab al-bulhan, Bodl. Or. 133).¹ This codex is particularly dear to me because it was the subject of my dissertation at the Faculty of Oriental Languages of the University of Venice, now almost 30 years ago, where my main subjects were Arabic and Islamic Art.² I am not aware if this is still the case, but at the time a student without a degree was not allowed direct access to the manuscripts at the Bodleian, only to their microfilms. I remember fondly that, when I was denied access to the *Kitab al-bulhan*, I 'sneaked in' with my mentor, Professor Ernst J. Grube, looking over his shoulder while we discussed and studied the manuscript together. Professor Grube sadly passed away in 2011 and I wish to dedicate this paper to his memory.

The *Kitab al-bulhan* is written in Arabic, this being the main reason why it was not included in the *Love and Devotion* exhibition at the State Library of Victoria which was focused on Persian manuscripts. However, it was produced in a Jalayirid environment at the end of the 14th century. The Jalayirids (c. 1336–1432), who dominated the area of western Iran and Iraq with capitals both in Tabriz and Baghdad, epitomised Persian and Arabic culture of the time, and so the production of manuscripts in Jalayirid Baghdad can be regarded as a hybrid of both literary cultures. In this article I will focus on the *Kitab al-bulhan* in general and in particular on its talismanic illustrations. The talismanic sciences were very common in the medieval Arab and Persian world and one of the most appreciated signs of devotion.

A proper translation of the manuscript's title presents the first challenge. The word *kitab* (book) is straightforward but *bulhan* is an unusual term stemming from the root *b-l-h*. The title is clearly written at the beginning at folio 1r. When the manuscript was studied in depth for the first time by D. S. Rice in an article on the 'Seasons and Labours of the Month', he translated it as 'The Book of Wellbeing'.³ According to Lane's *Lexicon*, which is the best source for medieval Arabic, the word *ablah*, which comes from the same root (*b-l-h*) means 'someone who has little knowledge of uncommon things', and so I believe that a more suitable translation of this title is 'The Book of Surprises', which would appropriately place this manuscript into the literary body of ' *ajab* (wonder) literature exemplified by the text of Zakariya ibn Muhammad al-Qazvini who wrote his celebrated work ' *Aja'ib al-makhluqat wa ghara'ib al-mawjudat* ('The Wonders of Creation and the Oddities of Existing Things') in the late-13th century.⁴ Thus, while mentioning it throughout in its original title, *Kitab al-bulhan*, I'd like to refer to it in English as 'The Book of Surprises'.



The sage, Abu Ma'shar al-Balhi, conducting an astronomical experiment.
From a manuscript of *Kitab al-bulhan*, mostly 14th century.
Bodleian Library, University of Oxford, MS. Bodl. Or. 133, fol. 34r.

The purported author of the miscellaneous series of treatises bound in the *Kitab al-bulhan* is Abu Maʿshar al-Balkhi whose name is clearly indicated on the second line of the introduction to the book. Abu Maʿshar (787-886 CE) was born in Balkh (modern-day Mazar-i Sharif) in northern Afghanistan but he moved to the ʿAbbasid court in Baghdad at the beginning of the 9th century. Apart from his fame as an astronomer, he is well known for having developed a system of astrological magic founded mostly on neo-Platonic theories, which became popular in his time and are related to Arabic philosophy dealing with mankind's interaction with the environment and his dependence on it. Abu Maʿshar is known especially for a large body of work entitled *al-Madkhal al-kabir*, 'The Great Introduction [to Astrology]'. The text copied in the *Kitab al-bulhan* and specifically mentioned in the introduction is the *Kitab al-mawalid* or 'Book of Nativities', an astrological treatise by Abu Maʿshar that deals with the horoscopes of men and women.⁵

One of the most significant full-page illustrations represents the author, identified by the title in the cartouche at the top of the page (see p. 23): Abu Maʿshar – the astronomer, astrologer and philosopher – sits bare-chested atop a column holding an astrolabe in his right hand; he is flanked by an attendant looking at him in a gesture of surprise (his finger raised to the mouth), captivated by the experiment the master is attempting; books and the astronomer's clothes complete the painting on the right side. The *Kitab al-bulhan* was rebound in random order at some unknown time, but this illustration was probably the first in the series of full-page paintings introduced by a title and without accompanying text, which is so characteristic of this manuscript.

