Water and Sign Magic in al-Jabin, Yemen

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Acknowledgements

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Abstract

The preserved heritage of al-Jabin, a town located in Yemen's western highlands, offers a unique opportunity to document traditional water engineering principles. There are no springs in the immediate vicinity, because the town is perched at the edge of the mountain escarpment. Even today, water is provided by open cisterns that collect surface run-off following a rain. But as the rains needed to feed the system are highly unpredictable, the water supply is never secure. The perimeter wall of one of the cisterns bears a group of seven signs, a detailed description of which is given in *Kitab Shams al-Ma`arif wa-Lata'if al-`Awarif*, a work attributed to Ahmad ibn `Ali al-Buni (d. 1225), a well-known prolific writer on magic. Al-Buni explains that the signs symbolize God's supreme name and thus display great magical power of a protective and well-wishing nature. Generally speaking, magical practices attempt to influence the course of natural events by calling upon a superhuman force. In the case of the cistern, God's supreme name was inscribed in the hopes that this would lead to a guaranteed water supply. While it is easy to dismiss al-Buni's text and the observed practice in al-Jabin as superstitious frailty, one needs to bear in mind that under life-threatening circumstances, even people in the modern West easily resort to magical procedures.

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Introduction

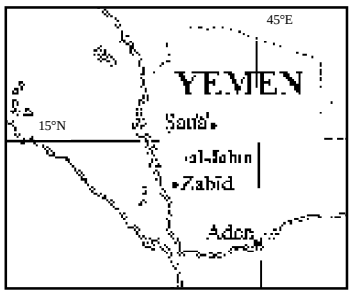

FIGURE 1: Location of al-Jabin in Yemen.

The town of al-Jabin is positioned on the western escarpment of the Yemeni highlands at an altitude of 2,400 meters (see map, Figure 1). Two rainy seasons occur in spring (between March and April) and in late summer (between July and September); however, these reflect long-term averages and the spatial and temporal variability of rainfall is high from year to year.[1] Localized out-of-season rains are nothing unusual, nor are dry years – to the point of no precipitation at all.

The steepness of the mountainsides limits arable farming to human-made terraces. Tony Wilkinson, who has studied terraced agriculture in the Yemeni highlands in detail, concluded that its origins go back to at least the third millennium BCE.[2] Today, in the area of al-Jabin, the cultivation of perennial coffee bushes produces a valuable cash crop on the western slopes, which face the Red Sea and receive most of the precipitation.

There is a distinct difference between the crops grown on the western mountainsides and those on the terraces of the drier eastern terrain lying in the rain-shadow. Here, sorghum is cultivated as a subsistence crop and provides both cereal grain and animal fodder. Where direct rainfall is not sufficient for terraced agriculture, the farmers harvest rainwater from the adjacent slopes serving as mini-catchments. Diversions are created either by digging ditches (where possible) or, more commonly, by heaping up gravel and stones on the open surface. As soon as it rains, the surface run-off is funnelled by the human-made berms into broader channels that direct the water from the hillsides onto the lower-lying fields.[3] In many parts of Yemen, the term used for such human-made diversions is *sawaqi* (sg. *saqiyah*), which is why the aforementioned authors refer to rainwater harvesting as "*sawaqi* supplementary irrigation."

Since al-Jabin is perched at the escarpment's edge, with the ground falling away sharply to the west, there are no springs in the immediate vicinity. Spring water for drinking is found only at levels considerably lower down the mountain, and using it involves the labor-intensive task of hauling it in small containers on the backs of people or draught animals. The solution to providing the town with domestic water was to construct open cisterns (*birak*, sg. *birkah*) that collect surface run-off following a rain, based on the principles of rainwater harvesting. Al-Jabin has two large public cisterns, one on its

Figure 2: Public cistern on the escarpment of al-Jabin.

north side and one on its south side (Figure 2). The southern one, situated below the military fort, developed a crack years ago and, despite an attempt to mend it, remains largely empty; the northern one is fully functional.

Both cisterns are roughly oval in shape and have several rows of high ledges and a broad staircase leading to the bottom. Many steps have between one and three small raised pods at roughly half a step in height. This provides easy access for water collection at all times, no matter what the depth of the water level during the course of a year. The cisterns were lined with *qadad*, the traditional Yemeni lime plaster applied to a building's external and internal facades predominantly as a protective coating for waterproofing.

