

The astrological origin of Islamic geomancy

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1. GEOMANCY AND ITS DISTRIBUTION IN TIME AND SPACE

Perhaps the best way to introduce the geomantic family of divination systems, and their enormous cultural historical significance, is by pointing out that it, and it alone, provides the answer to that unfortunately overlooked, yet inspiring, question of modern scholarship: *What do a nineteenth-century CE German farmer, a twentieth-century CE typing-girl from Botswana, and a late first-millennium CE Arabian sage have in common?*

First introduced into West European intellectual life in the 11th century CE, when numerous Arabic texts were translated, geomancy as a divination method became associated with the most prominent representatives of the occult sciences in medieval and Renaissance times, including Bernardus Silvestris, Roger Bacon, Albertus Magnus, Cornelius Agrippa and Robert Fludd. As in the

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Arabic originals, by Muḥammad al-Zanātī, °Alī b. Umar, Fadhl b. Sahl al-Saraksi, Ahmad b. °Ali Zunbul, etc., the system was popularised through ‘books of fate’, and ‘punctuation’ (as it was called after its characteristic patterns of dots) became a self-help oracle even in the rural peripheries of European life

‘Also farmer Hinrich Fehse must have looked up things in such a book, one of the characters in the Theodor Storm’s [1817-1888 – WvB] novelette ‘Draussen im Heidedorf’ [‘ Out there in the village on the moors’]:

“For this purpose he produced my mother’s punctuation book from the sewing box. He set himself opposite me and then started to produce dots with chalk on the table. He did this with such urgency and got such a blush in the process that I asked him: ‘Hinrich, what is it that you are punctuating on, after all?’ ‘Shut up, shut up’, he said. ‘Keep to your sewing job!’ – But without him noticing I leaned over the table and saw at which number in the book he held his finger. – So the question was if the sick person would get better? – I kept quiet and went on with my work, and he stipulated on, counted ‘even’ or ‘odd’, and finally punctuated the figures with chalk on the table.”²

From a very different corner of the Old World: Francistown, Botswana, Southern Africa, hails the following account of Jane Sinombe’s oracular consultation in 1991:

‘As one of the many daughters of Mr R. Sinombe, the high priest of the ancient and widespread Mwali territorial cult, Jane (aged 21), an unattached typist living in Botswana’s booming Francistown, has grown up in a milieu where divination, mediumistic cults and herbalism were taken for granted. A prominent place among her adolescence memories is occupied by the annual meetings of the Kwame/Legwame Traditional Association – one of the several Botswana guilds of traditional healers, and the one through which her father, as founder-president, pursued the local continuity of the Mwali cult in a formal organisational shape well within Botswana’s Societies Act – with scores of traditional healers discussing, celebrating and officiating at her father’s spacious Nata homestead at 200 km north-west from Francistown. Only the previous year she was instrumental in escorting one of the novices³ of MmaShakayile, a particularly prominent cult leader, to Nata for official registration with her father’s guild. By that time she was still enrolled in a typing course. Meanwhile she has finished the course and had managed to find work as a secretary at a contractor’s office. Her euphoria over this hard-to-find job has not lasted long: within a few months she finds herself the centre of a

² Helm, E.M., 1985, *Het grote orakelboek [: kaartleggen – koffiedik kijken – handlezen – astrologie en vele andere wegen om met elkaar in de toekomst te kijken]*, Utrecht/Antwerpen: Spectrum, p. 72f, my English translation of this passage; the book is a Dutch translation of *Das große Orakelbuch*, München: Ehrenwirth, 1983.

³ The present writer. For an extensive treatment of my apprenticeship and practice as a Southern African geomancer, cf. van Binsbergen, W.M.J., 2003, *Intercultural encounters: African and anthropological explorations towards a philosophy of interculturality*, Berlin/Münster: LIT.

frightening whirlpool of backbiting and slander, in the course of which her financial integrity is questioned and several candidates have presented themselves to take over her newly-gained job. Her father's towering position in the cult does not mean that he engages in divination, he is not staying in Francistown, and ever since her parents' divorce Jane's attitude towards him has been very ambivalent. So it is to MmaShakayile that she now turns for divinatory clarification and advice. This cult leader's urban yard in Monarch, an upgraded former mine compound, in its various rambling structures houses a large number of junior relatives and lodgers who have no dealings with the cult, but the yard is foremost, in popular perception, a cultic lodge, where junior adepts (*amathwaza*, singular *uthwaza*) are being purified and trained in order to assume, ultimately, the office of sangoma spirit medium, which includes trance divination, officiating at laymen's sacrifices to the latter's ancestors, herbal therapy, and operating the region's characteristic four-tablet oracle (*hakata* or *ditaola*) – the local variant of geomancy. Rarely does the old lady throw the tablets herself these days, but her senior adepts are fully capable of conducting a divinatory session without even her intervention.