We also know the name of the calligrapher who copied the text of most of the manuscript. He is ʿAbd al-Hasan ibn Ahmad ibn ʿAli ibn al-Hasan al-Isfahani, who states on fol. 1v that he was born in Baghdad and was a student of the Aristotelic 'demonstrative' (*burhan*) sciences. He was therefore a native of Baghdad whose family originally came from Isfahan in Iran. We learn from his presentation that he was the calligrapher as well as the compiler of the overall content of the *Kitab al-bulhan*, which is composed of a series of treatises that deal with the demonstrative sciences. At fol. 2r, he writes that 'this book I have compiled (*rasamtuhu*: also 'drawn, sketched, designed, painted') includes some of the explanations of these [demonstrative sciences] with illustrated drawings (*nuqush musawwarat*) and coloured figures (*ashkal musabbaghat*)'. The use of the verb *rasamtu* is interesting because it also means 'I sketched, I drew' and we are therefore informed that the colour illustrations were part of the initial planning of this manuscript. He also states that he wrote this book 'for the dear brother, the tongue of the time (*al-akh al-ʿaziz lisan al-zaman*) . . . Husayn al-Irbili . . .' Consequently, we also know the name of the person who commissioned the manuscript or was instrumental in its genesis, a prominent citizen whose family was originally from the town of Irbil near Mosul in northern Iraq.

The manuscript offers additional useful information at fol. 131r: 'This blessed book passed from the hands of . . . al-Irbili to . . . Haydar ibn al-Hajji ʿAbd al-Karim ibn Muhammad . . . in the month of Shaʿban 812 [December 1409 – January 1410]

. . . Written for and owned by Shaykh al-Diya Husayn al-Irbili'. This means that the manuscript can be safely attributed to the late Jalayirid period because the original owner (Husayn al-Irbili) gifted it, or sold it, to someone else in the last decades of Jalayirid rule. Al-Irbili also copied in his own hand some of the treatises in this compilation (in addition to those written by al-Isfahani), among which are the *Kitab al-fal* or 'Divination of the Imam Ja'far' and the *Fal al-anbiya* or 'Divination of the Prophets' at fols. 131-174. At fol. 163r we can read his signature: '... by the hand of ... al-Diya Husayn ibn al- 'Abd ibn Muhammad al-Irbili ... he wrote it himself in date ...' and at fol. 169r: 'This blessed divination was finished on Sunday 13 dhu-l-hijja of the year ... by the hand of its owner ... al-Diya Husayn ibn al- 'Abd ibn Muhammad al-Irbili ...' Unfortunately the years are unreadable, but we can postulate that – since al-Irbili sold the manuscript in 1410 and had copied these two treatises on divination before that date – he must refer to 1388, 1396 or 1404 since the 13th of dhu-l-hijja was on a Sunday only in those years in the previous two decades.

A number of folios are missing in the *Kitab al-bulhan* and the codex is now bound in random order so that it looks like a jumble of incoherent different treatises. There exist, however, two Turkish copies of the *Kitab al-bulhan* made at the time the manuscript must have been in Ottoman Turkey when its pages were still bound in their correct sequence. Consequently, they provide the models for a proper reconstruction of the original codex.⁶ These two copies were made in c. 1582, one for Aysha Sultan and the other for Fatma Sultan, both daughters of the Ottoman sultan Murad III (r. 1574–95). The manuscripts are today in the Pierpont Morgan Library, New York and the Bibliothèque Nationale, Paris, and bear a title that can be translated as 'The Ascension of Propitious Stars and the Sources of Sovereignty' (*Matali' al-sa'ada wa yanabi' al-siyyada*). Both codices have been studied to some degree: the latter was published in Spain as a facsimile under the title 'The Book of Felicity' whereas Barbara Schmitz included the former in her catalogue of Islamic manuscripts in the Piermont Morgan Library.⁷ These two Ottoman copies represent the translation made by the well-known poet Seyyid Mehmet ibn Amir Hasan al-Su'udi who was at the court of Murad III. It is mentioned in the introduction that he used an illustrated copy for his translation, which must be the Bodleian *Kitab al-bulhan*.