The Bayt al-Shaykh Cistern and the Group of Seven Signs

Bayt al-Shaykh is a cluster of dwellings located in al-Jabin's southern part, next to the Grand Mosque. The buildings are centered around a small cistern that is exclusive to the settlement (Figure 3). Access to it is provided by an underground passage that also connects the houses to each other. Such tight clusters of dwellings, often built wall-to-wall to give a fortress-like impression, are typical of the al-Jabin area.[4] The houses usually share a mosque and a cistern. In the example of Bayt al-Shaykh, part of the Grand Mosque's roofs actually serve as collection surfaces for rainwater to feed the settlement's cistern. In turn, any overflow from that cistern is used in a small pool that is part of the mosque complex.

FIGURE 3: The Bayt al-Shaykh settlement's cistern.

On the plaster surface of the Bayt al-Shaykh cistern's perimeter wall, which is partly formed by the immediately adjacent houses, is an inscription together with a group of seven signs (Figure 4, below). Ahmad ibn `Ali al-Buni (d. 1225), a prolific writer on magic, described these signs. The main work attributed to him is *Kitab Shams al-Ma`arif wa-Lata'if al-`Awarif*. It is assumed, however, that major parts of the book were only written at the beginning of the fourteenth century by a group of authors, for which stylistic reasons can be cited, as well as the fact that the text mentions individuals who lived after al-Buni's death.[5] For the purposes of this article, the question of authorship and exact date are not significant. The work and al-Buni, both of

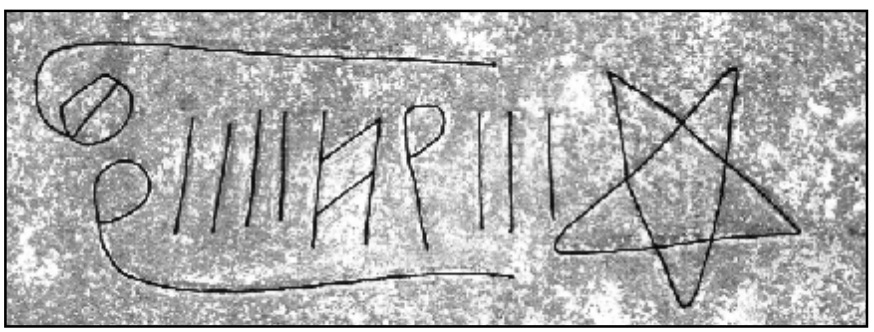

FIGURE 4: The group of seven signs on the perimeter wall of Bayt al-Shaykh's cistern (enhanced via tracing).

which enjoy great popularity in the Middle East even today, are considered authoritative on magic, and the fact that students would add to a great scholar's writings under his name, instead of their own, has a long tradition in the Islamic world.

This work appears in three redactions: *Shams al-Ma`arif*, a short one that is the earliest version; *Shams al-Ma`arif al-Wusta*, one of medium length; and *Shams al-Ma`arif al-Kubra*, a long version that is the most recent and remains very popular in the Middle East.[6] In the short redaction, *Shams al-Ma`arif*, al-Buni describes the seven signs as follows[7]:

> … three sticks lined up after a seal; at their head, something that is like the bent head of a lance; a *mim* squashed and amputated; then a ladder which leads to every hoped-for object but which is nonetheless not a ladder; four objects resembling fingers have been lined up, pointing towards good things but [they are] without a fist; a *ha'* in half; then a *waw* bent over like a tube of a cupper, but which is not a cupping glass.

He then sums up their meaning:

> … this is the name which is supreme in its power, and if you did not know this before, know it [now] ... Here is the name of Allah, may His glory be exalted ...

The signs found on the Bayt al-Shaykh cistern follow al-Buni's description closely, but with the three vertical lines lacking the wavy horizontal line on top, the letter *waw* resembling more closely a *mim*, and the order of the *waw* and the *ha'* reversed. Of course, Arabic inscriptions in general are known for their rather liberal use of letter shapes and even the order of whole words. As for the seven signs in particular, differences of shape and order were a familiar phenomenon until al-Buni's time, after which only minor variations occur.[8]

The Seven Signs' Interpretation

Hans Winkler has traced the seven signs' origin and interpretation.[9] The following remarks are confined to those aspects that are significant for understanding why they were inscribed on Bayt al-Shaykh's cistern. A particularly important source of knowledge is chapter 12 of *Shams al-Ma`arif al-Kubra*, in which al-Buni lists the seven signs twice and describes their meaning in considerable detail.[10] But the reader must be cautioned, for al-Buni's explanations are not always straightforward and sometimes are even contradictory.

Al-Buni, who was not the first one to deal with the topic, draws heavily upon an earlier literary source referred to as the *Diwan of `Ali*. This collection of poetry and sayings, attributed to `Ali ibn Abi Talib (Cod. Brit. Mus.