Upon her arrival at the yard, one evening, Jane presents herself to Molly, senior adept and MmaShakayile's granddaughter, whom she finds chatting in front of the main house. She briefly explains the purpose of her visit, and is taken inside where she is seated on a mat, the legs stretched in front of her. Jane produces her five-Pula note,⁴ and MmaShakayile's sacred *hakata* (four small flat wooden tablets each with distinct markings) are produced. Molly is to preside over the session, with MmaMleya and Johannes⁵ – both *amathwaza* about to graduate – in attendance in order to complement Molly's interpretations and to gain further experience and confidence. After Jane has imparted her own life essence to the tablets by handling them and blowing over them, Molly throws them down on a gaudy cloth featuring pictures of lions in the sacred colours red, white and black. She names their first fall as Chilume⁶ (one of the sixteen configurations that are possible when each of four tablets can end up face up or face down), and interprets this fall in terms of an inquiry about sorcery. Then she throws again, naming and interpreting this fall again, and so on, occasionally handing the tablets to Jane to let her throw, and persuading her, through interjections, questions, hesitations, to formulate specific questions and to respond to the ever more detailed and dramatic tale that gradually shape up out of the oracular pronouncements of Molly and her two junior colleagues: a tale of competition between colleagues at Jane's place of work, and of the sinister, occult weapons which her adversaries are employing. In the final part of the session, which all together comprised twenty-eight throws, Jane is exhorted to rely on her ancestors, and on MmaShakayile's counter-medicine (for which an additional P10 is to be charged), in order to fight back her colleagues' attacks, and she is reassured that she will keep her job and even gain a supervisory rank in the near future. (This came true, incidentally.) Momentarily relieved, Jane leaves the yard, and stops a taxi to take her all

⁴ Pula, the Botswana currency. At the time, P1 ≈ US\$0.50, and the legal minimum wage was just below P1 per hour; Jane earned about 50% more than that.

⁵ The present writer.

⁶ , i.e. the configuration where all tablets are upside down except for the senior male tablet. For further details, see: van Binsbergen, W.M.J., 1993, 'Divinatie met vier tabletten: Medische technologie in Zuidelijk Afrika', in: Sjaak van der Geest, Paul ten Have, Gerhard Nijhoff en Piet Verbeek-Heida, eds., *De macht der dingen: Medische technologie in cultureel perspectief*, Amsterdam: Spinhuis, pp. 61-110; van Binsbergen, W.M.J., 1995, 'Four-tablet divination as trans-regional medical technology in Southern Africa', *Journal of Religion in Africa*, 25, 2: 114-140.

the way back to her room in the Block VII residential area, a distance of some fifteen kilometres all across the sprawling town.⁷

And finally, as one of the earliest documentary attestations of geomancy in an Arabian context:

‘Ce procédé [i.e. geomancy], considéré par Doutté⁸ comme une modernisation d’at-tarq bil-’hasat^{9,10} est déjà décrit par Ibn al-A’rabi¹¹ en ces termes: ‘‘Le hazi s’assied et fait tracer, par un jeune garçon à son service, des lignes sur le sable ou de la poussière; il les trace avec agilité et promptitude, de manière qu’il soit impossible de les compter. Puis, sur l’ordre du maître, il les efface deux à deux, tout en disant: ‘Vous deux, témoins oculaires [de la volonté des dieux], faites apparaître promptement l’évidence’’^{12!} S’il n’en reste à la fin que deux lignes, c’est signe de succès; mais s’il n’est resté qu’une, c’est signe d’échec et de malheur.’^{13 14}

What is the formal nature and what is the inner working of this geomantic divination system, whose ramifications stretch across three continents and several millennia? What are the historical antecedents that explain its emergence, apparently out of the blue, in Islamic Mesopotamia by the end of the first millennium CE? These are the central questions of the following argument.

⁷ Author’s field-notes.

⁸ Doutté, E., 1909, *Magie et religion dans l’Afrique du Nord*, Alger: Jourdain.

⁹ ‘Casting of pebbles’, i.e. lithoboly.

¹⁰ Doutté, o.c. p. 378. [Fahd’s original footnote]

¹¹ ‘Mort vers 230/844, à l’âge de 81 ans’; cf. Brockelmann, C., 1937-42, *Geschichte der arabischen Literatur*, Leiden: Brill, Supplementband I, 179; cité ap. Alusi, loc. cit. [Fahd’s original footnote; al-Alusi, i.e.: Mahmud Shukri al-Alusi, *Buludj al-arab*, III, 323; cf. Fahd 1966: 195 n. 4] . This 9th century CE figure is not to be confused with the famous mystic by the same name, nearly half a millennium later (1165-1240 CE; cf. Chittick, W.C., 1989, *The Sufi Path of Knowledge: Ibn al-‘Arabi’s Metaphysics of Imagination*, Albany: SUNY Press.

¹² Here Fahd gives a long philological footnote citing passages from the above work of al-Alusi, and from: al-Zabidi, Muḥammad Murtadah, *Taj al-‘arus min jawahir al-Qamus*, i-x, éd. du Caire 1286/1869-1287/1870; and refers to: Goldziher, I., 1902, ‘Einige arabische Ausrufe und Formeln’, *Wiener Zeitschrift für die Kunde des Morgenlandes*, Wien, 16: 131-146, esp. 139f.; all of which is suggestive of an intimate link between geomancy, belomancy and ornithomancy.