The Ottoman manuscripts include a portrait of Murad III depicted as a man of culture and a bibliophile with an open copy of the manuscript he commissioned in which we can recognize some of its astrological images. As I mentioned above, these later copies are instrumental in filling the present gaps in our knowledge and understanding of the *Kitab al-bulhan*.

As expected from a text that includes Abu Ma'shar's writings, the *Kitab al-bulhan* contains a series of illustrations related to astronomy and astrology. The 'Book of Nativities' requires at least one illustration for each of the twelve Signs of the Zodiac but we can see also full-page miniatures depicting the Rainbow and the Stars, others with the 28 Stations of the Moon, the Apogee (exaltation) and Perigee (dejection) of the Seven



Iblis, lord of all the demons.
From a manuscript of *Kitab al-bulhan*, mostly
14th century.
Bodleian Library, University of Oxford, MS.
Bodl. Or. 133, fol. 33r.



Shamhurash, the demon king of Thursday.
From a manuscript of *Kitab al-bulhan*, mostly
14th century.
Bodleian Library, University of Oxford, MS.
Bodl. Or. 133, fol. 32v.

Planets and the Lunar Node, the Climates and the Seasons. In the 'Book of Nativities' (*Kitab al-mawalid*) each Sign of the Zodiac is represented in conjunction with its Planet by means of a full-page illustration (for example, at fol. 21v Saturn is the master of Aquarius therefore the planet is shown as a dark-skinned man pulling water from a well) and three small vignettes at the bottom depict the planets that influence the three decades of the month related to the sign (in the case of Aquarius these are Venus, Mercury and the Moon). An interesting double page shows an illustrated chart that links the 7 Planets to different activities and professions; for example, Saturn (the 'dark Planet') is related to jobs that have to do with dirtying one's hands, such as blacksmith or leather tanner; the 'Planet' Sun looks over rulers and money-makers having to do with power and gold. In the illustrations that deal with the seven Climates of Earth, each climate is linked to a Planet. Once again, for example, Saturn is responsible for those regions of the world where dark-skinned peoples are found. Four more miniatures are related to the Seasons and are among the best illustrations in the *Kitab al-bulhan* as already noted by Rice in his 1954 'Seasons and Labours of the Month' article.

The most interesting section, however, at least from the art historical viewpoint, is a series of extraordinary full-page illustrations that require interpretation because the only way to understand their subject – in addition of course to having enough familiarity with its iconography in order to decipher correctly the scene represented in the painting – is by reading its title placed in large letters at the top of the page. There is no text (and never was) associated to these works, which makes this section intriguing, fascinating, and unique in this period of development of Islamic book illustration.

We do not know if these full-page illustrations can be linked to Abu Ma'ṣhar's writings: it seems unlikely because most of them have a narrative content, although some have talismanic significance and they might indeed be related to the famous astrologer. This series starts with the extraordinary image of Iblis, the 'Accursed Devil' (*iblis al-la'in*) who is sitting frontally in an enthroned position, as appropriate for the ruler of all jinns and devils (opposite). The jinns are neither humans nor angels, they are made of smoke and are usually invisible to man but they live on earth, present themselves through dreams and can be responsible for many illnesses and life challenges.

In the *Kitab al-bulhan* a couple of images are missing in this section on the jinns and we can refer to the Ottoman copies in order to reconstruct the full series of the seven 'Kings of the Jinns', each one connected with a specific day of the week, an angel, a planet and a metal following many literary treatises on magic and talismans. The original sequence in the manuscript seems to rely mostly on the writings of Buqratis (the Greek Hippocrates) rather than Abu Ma'ṣhar. The jinns of Sunday and Monday, the 'Gold King' and the 'White King' are missing in the *Kitab al-bulhan* but we know their name and appearance from the Ottoman copies.⁸ Each 'King' is usually depicted with his helpers and the talismanic symbols needed to exorcise him are also drawn within the frame of the painting.