577 [Add. 7534]), contains a poem that reports his finding and description of a group of seven signs inscribed on a rock that is identical – word for word – with the one given by al-Buni for the first four signs. The rest differs in part as to the signs' order and shapes. `Ali's conclusion that the seven signs symbolize God's supreme name also matches al-Buni's.

Heinrich Ewald, who published the text,[11] subsequently explained that the attribution of this collection of poetry to `Ali is not to be taken literally because stylistic reasons make a later date more likely,[12] a critical observation first indicated by Joseph Reinaud.[13] Winkler, after reexamining the text, pointed out that the most recent name given in the poem's chain of transmitters, Abu `Ali al-Tabrisi (d. 1154), suggests a date in the first half of the twelfth century.[14] The reference to `Ali as having discovered the signs should be understood as emphasizing their venerable age and thus their importance. Even though `Ali is most probably not the poem's author, its significance through the centuries, especially for Shi`ites, is underlined by its inclusion in a standard reference work on Shi`ite Islam.[15]

Ewald's original publication of the poem, entitled "A Himyaritic Inscription," shows his confusion over the signs' meaning, which he misinterpreted as old South Arabian writing. One should bear in mind that in the mid-nineteenth century, the study of old South Arabian languages was only just beginning. Another example that underlines just how little the signs were understood at the time is an 1864 publication of an engraved stone with the names of the twelve Imams around the rim and the seven signs at the center. The article's author admits that he is not familiar with their meaning,[16] which explains why the seven signs are shown upside-down in the accompanying illustration.

Unfortunately, no certain date can be assigned to the stone. However, it does share a peculiarity with other representations of the signs, namely, the first sign has the shape of a small circle. These examples include the (so far) oldest datable piece: a talisman most probably from the eleventh century.[17] The earliest text example illustrating this group of seven signs, the poem attributed to `Ali, shows the same characteristic. For an explanation of the first sign's significance, we have to go back to al-Buni's text.

The First Sign: The Seal

As noted in the short version of his work, ***Shams al-Ma`arif***, al-Buni calls the first sign simply a "seal." In chapter 12 of ***Shams al-Ma`arif al-Kubra***, he refers to it as a ***ha'***.[18] When standing on its own, the letter ***ha'*** has the shape of a small circle. In fact, this is how the first sign is illustrated in the earliest text examples and on the oldest objects that have representations of the group of seven signs. In the same text, however, al-Buni also calls the first sign "a

seal with five corners," namely, a five-pointed star.[19] While in al-Buni's works the small circle is still occasionally used to illustrate the first sign,[20] it is increasingly replaced from his time onward by the five-pointed star – perhaps somewhat of a logical succession, for *ha'* has the numerical value of five.

This symbol, a five-pointed star drawn in one continuous line, has its own ancient origins that are independent of the group of seven signs. The earliest evidence is found in the eastern Mediterranean before 1500 BCE; several examples also exist from the first millennium BCE.[21] Wherever the five-pointed star was used – in the eastern Mediterranean as well as in those territories that adopted it later – the original pentagonal shape was eventually transformed into a six-pointed star composed of two overlapping equilateral triangles. Examples of this appear as early as the first millennium BCE and increasingly in the first millennium CE, and both were used side by side.[22] As part of the group of seven signs, the six-pointed star is shown in a thirteenth-century and a fifteenth-century manuscript of al-Buni's work, while in a sixteenth-century manuscript and the printed version the five-pointed star is found. Other authors present the seal in its five- and six-pointed shape within the same manuscript. A comparison of the textual examples and objects illustrating the group of seven signs allows the sequence to be drawn as follows: the small circle, which is the original shape of the first sign (the "seal"), starts to be replaced with the five-pointed star at the time of al-Buni. Apparently, very soon after that it becomes interchangeable with the six-pointed star.[23]

The first sign's significance is explained by its original circular shape, together with al-Buni's statement that it represents a *ha'*. This letter is to be understood as an abbreviation for *huwa*, "He," the Qur'anic designation for Allah.[24] As mentioned before, al-Buni also refers to the first sign as a "seal" (*khatam*). Even in our own time, people working in the Middle East are familiar with a seal being used in place of a signature, as a person's mark that validates such documents as official letters or contracts. Stamped onto an object, a seal establishes authenticity and serves as a sign of ownership.