¹³ Cette ligne est appelée *āsham*, ‘noire’ (*Taj al-‘arus min jawahir al-Qamus*, 5, 129, l. 12 sq. cf. ib. l. 13 sqq. (...) Comp. *Taj al-‘arus min jawahir al-Qamus* s.v. *khatt*, traduit par A. Jaussen, *Les coutumes des Arabes au pays de Moab*, 183, n. 1. [Fahd’s original footnote, with shortened references expanded by me]

¹⁴ Fahd, T., 1966, *La divination arabe: Etudes religieuses sociologiques et folkloriques sur le milieu natif de l’Islam*, Leiden : Brill, p. 197f.

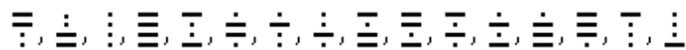
2. ISLAMIC GEOMANCY AS A DIVINATION SYSTEM

Essentially, any inductive divination system consists of two¹⁵ elements: a random generator producing a-select numbers, and an interpretative catalogue whose entries can be selectively consulted by means of these numbers.¹⁶ In formal terms, the geomantic family of divination systems is characterised by random generators (often – but not always – involving the use of sand or earth, hence the common designation *‘ilm al-raml*,¹⁷ ‘sand science’) producing 2⁴ equiprobable different configurations, all of which have been named and specified in the attending catalogue.

In the standard geomantic practice sixteen different configurations are arrived at by the construction of four horizontal rows, each element consisting of one dot (for the outcome ‘odd’ of a particular chance procedure, e.g. making an uncounted number of dots on the ground (cf. Plate 1 below) or on a piece of paper; throwing pebbles, shells, sticks etc.) or two dots (for ‘even’). In this way patterns of the typical and well-known geomantic figures are produced:



Two dots on the same horizontal line may also be connected so as to form horizontal lines (an obviously secondary usage common in Arabic contexts):



¹⁵ Or rather three, if one distinguishes, between the random generator and the interpretative catalogue, the coding procedures by which the numbers produced by the former, are turned into meaningful entries (e.g. geomantic figures, of the characteristic shape , ,  etc. – see below)

whose meaning is then to be looked up in the interpretative catalogue; cf. van Binsbergen, W.M.J., 1997, ‘Rethinking Africa’s contribution to global cultural history: Lessons from a comparative historical analysis of mankala board-games and geomantic divination’, in: van Binsbergen, W.M.J., 1997, ed., *Black Athena: Ten Years After*, Hoofddorp: Dutch Archaeological and Historical Society, special issue, *Talanta: Proceedings of the Dutch Archaeological and Historical Society*, vols 28-29, 1996-97, pp. 221-254. For our present purpose, these coding procedures may well be regarded as an intrinsic part of the interpretative catalogue.

¹⁶ Cf. van Binsbergen 1994, o.c.; van Binsbergen, W.M.J., 1995, ‘Four-tablet divination as trans-regional medical technology in Southern Africa’, *Journal of Religion in Africa*, 25, 2: 114-140; van Binsbergen, W.M.J., 1996, ‘Transregional and historical connections of four-tablet divination in Southern Africa’, *Journal of Religion in Africa*, 26, 1: 2-29;

¹⁷ In Arabic pronunciation, the article’s ‘-l’ is assimilated to the initial ‘r-’ of *raml*.

Dots may be connected by lines also vertically and diagonally, and the resulting figures embellished at liberty, so as to produce the fantastic glyphs of geomantic magic (cf. Plates 2 and 3 below). Each of the sixteen possible configurations is identified by name, and for each a number of standard interpretations is given in an interpretative catalogue which in principle is in written form, although in less literate peripheries it may simply have been committed to memory. Naturally, in the course of their transmission over vast expanses of space and time the contents of these catalogues may have come to vary considerably, but an underlying identical structure and contents remains detectable. Below (Tables 1, 3) we shall look at some of these catalogues in detail. In the Southern African case, the chance procedure leading to the selection of one out of the sixteen configurations consists not of uncontrolled, spontaneous production of a repetitive series followed by elimination and assessment in terms of ‘odd’ or ‘even’, but, as we have seen at Jane’s session, by the fall of four tablets which can each take two values, notably ‘face up’ and ‘face down’; in this far corner of the Old World, where the presence of geomancy and Islamic influence in general so far has gone unnoticed, the interpretative catalogues as applied by individual diviners tend to be very idiosyncratic yet, as I have shown elsewhere,¹⁸ derive from the same medieval original geomantic corpus as the catalogues found throughout the Islamic world and in Europe.

A central feature of classic, Arabic geomancy is the construction of a ‘complete geomantic theme’: from the original four tetragrams (the four ‘mothers’) twelve other configurations (four daughters, four nephews, two witnesses and two judges, of which the last one is often called ‘arbitrator’) are derived by a special form of addition, based on the following computational rules:

$$\begin{array}{l}
 \text{even} + \text{odd} = \text{odd, i.e. } oo + o = o, \\
 \text{odd} + \text{even} = \text{odd, i.e. } o + oo = o, \\
 \text{even} + \text{even} = \text{even, i.e. } oo + oo = oo, \\
 \text{odd} + \text{odd} = \text{even, i.e. } o + o = oo.
 \end{array}$$

In passing we note the strange mixture of a kinship idiom, with a legal idiom of witnesses and judges.