Among the extant illustrations in the *Kitab al-bulhan*, the 'Red King' (*al-malik al-ahmar*) is the jinn of Tuesday and here the talismanic symbols are evident both in the monotonous repetition of individual letters (in this case, the letter 'ta'), and numbers, and in the so-called 'spectacle symbols' originally deriving from the Kabbalah or other mystical and magical traditions (fol. 31r). The Red King of Tuesday has a close relationship with Mars, the planet of war, and is consequently depicted as a monstrous being riding a lion while holding a sword and a severed head. The 'Black King' (*al-malik al-aswad*) is the jinn of Wednesday (fol. 30v). His talisman is elaborate and also his helpers are quite extraordinary. The jinn of Thursday is a king named 'Shamhurash', the title specifying that he is *nasrani* ('Christian'), who is also known from some sources as Abu al-Walid or 'Father of the Child' (opposite). This is probably the reason why he is represented with a naked child in his hands, held upside down, although it is unclear whether Shamhurash's influence over him is positive or negative. The talismanic symbols are complex and include also the hexagon, the 'Seal [on the ring] of Solomon' (*khatam sulayman*) which is formed by two triangles, one upright and the other upside down, symbolising the entire universe combining the upper and lower spheres.

The jinn of Friday is the four-headed King 'Zawba^ʿa', sitting frontally in a royal position of power (fol. 31v). The combination of monstrous horned heads and harmless facing equines is quite extraordinary. The last King of the week is the jinn of Saturday, 'Maymun', which also means 'monkey' in Arabic and is here described in the title and represented in the illustration as 'Maymun of the Clouds' (*maymun al-sahabi*, fol. 32r). He is therefore one of the flying jinns who visit humans and he also has a child in his hands like the above-mentioned Shamhurash.

The sequence of the seven Kings of the week is complemented in the *Kitab al-bulhan* by additional jinns who can be related to illnesses or ways of disrupting one's life. One of these is 'Kabus', the 'Nightmare', who puts one's life in disarray while the subject is asleep (see p. 30). In the interior setting of a bedroom, Kabus visits a hapless sleeping man as a menacing dark figure. The 'spectacle' talismanic signs are evident in this painting. We know the name of another of these jinns from the Ottoman copy since the original title is damaged in the *Kitab al-bulhan*: it is the 'Evil Eye', one of the most common talismans also today, available everywhere in the Middle East as a blue glass disk with the centre representing the eye and pupil (fol. 28v).

Another interesting character is the female jinn Tabi^ʿa (fol. 29v). Her origins hark again back to the Kabbalah and the figure of Lilith, the demonic goddess who was purportedly destined by God to control and weaken human babies. She can also be related to the queen of witches in Christian demonology and so this image acquires an extraordinary significance linking Hebrew, Christian and Islamic traditions together.⁹ The last of the illustrations of the jinns is Huma, the 'Fever' (fol. 30r). This jinn has three heads, sits in a frontal position and embraces the surrounding space with his arms, ready to snatch someone's body and make him feverish. This series of paintings is truly extraordinary and they have no comparison in other manuscripts,¹⁰ which makes the *Kitab al-bulhan* one of the most fascinating of Arabic manuscripts.

In the 14th century as well as today, talismans were usually housed inside small metal boxes that hang from the neck. They are written using Qur'^ʿanic verses, invocations and incomprehensible talismanic symbols and are sometimes illustrated with drawings before they are folded several times and inserted into these boxes. Unlike a few other known illustrated talismans from this early period,¹¹ the pages in the *Kitab al-bulhan* were never detached from the manuscript and folded, so they can be interpreted as a sort of manual or compendium of talismanic illustrations.

From the literary point of view, Abu Ma^ʿshar may have played a part in the creation of the talismans in the *Kitab al-bulhan* but it is likely that these illustrations are the result of a variety of sources. One of the most important authors who may have been consulted to create the talismanic symbols in the paintings of the jinns is Ahmad ibn 'Ali al-Buni (d. circa 1225) whose major work is the 'Great Book of the Sun of Gnosis' (*Shams al-ma^ʿarif al-kubra^ʿ*), which includes a large number of diagrams, symbols, magic squares with the names of the 28 Stations of the Moon, the 28 letters of

the alphabet, the twelve Metals, the twelve Signs of the Zodiac and the four Elements.¹² In reference to the 'spectacle' symbols, the most likely source is Ibn al-Wahshiyya (active late 9th–10th century, therefore almost contemporary to Abu Ma'shar) and his 'Book of Nabatean Agriculture' (*Kitab al-filaha al-nabatiyya*) where one can find these talismanic signs, each one connected to a letter of the Arabic alphabet.¹³ The 'spectacle' symbols became popular in the Arab and Persian Middle East and continuity in their use can be demonstrated until very recently, since pages including these very same talismanic characters were created by the renowned Ethiopian calligrapher Gera Mawi Mazgabū (1941–2006) in Addis Ababa.¹⁴