These functions are confirmed by the material culture remains that carry five- and/or six-pointed stars – not as part of the group of seven, but as standing on their own. In the ancient and in the Islamic worlds, five- and/or six-pointed stars are found on weights, stamps, coins, and seals, where they attest to the item's validity and legitimacy. More importantly for this study, the symbols frequently occur in contexts where they have a protective and talismanic role, with "talisman" being understood here in its most general sense as "a thing endowed with potency."[25] Five- and/or six-pointed stars appear, for instance, on tombstones, houses, amulets, and in various practices attempting to influence the course of events by warding off evil.[26] The

objects or persons bearing the seal are "stamped" with the abbreviated or symbolized form of God's name and thus "sealed" against (protected from) harmful influences.[27]

As for Yemen in particular, five- and six-pointed stars are ubiquitous, and it is again the material culture remains that confirm the described functions. The five-pointed star first appears on coins from ancient South Arabia.[28] In Islamic Yemen, five- and six-pointed stars as geometric shapes are widespread in domestic architecture, on house facades, interior walls, doors, and windows; as part of inscriptions having a religious nature and on such religious architectural works as mosques and minarets, tombs and cenotaphs; as designs on amuletic jewellery; and as graffiti on walls and rocks.[29] For Islamic times, the emphasis seems to be on the protective and talismanic nature of the symbols' distinct supernatural qualities, and their appearance in religious contexts is notable.

The Second Sign: Three Vertical Lines with a Wavy Horizontal Line on Top

The second sign, "three sticks lined up ..., at their head, something that is like the bent head of a lance," defies explanation.

The Third Sign: The Letter Mim

The significance of the third sign, the letter *mim*, is derived from the fact that it forms the first letter of Muhammad's name and is repeated in the middle of the word.[30] At the same time, the *mim*'s numerical value is forty, an important number in Islam (as well as in Christianity). Forty is not necessarily used in the literal sense of its numerical equivalent, but in a metaphorical way to imply "numerous." This meaning causes it to play an important role in Muslim folk belief and saint worship.[31] An interesting article by Lawrence Conrad discusses aspects of forty's symbolic value as regards measuring time and describes it as the ideal age for the "optimum balance of physical strength, emotional maturity, and intellectual vigour."[32] Thus it may also imply spiritual consummation: Muhammad was "forty" when he received the first revelation.

However, al-Buni's remark that the *mim* is "squashed and amputated" remains obscure.

The Fourth Sign: The Ladder

Al-Buni's description of the fourth sign as "a ladder which leads to every hoped-for object" seems plausible, given that its shape does, in fact, resemble a ladder with rungs. The ladder may therefore be understood as a symbol for climbing up, namely, getting closer, to the good and thus closer to

God. This is why prayer is sometimes called a ladder. Unfortunately, al-Buni shatters such a straightforward interpretation by concluding that "[it] is nonetheless not a ladder." Winkler, who speculates that both the *mim* and the ladder may have their origin in pre-Islamic signs, points out that a pair of symbols frequently found on ancient South Arabian monuments bears some resemblance to the *mim* and the ladder.[33] Numerous examples are given by Adolf Grohmann, who interprets the two signs as symbols of the divine.[34]

The Fifth Sign: Four Vertical Lines

Al-Buni depicts the fifth sign as follows: "four objects resembling fingers have been lined up, pointing towards good things but [they are] without a fist." Throughout human history, frightening demons and spirits with only four fingers have populated many cultures.[35] Particularly interesting in the Islamic context is the description of the Punjab's jinn (spirits), who "are believed to have no bones in their arms; they have only four fingers and no thumbs."[36] The fourth sign would thus be a symbol that provides protection from those fearful beings with incomplete hands. But in *Shams al-Ma`arif al-Kubra*, al-Buni gives an alternative explanation: he calls the four vertical lines "four *alif*s."[37] The letter *alif* is of special significance, because it is the first letter of the word Allah and can thus serve as a symbol for God's name.[38]

The Sixth and Seventh Signs: The Letters Ha' *and* Waw

The letters *ha'* and *waw* combine to form *huwa*, "He," the Qur'anic designation for Allah. Al-Buni's description of the "*ha'* in half" refers to the letter's shape when connected to the left, in this case to the *waw*. Occasionally, the *ha'* is replaced with a six-pointed star, which seems to underline the interchangeability of *ha'*, the small circle, and the six-pointed star.[39]

The Significance of the Group of Seven Signs

In his work, al-Buni gives examples for the practical uses of this group of signs in everyday life. For instance, he claims that no ship carrying a person bearing them will sink, no house containing them will be destroyed by fire, and no goods marked with them will be stolen. The seven signs promote recovery from sickness and, if written down and deposited with the corpse, will protect the deceased from the torments of the grave. In addition, they will ensure strength and support for those in need of help. These and many other examples listed by him underline their protective and talismanic powers.[40]