There are indications however that the mothers here do not primary stand for a kinship reference, but for fundamental cosmological entities: planets or

¹⁸ van Binsbergen 1996, o.c.

elements.¹⁹ In very rare variant it is fathers and sons, rather than mothers and daughters, that are being constructed.²⁰

If we represent each geomantic element in formula as the bilocal relation:

$E(a, b)$

where

E = a geomantic element (one out of sixteen)

a = serial number of element E in the ordered series 1 through 16

b = line number

whereas

$\Sigma_{(a_1+a_2)}$ = the computational result of the value on line b , of elements numbered a_1 and a_2 ,

then the computational rules for the derived figures (i.e.: all figures except the four mothers) can be summarised in formula format as follows:

$$E_{(5, 1...4)} = E_{(1...4, 1)}$$

$$E_{(6, 1...4)} = E_{(1...4, 2)}$$

$$E_{(7, 1...4)} = E_{(1...4, 3)}$$

$$E_{(8, 1...4)} = E_{(1...4, 4)}$$

$$E_{(9, 1...4)} = E_{(\Sigma_{(1+2)}, 1...4)}$$

$$E_{(10, 1...4)} = E_{(\Sigma_{(3+4)}, 1...4)}$$

$$E_{(11, 1...4)} = E_{(\Sigma_{(5+6)}, 1...4)}$$

¹⁹ Carra de Vaux, B., 1974, 'al-Sabi'a', in: Gibb, H.A.R., & J.H. Kramers, 1974, *Shorter Encyclopaedia of Islam*, Leiden: Brill, reprint of the first edition of 1953, pp. 477-78; mothers as elements also among the *Ikhwan al-Safa'*, cf. de Boer, T., 1921, *De wijsbegeerte in den Islam*, Haarlem: Bohn, p. 90; also cf. de Boer, T., 1967, *The history of philosophy in Islam*, trans. by E.R. Jones, first published 1903.

²⁰ The point is not without significance. In an Arabic environment, it would elicit comment if the dominant patrilineal and patriarchal idiom is not observed; the descent series mothers/ daughters/ nephews is distinctly matrilineal. Should this be read as evidence that the system was imported from a non-patrilineal environment? And what milieu in the ancient and medieval Near East would qualify as such an environment? Or, somewhat more likely, could it be taken – within the generally patrilineal context of the Near East – as another example of the widely attested general rule, first expressed by Meyer Fortes (cf. Fortes, M., 1953, 'The structure of unilineal descent groups', *American Anthropologist*, 55: 17-41.) that such symbolic domains as religious specialism, spirit possession, magical expertise etc. tend to be inherited not in the dominant but in the submerged line of descent, i.e. matrilineally in a patrilineal society. Another widely attested application of this rule is the fact that when, in West Asian including Arabian magic, a client is to give a parent's name, it is usually the name of the mother, not the father, which is required.

$$E_{(12, 1...4)} = E_{(\Sigma_{(7+8), 1...4})}$$

$$E_{(13, 1...4)} = E_{(\Sigma_{(9+10), 1...4})}$$

$$E_{(14, 1...4)} = E_{(\Sigma_{(11+12), 1...4})}$$

$$E_{(15, 1...4)} = E_{(\Sigma_{(13+14), 1...4})}$$

$$E_{(16, 1...4)} = E_{(\Sigma_{(1+15), 1...4})}$$

The example in diagram 1 should suffice to illustrate this apparently complex algorithm.

For those not familiar with geomancy it may be useful to point out that the appearance of a series of sixteen elements in two related but essentially different contexts may at first present a source of confusion:

- (a) mathematically, there are 16 possible *different* configurations which can be formed out of four lines, having in each line one element which can take two values ('even' or 'odd', 'oo' or 'o'). Whenever a geomantic figures is constructed by means of a chance process, one and only one of these sixteen will be produced;
- (b) The construction of a full geomantic 'theme' (i.e. horoscope) out of four original mothers resulting from chance operations, necessarily produces a series of sixteen and only sixteen figures, several of which may occur more than once, as is clear from the example in diagram 1, where only ☶, ☷, ☸, and ☹ occur only once.