The talismanic pages of the *Kitab al-bulhan* are extraordinary but there are many other full-page paintings in the manuscript that relate to wonders and stories that must have been quickly identifiable by the average viewer just from the title and the image. One of the most interesting ones, which is unfortunately missing in the *Kitab al-bulhan* but is present in the Ottoman copies, is the illustration of the 'Laughing Snake' (*mar-i qahqaha*) that is able to kill with his look and is therefore approached by a group of men holding a mirror in front of him in the hope that it will self-destroy by looking at its own image. We do not know whether this was originally part of the section on the jinns but in the later copies this image is placed as the last of the jinns or the first of the following section. The 'Laughing Snake' represents a medley of different myths ranging from the Basilisk – also a snake or reptile able to kill with its look – to the mythical life of Alexander the Great (Iskandar in Arabic and Persian).¹⁵ A similar story is present al-Qazvini's *Wonders of Creation* in which the largest creeping creature on earth, the gigantic Sannaja, is approached by other animals with their eyes closed so that it will die if it sees them first.¹⁶

There are a few other images in the *Kitab al-bulhan* that are related to magic and divination. For example, one illustrates the Hermetic temples of Egypt and the Maghreb. Abu Ma'shar wrote an entire treatise, the *Kitab al-uluf* ('The Book of the Thousands') dedicated to the occult sciences of Hermes Trismegistus.¹⁷ The miniature represents the interior of one of these Hermetic temples, probably the temple of Abu Sir in Akhmim (Panopolis) in Upper Egypt (fol. 29r). This painting, like that of the 'Laughing Snake' provides a perfect transition in the *Kitab al-bulhan* from the jinns to the physical and human world and its multifaceted stories.

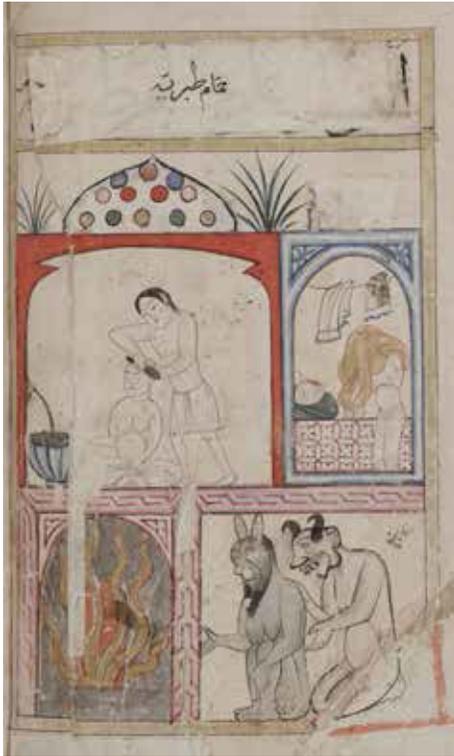
There is a plethora of images that refer to man-made wonders, one of the most famous of which is the 'Lighthouse of Alexandria' (fol. 36r). The illustration shows schematically the city of Iskandariyya (Alexandria) and the famous tower with its mirror on top, which was used to reflect the sun and warn the ships of the nearby coast. One of the celebrated seven wonders of antiquity, the Lighthouse of Alexandria was in ruins by the 14th century and its stones were used in the late-15th century to erect buildings for the Mamluk sultan Qaitbey.¹⁸

Another famous building is the Mosque of the Umayyads in Damascus, which according to many Arab authors was one of the four most significant edifices in the



The demon Kabus.

From a manuscript of *Kitab al-bulhan*, mostly 14th century.
Bodleian Library, University of Oxford, MS. Bodl. Or. 133, fol. 28r.



The Baths of Tiberias.
From a manuscript of *Kitab al-bulhan*,
mostly 14th century.
Bodleian Library, University of Oxford,
MS. Bodl. Or. 133, fol. 35v.