To sum up: the underlying notion is an attempt to influence the course of natural events by calling upon a superhuman force. And this is the general definition of "magic" (*sihr*),[41] bearing in mind that the medieval authors

dealing with the topic vary on the specifics.[42] In Islam, a clear distinction is made between white magic that causes no harm to others, but rather tries to ward off hardship, and black magic that seeks to harm others. The latter takes recourse to demonical forces and is prohibited, whereas the former is permitted in certain cases. But the division between the two is not as clear as it may seem, for books on white magic normally contain explicit instructions on how to inflict misfortune on others. Al-Buni's own *Shams al-Ma`arif* can serve as an example of this practice.[43]

White magic is deeply interwoven with religion. At the core of this union lie the *khawass* (sg. *khassah*), the special properties – that is, unaccountable, hidden forces – of such things as Qur'anic verses and God's names.[44] These secret powers, which have a talismanic value, take us back to the group of seven signs. It needs to be repeated here that the poem attributed to `Ali describes the signs and concludes they represent God's supreme name; al-Buni's work provides the same interpretation, and the author emphasizes this particular name's great magical power.[45] The specific group of seven signs is one of the shapes that this name can take, encoded in strange and unfamiliar symbols that do not reveal their true meaning to the uninitiated. When handled appropriately, namely, inscribed ("stamped") on an object, however, its user will benefit from the name's various forces.

In the example of Bayt al-Shaykh, God's supreme name (the group of seven signs) was written on the cistern in the hopes of influencing the course of natural events and ensuring the vital water supply. In keeping with this function, the signs have been called the "seven magical signs."[46] While calling upon God, this kind of magical practice is based on an understanding of a specific relationship between God and human beings, one in which either side can affect the other.[47]

The attempt to urge God through magic is particularly visible in the rogatory rite for rain, *istisqa'*, a custom that goes back to pre-Islamic origins. For example, the inscription Ja 735 from ancient South Arabia[48] describes a desperate situation caused by one and a half years of drought with no precipitation at all: the fields are barren, the trees have died, and the wells have dried up. In this state of emergency, the entire tribe undertakes a procession to the temple, where the religiously inspired rain-making rituals involve invocations and sacrifices in the hopes that the deity can be convinced to let it rain. Females seem to have played a significant role in the ritual act. Other pre-Islamic rain-making practices are known.[49]

In Islamic times, the Prophet's uncle `Abbas enjoyed a particularly high reputation for his ability to cause rainfall.[50] Muhammad himself is also reported to have been directly or indirectly involved in successful rain rogations on

several occasions.[51] Clearly, the ancient rite had to be appropriated to Islam's requirements by eliminating elements with an openly pagan character. However, its fundamental principle remained the same, and everywhere in the Islamic world this procedure includes a wide variety of "magical" practices.[52] In fact, people seem to have demanded them as part of *istisqa'* and considered them an essential addition to the powers of persuasion. In any case, the effectiveness of the request for rain was – and is until today – to a large extent dependent upon the use of appropriate formulas that should include certain names of God, particularly His supreme name.[53]

Conclusion

In western scholarship, magical practices are usually viewed as reflecting a backward society with low educational levels. Winkler, who translated and interpreted lengthy passages of al-Buni's work, refers throughout his book to those people in whose life magic plays a major role as "primitive." The eminent German scholar Manfred Ullmann dismisses al-Buni's treatise in a most perfunctory way, calling it "brainless."[54] However, in a world where whether fundamental human needs are met or not is left to chance, people easily resort to magical practices – in our example the use of a formulaic invocation – in the hopes of influencing the course of natural events and achieving what seems to be out of reach. In al-Jabin, the engineering skills required for building cisterns and associated water harvesting devices did not pose a problem. However, the rains needed to feed the system were unpredictable. Water scarcity was a perpetual threat to the sustainability of life, and so people tried a magical approach, hoping that it might ensure a guaranteed water supply. Under the described circumstances, magic acquires its own validity.

The magic signs are dated by an inscription on the cistern to 1885-86. According to a recent article (21 January 2008) in the *Yemen Post*, one of the country's English-language newspapers, magical procedures are not only common today, but are enjoying a growing popularity. More than 100 centers where magic is practiced are known to exist in the capital city of Sanaa alone.[55]

Endnotes

1. Ahmed al-Hubaishi and Klaus Müller-Hohenstein, *An Introduction to the Vegetation of Yemen. Ecological Basis, Floristic Composition, Human Influence* (Eschborn: Deutsche Gesellschaft für Technische Zusammenarbeit, 1984), 77-78.
2. Tony Wilkinson, "Settlement, Soil Erosion and Terraced Agriculture in Highland Yemen: A Preliminary Statement," *Proceedings of the Seminar for Arabian Studies* 29 (1999): 183-91. [pp. 185, 188-90].