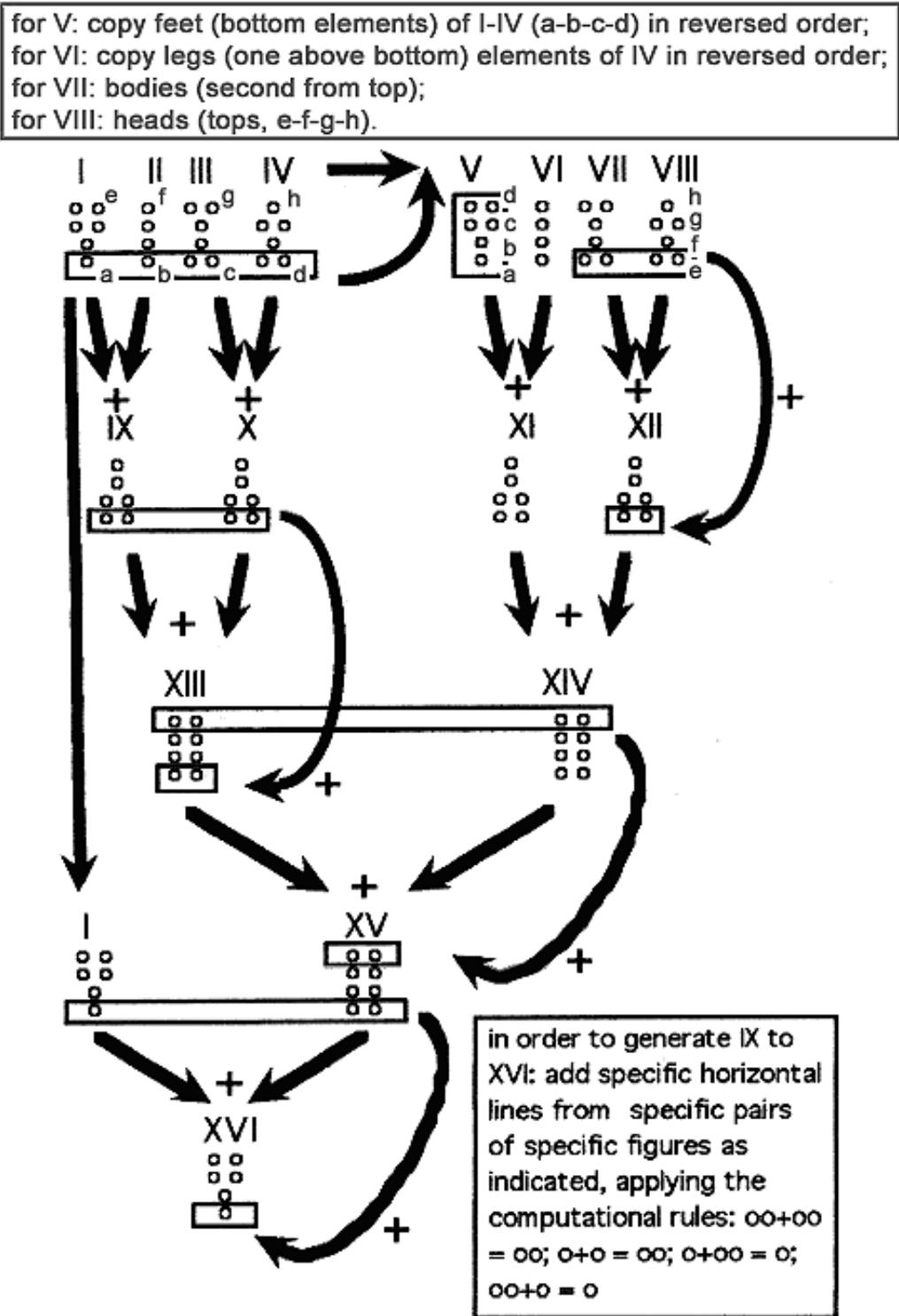


Figure 1. An example of the production of a full geomantic theme of 16 figures, starting from the four 'mothers'

For the mathematician, these procedures offer all sorts of possibilities for further combinatorial and (since they involve all kinds of symmetries) topological manipulation,²¹ which would largely seem to be empty mental exercises not conducive to increased insight in the geomantic system. However, there is one important, and unexpected, implication of the mathematical properties of the generation of the complete geomantic theme: *although all configurations have an equal chance of occurring among the first four elements (the mothers), the computational rules in combination with the rotational symmetry of the tetragrams are such that out of the sixteen geomantic figures (16 possible ‘mothers’), only eight can be produced as judges*. This means that oracular pronouncements produced with classic (= ‘complete theme’) geomancy are not truly equiprobable, and that in fact pessimistic outcomes are less frequent. This effect does not occur with the simpler versions (without derived geomantic theme), nor with the attenuated African versions.

In the simpler form, the fifteenth element, the ‘judge’, decides the entire outcome of the oracle; the specific configuration it displays is interpreted primarily by reference to a catalogue listing the specific oracular meanings of the sixteen named configurations. Here the literal semantic contents of the name (in Arabic, Greek or Latin) of the configuration usually serves as a point of departure for the interpretation. The interpretation may be enriched by taking into account the planetary and zodiacal associations of each of the sixteen names. A provisional summary is presented in Table 1.

In the more complex versions like al-Zanātī’s²² the first twelve of these sixteen configurations are identified with the twelve astrological houses and interpreted accordingly, while taking into account the usual correspondences and conventional meanings of the twelve houses, the planets and the zodiacal signs.