The wall of Alexander (Iskandar).
From a manuscript of *Kitab al-bulhan*,
mostly 14th century.
Bodleian Library, University of Oxford,
MS. Bodl. Or. 133, fol. 38r.

world (fol. 36v). The building pre-existed the advent of Islam and was re-utilised from the Christian Church of St. John in order to be turned into a mosque. It is interesting to notice that bells are depicted atop the minarets: this may be a reference to the original Christian building.

Tiberias is a city in modern-day Israel on the western shores of the largest lake in the area, the Sea of Galilee. Founded in honour of the Roman Emperor Tiberius in the early 1st century CE, it became a famous thermal station and continued to be used in the Islamic period. The illustration represents the celebrated Bath of Tiberias, like the Mosque of the Umayyads one of the most famous structures in the region, where the water was always so warm that there was no need to keep the fire going (see above). The painting suggests that the water remains hot because there are jinns who look after the fire and keep it warm all the time. The interior of the bath shows two floors: various hammam-related activities take place on the upper floor whereas the lower section represents the underground with two busy jinns in conversation while they take care of the fire.

Another well-known building was the Monastery of the Raven, which is reported in many travellers' accounts as located in Spain or in Portugal (fol. 37r). The extraordinary story about it is that a talking raven, depicted atop the dome in the illustration, knows the name of every person who enters the monastery and announces it loudly and clearly on their arrival.

The famous story of Alexander the Great and the construction of the 'Wall of Gog and Magog', originally a Biblical narrative,¹⁹ are encountered in many accounts including the Qur'an (see p. 31). Alexander erected a huge wall made of fused bronze that separated the civilised world from the wild and savage realm, exemplified by the people of Gog and Magog (*juh wa majuj*) who are represented as naked creatures licking the wall with their rough tongues in the hope to find their way out and riding writhing snakes. The large figures outside the wall are automata playing a long trumpet and drums, making noise and music to make the people of Gog and Magog believe that there was an entire army of people waiting to kill them if they tried to climb the wall.

There are several illustrations which are familiar today to the readers of *The Thousand and One Nights*²⁰ although they may have been included in other collections of stories in the period of creation of the *Kitab al-bulhan*, since the final version of this celebrated text is relatively recent and ultimately the result of English, and especially French, 'orientalist' contributions to the various editions that started to appear at the beginning of the 18th century. One of these illustrations is entitled 'The Traveller and the City of Copper' and depicts a story of two travellers (the emir Musa and the shaykh 'Abd al-Samad) which is included in the tales related to the 'Jinns Imprisoned in the Jars since the Times of Solomon' in *The Thousand and One Nights* (fol. 45v). Here the traveller is one instead of two but the story must be the same: the City of Copper has neither gates nor other entrances and anyone who tries to climb its metal walls would fall in and die; however, 'Abd al-Samad becomes the hero of the story and manages to get safely into the city helped by his prayers.

One of the most famous tales in *The Thousand and One Nights* is in the long section on the adventurous travels of the sailor Sindibad, from his fifth voyage. One of the most accomplished paintings in the *Kitab al-bulhan* and the first to be published in 1928,²¹ the illustration relates to the story of Sindibad (called simply 'the Arab' in the title) and the Old Man of the Sea (opposite). Sindibad arrives on a deserted island and sees a strange creature, half-old man half-fish. He takes pity on him because he can't walk and appears to be starving, so he takes the odd creature on his shoulders not knowing that he would cling tightly to him without letting him go, start to order him around and hit him hard on his head. Sindibad does not know how to get rid of him until he notices vine trees with ripe fruit. The illustration shows the sailor crushing grapes in order to turn them into wine that he will give the Old Man of the Sea to get him drunk. The creature will weaken his grip on Sindibad's shoulders and fall on the ground, after which the sailor will kill him with a stone.

Another story narrated by Sindibad the Sailor in *The 1001 Nights* takes place in



Sindibad and the old man of the sea.
From a manuscript of *Kitab al-bulhan*, mostly
14th century.
Bodleian Library, University of Oxford,
MS. Bodl. Or. 133, fol. 43r.