3. Rainwater harvesting was described by Horst Kopp, *Agrargeographie der Arabischen Republik Jemen* (Erlanger Geographische Arbeiten, Sonderband 11) (Erlangen: Fränkische Geographische Gesellschaft, 1981), 110-11; Helmut Eger, "Rainwater Harvesting in the Yemeni Highlands: The Effect of Rainwater Harvesting on Soil Moisture Status and Its Implications for Arable Farming, a Case Study of the Amran Region," in *Entwicklungsprozesse in der Arabischen Republik Jemen*, eds. Horst Kopp and Günther Schweizer (Jemen-Studien, 1) (Wiesbaden: Reichert, 1984), 147-69; in more detail Helmut Eger, *Runoff Agriculture: A Case Study about the Yemeni Highlands* (Jemen-Studien, 7) (Wiesbaden: Reichert, 1987).
4. Charles F. Swagman, *Development and Change in Highland Yemen* (Salt Lake City: University of Utah Press, 1988), 27-28.
5. Mohamed M. El-Gawhari, *Die Gottesnamen im magischen Gebrauch in den al-Buni zugeschriebenen Werken* (Ph.D. thesis, University of Bonn, 1968), 14-26.
6. Wilhelm Pertsch, *Die orientalischen Handschriften der herzoglichen Bibliothek zu Gotha*, 2: *Die arabischen Handschriften* (Gotha: Perthes, 1880), nos. 1262 and 1263; Hans A. Winkler, *Siegel und Charaktere in der muhammedanischen Zauberei* (Studien zur Geschichte und Kultur des islamischen Orients, 7) (Berlin and Leipzig: de Gruyter, 1930), 67.
7. Al-Buni's text passage is reproduced in Arabic together with a German translation in Winkler, *Siegel und Charaktere*, 68-72, in particular 69 and 71. A French translation is given by Georges C. Anawati, "Le nom suprême de Dieu," *Atti del Terzo Congresso di Studi Arabi e Islamici, Ravello, 1-6 settembre 1966* (Napoli: Istituto universitario orientale, 1967), 7-58. [p. 27]. I am following the English translation of the passage by Venetia Porter, "Islamic Seals: Magical or Practical?" in *University Lectures in Islamic Studies*, 2, ed. Alan Jones (London: Altajir World of Islam Trust, 1998), 135-49 and figures 8.1-8.14. [pp. 145-46]. Please note: instead of al-Buni, Porter erroneously cites the theologian Fakhr al-Din al-Razi (d. 1209) as the author.
8. See Winkler, *Siegel und Charaktere*, 67, 114-19.
9. Ibid., 114-49.
10. Ahmad ibn `Ali al-Buni, *Kitab Shams al-Ma`arif al-Kubra wa-Lata'if al-`Awarif*, 4 vols. (Cairo: Husayniyyah, n.d. [c. 1905]), 1:80-86. A German translation of the critical text passage of chapter 12 can be found in Winkler, *Siegel und Charaktere*, 72-85.
11. Heinrich Ewald, "Eine himjaritische Inschrift," *Zeitschrift für die Kunde des Morgenlandes* 2 (1839): 107-09.
12. Heinrich Ewald, "Über die Sammlung arabischer und syrischer Handschriften in *British Museum*," *Zeitschrift für die Kunde des Morgenlandes* 2 (1839): 190-214. [pp. 192-200].
13. Joseph T. Reinaud, *Monumens arabes, persans et turcs, du cabinet de M. le Duc de Blacas et d'autres cabinets*, 2 vols. (Paris: L'imprimerie royale, 1828), 2: 245.
14. Winkler, *Siegel und Charaktere*, 65-66.