A sample from the beginning of al-Zanātī’s highly influential *Treatise on the principles of sand-science* may convey the general tone and the highly elliptical style of this author:

²¹ Jaulin, R., 1957, 'Essai d'analyse formelle d'un procédé géomantique', *Bulletin IFAN*, xix, 1-2, série B: 43-71; Jaulin, R., 1966, *La géomancie: Analyse formelle*, Cahiers de l'Homme, Ethnologie–Géographie–Linguistique, N.S., iv, Paris: Mouton; Jaulin, R., 1968, 'Sur la géomancie', in: Caquot, A., & M. Leibovici, eds., 1968, *La divination*, tome second, Paris, Presses Universitaires de France, pp 473-552.

²² al-Zanātī, Muḥammad, 1320 H./1923 CE, *al-Fasl fī usūl ‘ilm al-raml*, Cairo; al-Zanātī, Muḥammad, 1341 H./1902 CE, *al-Aqwal al-mardīyya fī ma‘rifat al-a‘mal al-ramlīyya*, Cairo; both in the University of Leiden library.

‘In the name of ALLAH,
the Compassionate, the Merciful
and peace be upon Our Lord Muḥammad,
the most exalted of all prophets,
and upon his kith and kin and all his companions

Now this book is the treatise on the principles of sand-science according to the bases of the Idrīsiān facts. Shaykh Zanāṭī – may the forgiveness of Allah be upon him²³ – has said that every science has a beginning and every work an introduction and we want to introduce the bases of sand-science which give satisfaction to beginners and foundations to who is already advanced in this science. We begin in the name and with the help of Allah, saying that sand-science goes back to that prophet of Allah by the name of Idrīs, may the forgiveness of Allah be upon him and upon our prophet Muḥammad and all other prophets before him. Idrīs has seen facts in his dreams and the scientists and wise people have found that all the creatures consist of four elements: Fire, Air, Water, Earth²⁴ and then four results heat, cold, moist, dry, and four directions east, west, south, north. And they have looked at people’s activities finding that there are four measures: weighing, counting, planting, and farming. And the name of Allah is four letters and ‘Isa is four letters and Muḥammad is four letters²⁵ and each house²⁶ must have four corners. Then everything is stabilised on four corners, four figures, four extremities [of the human body], four elements. They have built configurations up from them designating them ‘Mothers of the houses’. The first house is the future and it is enunciative, because it is the first you see when the mystery of the world is explained in terms of reality and practice. That is why they call it the future of the client,²⁷ moreover it is the soul’s house, the ‘self of men’. Then they have formed a second house called the house of capital. It informs you of the conditions of capital and money. And they have formed a third house called house of movements because when a person gets capital he can move and act... [etc. the fourth house is introduced, as well as the formation of up to sixteen houses – i.e. configurations – basically by regrouping of elements in the first four configurations, along the lines set out in my diagram 1, above] ...and they have formed a new configuration called ‘sand ruler’ and it is the ‘friendship balance’ and sand too, and it can never be a person. It is the fifteenth house. Then they have formed from the first and the fifteenth house a new configuration called ‘the end result’. It is the sixteenth. From that house you get sand from sand. When you see happy configurations in the sand you pronounce good news and success. When you see distressful or tragic configurations in the sand you pronounce bad news from whatever is the object of the consultation. When you see in the sand a mixed configuration you pronounce middle results ‘difficult in the

23 I.e. ‘the late’; Zanāṭī is here implied not to have written this book himself.

24 Arabic: *trobiyya*, an adjective referring to both ‘earth’ and ‘dust’, and hence coming close to ‘sand’ (Arabic: *raml*) on which the sance-science (*‘ilm al-raml*) revolves.

25 Sc.: ‘four letters in Arabic’. Muḥammad is written in four letters but the central ‘m’ has a duplication sign. ‘Isa (the initial *‘ain* also counts as a letter) is the Arabic name for the founder of Christianity, called Jesus by Christians.

26 Arabic: *bait*, meaning ‘human dwelling’, but also the established astrological technical term ‘house’ as a section (usually 1/12) of the zodiak specific to a particular person, place, and moment of time.

27 In the present translation, this word designates the one who consults the oracle.

beginning and easy at the end'. The happy configurations are five in number: $\begin{smallmatrix} \text{---} \\ \text{---} \\ \text{---} \end{smallmatrix}$ $\begin{smallmatrix} \text{---} \\ \text{---} \\ \text{---} \end{smallmatrix}$. The strong configurations for happiness are three: $\begin{smallmatrix} \text{---} \\ \text{---} \\ \text{---} \end{smallmatrix}$ $\begin{smallmatrix} \text{---} \\ \text{---} \\ \text{---} \end{smallmatrix}$ $\begin{smallmatrix} \text{---} \\ \text{---} \\ \text{---} \end{smallmatrix}$. The distressful negative in the sand are four: $\begin{smallmatrix} \text{---} \\ \text{---} \\ \text{---} \end{smallmatrix}$ $\begin{smallmatrix} \text{---} \\ \text{---} \\ \text{---} \end{smallmatrix}$ $\begin{smallmatrix} \text{---} \\ \text{---} \\ \text{---} \end{smallmatrix}$ $\begin{smallmatrix} \text{---} \\ \text{---} \\ \text{---} \end{smallmatrix}$.²⁸ The mixed configurations are five: $\begin{smallmatrix} \text{---} \\ \text{---} \\ \text{---} \end{smallmatrix}$ $\begin{smallmatrix} \text{---} \\ \text{---} \\ \text{---} \end{smallmatrix}$ etc.²⁹



Figure 4. Opening page of a popular Cairene edition of al-Zanātī, 1320 H./1923 CE.