The Waq Waq tree
From a manuscript of *Kitab al-bulhan*,
mostly 14th century.
Bodleian Library, University of Oxford,
MS. Bodl. Or. 133, fol. 41v.

a valley in Sirindib (Ceylon, modern Sri Lanka). This valley is full of precious stones, diamonds and rubies that are easy to spot from the top of the surrounding mountains because they are scattered everywhere on the ground (fol. 46v). The valley, however, is populated by terrible poisonous snakes that make it impossible to collect the stones. The local people thought up a great stratagem: they take a few sheep, kill them and cut them up; the chunks of raw meat are thrown down into the valley so that the stones that lie on the ground become caught in the meat; predatory birds are attracted to the meat, they carry the chunks to the mountains in order to attend to their meal, the merchants scare them away and so they can get to the stones. This improbable but exhilarating tale was cleverly précised by the painter of the *Kitab al-bulhan* in a miniature that includes all elements of the story except for the local people and Sindibad: a valley defined by rocky formations at its sides, animated snakes, birds flying around with meat in their beaks and colourful pebbles on the ground.

In the sea of China there is also the famous island of Waq-Waq as reported by most medieval Arab geographers. This island is ruled by a queen and the population is only female: it is usually illustrated in al-Qazvini manuscripts of the *Wonders of Creation* showing the queen surrounded by her female attendants.²² In the *Kitab al-bulhan*,

however, the painting titled the 'Tree of Waq Waq' is rather extraordinary because it illustrates the way in which the all-female population reproduces and self-perpetuates (see p. 33). Female figures grow from the tree as if they mature like fruit until they are 'ready' and they drop to the ground emitting a cry that sounds like 'Waq Waq!'.

More wonders of nature are present in the *Kitab al-bulhan*. The 'Mountain of Fire and the Salamander Birds' is a story related to the Phoenix who dies in the fire immolating itself and is later reborn from its ashes (fol. 42v). According to some Arab geographers, this tale does not relate to a single bird but to a large number of them called 'salamander birds' (the salamander being also often quoted as a reptile that is able to survive in the fire in medieval texts).²³ This is the way it was illustrated by the painter of this section of the *Kitab al-bulhan*: a burning rock formation surrounded by flames amongst which several small birds are perched.

A second marvellous story about birds and the wonders of the natural world is set in Upper Egypt: a small domed building located atop a remote mountain is visited every year by a flock of different species of birds (fol. 46r). The extraordinary fact is that one of the birds inserts its beak into a slit of this building and remains in that position for an entire year until it is replaced by the next one, after which it dies. These birds are attracted to the building by a magical power and no one can explain their behaviour.

Following this brief survey of some of the most interesting and fascinating aspects of the pictorial cycle of the *Kitab al-bulhan*, it is important to emphasize the unique nature of this illustrated manuscript. What looks today like a random collection of different treatises in its present condition is due to its eclectic nature but especially to its history. An analysis of the signatures and attributions reveals that there was a relationship and friendship ('. . . the dear brother, the tongue of the time . . .')²⁴ between 'Abd al-Hasan al-Isfahani (the copyist, compiler and possibly even the illustrator²⁵ of the larger part of the text) and Husayn al-Irbili (the first owner and the copyist of some of the treatises bound in the book, such as the 'Divination of the Imam Ja 'far' and the 'Divination of the Prophets'). If one looks closely to the style and some details in the illustrations, one can see that there is a clear relationship between the full-page paintings included in the earlier part, for which al-Isfahani was responsible, and the works that appear in later sections attributed to the pen of al-Irbili (for example, the use of similar conventions to illustrate the buildings as well as details of the vegetal backgrounds throughout the manuscript). Whether al-Isfahani was indeed the painter or a different professional artist was hired for the task, the final product was likely planned by these two individuals in the late-14th century. This consistency has not been properly acknowledged yet, but I believe that the *Kitab al-bulhan* should be now rightfully positioned within the small body of early illustrated literature on the 'Wonders of Creation' principally represented by a handful of late-13th century and 14th century copies of al-Qazvini's '*Aja 'ib al-makhlūqat*,²⁶ in addition to a copy of Abu Ma 'shar's *Kitab al-mawalid*,²⁷ a manuscript that partially survives in the Keir Collection in London.²⁸