15. Muhammad Muhsin Agha Buzurg al-Tihrani, *Al-Dhari`ah ila Tasanif al-Shi`ah* (al-Najaf: al-Ghari, 1838-39), 3: 203-04.
16. Andreas Mordtmann, "Studien über geschnittene Steine mit Pehlevi-Inschriften," *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 18 (1864): 1-52, Taf. I-VI. [p. 51, no. XIII and Taf. VI, no. XIV].
17. See Winkler, *Siegel und Charaktere*, 56, no. 1; 114 and 116, no. 1. The order of the signs is slightly different than the one described by al-Buni, with the first sign taking the second position.
18. Al-Buni, *Shams al-Ma`arif al-Kubra*, 1: 86.
19. Ibid., 84. Please note that in this instance al-Buni describes the five-pointed star as being repeated at the end of the group. Cf. Winkler, *Siegel und Charaktere*, 118, no. 15 for an explanation; an illustration of an example can be found in Edmond Doutté, *Magie & religion dans l'Afrique du nord* (Alger: Jourdan, 1909), 164.
20. See Winkler, *Siegel und Charaktere*, 116, no. 22.
21. Frederick J. Bliss and R. A. Stewart Macalister, *Excavations in Palestine during the Years 1898-1900* (London: Palestine Exploration Fund, 1902), 83 and pl. 29, no. 42; 123 and pl. 56, nos. 44 and 53; Henri de Genouillac, *Céramique cappadocienne*. 1: *Introduction. Collection Chantre* (Paris: Geuthner, 1926), 115 and pl. 20, no. 10043.
22. The five- and particularly the six-pointed star are recognized in popular Islam as the so-called "seal of Solomon," which is associated with supernatural powers. See Rachel Milstein, *King Solomon's Seal* (Jerusalem: Tower of David Museum of the History of Jerusalem, n.d. [1995]), 186-69 (sic); Winkler, *Siegel und Charaktere*, 57-65, 95, 127-33. Milstein's catalogue and Winkler (121-26) present examples from ancient and medieval Islamic, Jewish, and Christian contexts.
23. Winkler, *Siegel und Charaktere*, 114-19.
24. Ibid., 135.
25. See Emilie Savage-Smith, "Introduction: Magic and Divination in Early Islam," in *Magic and Divination in Early Islam* (The Formation of the Classical Islamic World, 42), ed. Emilie Savage-Smith (Aldershot, UK: Ashgate, 2004), xiii-li. [p. xxiii].
26. Winkler, *Siegel und Charaktere*, 127 also attributes a purely ornamental function to the pentagram and the hexagram. One may suggest, though, that their decorative appeal results to a large extent from their association with protective and talismanic qualities. This dual function is most obvious in jewellery decorated with a five- or six-pointed star. For several exquisite examples, see Elena Schenone Alberini, *Libyan Jewellery: A Journey Through Symbols* (Cannara, Italy: De Luca, 1998). Due to this particular design, the jewellery clearly takes on an amuletic function, with an amulet defined as "any relatively small object intended to be worn to ensure protection and well-being," see Emilie Savage-Smith, "Amulets and Related Talismanic Objects," in Francis Maddison and Emilie Savage-Smith, *Science, Tools & Magic*, 1: *Body and Spirit, Mapping the*

Universe (The Nasser D. Khalili Collection of Islamic Art, XII.1) (London and Oxford: The Nour Foundation, in association with Azimuth Editions and Oxford University Press, 1997), 132-47. [p. 133]. The five- and/or six-pointed stars, either standing on their own or as part of the group of the seven signs, are also found on so-called magic-medicinal bowls. See Annette Ittig, "A Talismanic Bowl," *Annales Islamologiques* 18 (1982): 79-94 and pls. II-VII. These objects form a separate study in their own right, cf. Emilie Savage-Smith, "Magic-Medicinal Bowls," in *Science, Tools & Magic*, 1, 72-100.

27. Cf. Winkler, *Siegel und Charaktere*, 112.
28. David H. Müller, *Südarabische Alterthümer im kunsthistorischen Hofmuseum* (Wien: Hölder, 1899), 78, n. 1, no. 15.
29. For a great many examples from Yemen through the centuries, see for instance the following works: *Sanaa: architecture domestique et société*, ed. Paul Bonnenfant (Paris: CNRS, 1995), especially 537-44, 546-47, and 548-49; Paul Bonnenfant, *Zabid au Yémen. Archéologie du vivant* (Aix-en-Provence: Édisud, 2004); Guillemette Bonnenfant and Paul Bonnenfant, *L'art du bois à Sanaa. Architecture domestique* (Aix-en-Provence: Édisud, 1987); Roberta Giunta, "The Talismanic-religious Nature of late Ottoman Inscriptions in the Tihamah Cities," *Proceedings of the Seminar for Arabian Studies* 32 (2002): 269-79; Lucien Golvin and Marie-Christine Fromont, *Thulâ: architecture et urbanisme d'une cité de haute montagne en République arabe du Yémen* (Paris: Éditions Recherche sur les Civilisations, 1984); and Robert B. Serjeant and Robert Lewcock, eds., *San`a' – An Arabian Islamic City* (London: World of Islam Festival Trust, 1983).
30. Winkler, *Siegel und Charaktere*, 148.
31. Frederick W. Hasluck, *Christianity and Islam under the Sultans*, 2 vols. (Oxford: Clarendon, 1929), 2: 391-402; Eduard König, "Die Zahl vierzig und Verwandtes," *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 61 (1907): 913-17; Rudolf Kriss and Hubert Kriss-Heinrich, *Volksglaube im Bereich des Islam*, 2 vols. (Wiesbaden: Harrassowitz, 1960-62), 1: 117, 220-21 and *passim*.
32. Lawrence J. Conrad, "Abraha and Muhammad: Some Observations Apropos of Chronology and Literary *Topoi* in Early Arabic Historical Tradition," *Bulletin of the School of Oriental and African Studies, University of London* 50 (1987): 225-40. [p. 232].
33. Winkler, *Siegel und Charaktere*, 148-49.
34. Adolf Grohmann, *Göttersymbole und Symboltiere auf südarabischen Denkmälern* (Denkschriften der Kaiserlichen Akademie der Wissenschaften, Philosophisch-Historische Klasse 58.1) (Wien: Hölder, 1914), 19-32. He calls the ladder-shaped sign a *Doppelgriffel* and the second symbol, which may be the origin of the "squashed and amputated *mim*," a *Blitzbündel*.
35. Winkler, *Siegel und Charaktere*, 138-40.
36. Ghulam Hussain, "Punjab – The Jinn – Their Appearance," *North Indian Notes and Queries* 1 (1891): 103, no. 678.
37. Ibid., 1: 85.