²⁸ Repetition in the original.

²⁹ Badwy & van Binsbergen, *o.c.*

The planetary correspondences attributed to the zodiacal signs in subsequent sections of Zanātī's argument, as well as those attributed by other Arabic geomantic authors, are fairly standard considering the astrological tradition as codified by Ptolemy and Manilius in Imperial Antiquity, but the geomantic zodiacal correspondences often so deviate from this tradition that – given the present, well developed, state of our knowledge of the history of astrology in the Babylonian, Greek, Hellenistic, Hebrew, Arabic, Indian and Chinese contexts – they may help to situate the emergence of geomancy in time and place.

Ibn Khaldun's *Muqaddima*,³⁰ written by the end of the 13th century CE, explains the emergence of geomancy as resulting from a situation when would-be astrologers, typically poor, under-educated and urban, had no longer access to the astronomical tables and the complex techniques necessary for calculating a proper professional horoscope, and therefore replaced the empirical input (the actual, astronomically absolutely correct, position – in most cases simplified to a mere longitude – of the heavenly bodies at the particular moment which the horoscope seeks to interpret) by the mock-astrology of geomancy: a series of chance outcomes of simple manipulations with a stick on sand, with pebbles, beans, shells or with pen on paper, but subsequently interpreted in the light of a conventionalised or better ossified astrological idiom deprived from all spatio-temporally specific astronomical input. This status as a 'poor man's astrology' is confirmed by the fact that only the first four astrological houses receive an independent input, while the contents of the eight others is merely secondarily derived – which is comparable with a hypothetical situation in which some astrologer would only calculate the planets and zodiacal signs for the first four houses, and ignore the others, or (and this as been widely attested practice astrological since Antiquity)³¹ as if the horoscope would be based not on the

³⁰ Ibn Khaldoun, 1863-68, *Prolégomènes historiques*, traduits en français et commentés par [W.] M[acGuckin baron] de Slane, Paris: Imprimerie Impériale; photomechanical reprint, Paris 1934-38; Ibn Khaldûn, 1980, *The Muqaddimah: An introduction to history*, translated from the Arabic by F. Rosenthal, 3 vols, second printing of second edition, Princeton (N.J.): Princeton University Press, 1980; first edition Bollingen Series XLIII, New York: Bollingen Foundation Inc, 1958.

³¹ A full discussion falls outside our present scope; cf. van Binsbergen, W.M.J., in preparation (b), *Four tablets: A Southern African divination system in its transregional and historical context*. Let me merely mention as an example the once enigmatic Tabula Bianchini, which was effectively and lucidly interpreted in the following book: Boll, F.J., C. Bezold & W. Gundel, 1966, *Stern Glaube und Sternedeutung: Die Geschichte und das Wesen der Astrologie: 5. durchgesehene Auflage mit einem bibliographischen Anhang von H.G. Gundel*, Darmstadt: Wissenschaftliche Buchgesellschaft; first published Leipzig 1926: Teubner Verlag, p. 60, 191f.

painstaking calculation of the heavens at the time of birth, but by the mere casting of dice.³²

The distribution area of geomancy encompasses the entire Islamic world, most of Africa (including large non-Islamic sections), most of Europe, and large sections of a para-Islamic periphery in Asia and the Indian Ocean region. Moreover, with the Atlantic slave trade the geomancy-based divination systems of West Africa crossed into the Caribbean, Central and South America.³³ Geomancy must be one of the most impressive examples of ‘globalisation’ *avant la lettre*, i.e. before the modern means of transport and communication made us take for granted the instant world-wide diffusion of material and intellectual products. Although often practised by illiterate diviners and their clients (e.g. in West and Southern Africa and on Madagascar), and partly rooted in simple chance procedures (like hitting the earth, throwing tablets, beans, shells etc.) which do not require recourse to writing, the system in its subsequent processing and interpretation of the chance outcomes has unmistakably a literate basis. Hence the most usual designation of the geomantic system of divination is *khatt al-raml*, i.e. ‘sand calligraphy’, with a definite reference to writing, literacy.

It is no accident that the prominent anthropologist Jack Goody concludes his introduction³⁴ to a seminal collection of papers on *Literacy in traditional societies* with an extensive reference to geomancy:

³² In fact, geomantic dice are being used in India and Iran: Culin, S., 1890-91, ‘East Indian Fortune-telling with dice’, *Proceedings of the Numismatic and Anthropological Society of Philadelphia*, 1890-91: 65. Of course, the Southern African *Hakata* four-tablet oracle could be regarded as consisting of geomantic dice, but it is difficult to regard them as modifications of some South or South West Asian geomantic dice: the latter are cubic and four are pivoted together on a rod, so that each can independently show any one of its four available faces; the *Hakata* are unstrung when in use, and each can show only two faces. There are however many mixed sets of *Hakata* dice which include four-sided dice made out of quadruped’s hoofs or astragali.