38. Winkler, *Siegel und Charaktere*, 140. As so often, the interpretation is not necessarily as straightforward as it may seem at first sight. For a less favourable comment on the *alif*, see Ignaz Goldziher, "Linguistisches aus der Literatur der muhammedanischen Mystik," *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 26 (1872): 764-85. [pp. 782-84].
39. Winkler, *Siegel und Charaktere*, 144, 116, no. 16. For the further development of the six-pointed star into an octagon, see 144 and 116, nos. 17-18.
40. Short redaction, *Shams al-Ma`arif* (Arabic text in Winkler, *Siegel und Charaktere*, 68; German translation, 70-71) and long redaction, 1: 80-81; German translation in Winkler, *Siegel und Charaktere*, 72-74.
41. Savage-Smith, "Introduction," xiii.
42. Toufic Fahd, "Sihr," *The Encyclopaedia of Islam* (new ed.) (1997), 9: 567-71.
43. Long redaction, 1: 81-82, 85-86 and Winkler, *Siegel und Charaktere*, 74-77, 81-84.
44. Manfred Ullmann, "Khassa," *The Encyclopaedia of Islam* (new ed.) (1978), 4: 1097-98. For more details, see Toufic Fahd, *La divination arabe. Études religieuses, sociologiques et folkloriques sur le milieu natif de l'Islam* (Leiden: Brill, 1966), 214-45.
45. Cf. El-Gawhari, *Gottesnamen*, 118-65.
46. Porter, "Islamic Seals," 145.
47. See Ignaz Goldziher, "Zauberelemente im islamischen Gebet," in *Orientalische Studien Theodor Nöldeke zum siebzigsten Geburtstag (2 März 1906): gewidmet von Freunden und Schülern*, ed. Carl Bezold (Giessen: Töpelmann, 1906), 1: 303-29. [pp. 303-08, 313].
48. Walter W. Müller, "Eine Bitte um Regen bei Dürre aus sabäischer Zeit," *Jemen-Report* 17, no. 1 (1986): 10-11.
49. Ignaz Goldziher, *Muhammedanische Studien*, 2 vols. (Halle: Niemeyer, 1889-90), 1: 34-35; Toufic Fahd, *Le panthéon de l'Arabie centrale à la veille de l'hégire* (Paris: Geuthner, 1968), 10-14.
50. Goldziher, *Muhammedanische Studien*, 2, 108; Goldziher, "Zauberelemente," 309; Theodor Nöldeke, "Zur tendenziösen Gestaltung der Urgeschichte des Islams," *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 52 (1898): 16-33. [p. 25-27].
51. Fahd, *La divination*, 264-66; Toufic Fahd, "Istisûa'," *The Encyclopaedia of Islam* (new ed.) (1978), 4: 269-70. [p. 270].
52. Goldziher, *Muhammedanische Studien*, 2: 312-13; Goldziher, "Zauberelemente," 308-12; Doutté, *Magie & religion*, 582-96.
53. Goldziher, *Muhammedanische Studien*, 1: 315-18.
54. Manfred Ullmann, *Die Natur- und Geheimwissenschaften im Islam* (Handbuch der Orientalistik, I.vi.2) (Leiden: Brill, 1972), 391.
55. Abdul Rahim al-Showthabi, "Love through Black Magic," *Yemen Post* 13, 21 January 2008, p. 5. Please note that al-Showthabi does not distinguish between black and white magic, but simply refers to any magical practice as black magic.