³³ Bascom, W., 1980, *Sixteen cowries: Yoruba divination from Africa to the New World*, Bloomington: Indiana University Press; Bastide, R., 1968, ‘La divination chez les Afro-Américains’, in: Caquot, A., & M. Leibovici, red., 1968, *La divination*, tome second, Paris, Presses Universitaires de France, pp. 393-428, espec. 423f.

³⁴ Goody, J., 1968, ‘Introduction’, in: Goody, J., ed., *Literacy in traditional societies*, Cambridge: Cambridge University Press, pp. 1-26.

no.	fig.	Arabic name	Latin name	standard interpretation	planet	zodiacal sign	value
1	☰ ⋮	al-nusrat al-dakhil inward victory	fortuna major	The most fortuitous geomantic figure: happiness, success in all domains; fulfilment of all desires; fortune, money	☉	♌ (☰)	+
2	⋮ ☰	al-nusrat al-kharij outward victory	fortuna minor	Medium happiness, a moderate success. Favourable to moderate ambitions, but not to great risks, nor to excessive desires. The culmination point of a period of success or happiness is past, but the period itself continues	☉	♌ (♅)	+
3	⋮ ⋮ ⋮	tariq road	via	Road, route, waterway, journey, the traveller, to depart, to roam, to visit, means of transport, life, guide	☾	♌ (♌)	0
4	☰ ☰ ☰	djama'a meeting	populus	People, crowd, populace, large collections of people, big cities, democracy, to collect, to concentrate, to bring together without order	☾	♌ (♌)	0
5	⋮ ⋮ ⋮	idjima'a assembly, meeting, communion	conjunctio	Conjunction, union, encounter, unity regained. Friendship and love. Grouping, assembly, meeting. Communion, community. To participate, to sympathise, to converge.	♀	♌ / ♍	0
6	☰ ⋮ ⋮	bayad whiteness	albus	White, whiteness; purity; cold. Ice, snow. The calm of death. To sleep; to slow down. Peace, light, spiritual elevation	♀	♌ / ♍ (♌)	0
7	⋮ ⋮ ⋮	naky al-khad gracious cheeks	puella	Girl, woman, female sex. Female animals. Virginity, chastity. Gentleness and grace.	♀	♌ / ♍ (♌)	+
8	⋮ ⋮ ⋮	al-kabd al-kharij outward capture	amissio	Loss; failure to obtain. Lack of success, to be shipwrecked, to decline. To go away, to end. To fall in ruin, to ruin oneself.	♀	♌ / ♍ (♌, ♍)	-
9	⋮ ⋮ ⋮	djau dala/ kausajil/ farkh downy/with scarce beard/chick/joy	puer	Boy, man, young man, the male sex. Solidity and firmness; power.	♂	♌ / ♍ (♌)	+
10	⋮ ☰ ☰	hamrah edness	rubeus	Red, redness. Excitement, stimulus; force, violence. To desire, to take, to capture, to kill. Blood, fire, war.	♂	♌ / ♍ (♌)	-
11	⋮ ⋮ ⋮	al-kabd al-dakhil inward capture	acquisitio	To acquire, to possess, to take home. To take, to capture, to steal. To gain, to carry the prize, to be admitted. To benefit; to pass to a higher grade.	♃	♌ / ♍ (♌)	+
12	⋮ ☰ ☰	al-hayyan/ al-ahyan beard/ (propitious) times	laetitia	Joy, happiness, health, light, success, victory, advantages of all kinds. Agreement	♃	♌ / ♍ (♌)	+
13	⋮ ☰ ☰	'uklah closed circle, link	carcer	Prison, to be imprisoned (literally and figuratively). Diabolical possession, magic. Egoism, solitary confinement, pregnant woman. To enclose, to conserve, to protect, to attach.	♃	♌ / ♍ (♌)	-
14	☰ ⋮ ⋮	ankis reversed	tristitia	Distress, unhappiness, pain and illness. Shadows and obscurity. Defeat; disadvantages of all kinds. Disagreement, difficulties, imitation. Sorrow; mourning.	♃	♌ / ♍ (♌)	-
15	⋮ ⋮ ⋮	rayat farah/ al-'ataba al-dakhil flag of joy/inward threshold	caput draconis	Internalisation, introversion, the inside world. Mysticism, meditation. Development of the faculties of the soul. Philosophical deepening of the world.	♃	no agreement	+
16	⋮ ⋮ ⋮	al-'ataba al-kharij outward threshold	cauda draconis	Externalisation, extroversion, the outside world. Action, development of the faculties of the body, the active and intensive life. Illusion, fraud and deception.	♃	no agreement	-

Table 1. The sixteen geomantic figures, their names in Arabic and Latin, their meaning, planetary and zodiacal associations, and their overall benefic or malefic nature.³⁵

³⁵ Source: le Scouézec, 'Géomancie', *o.c.*; al-Zanāī, *o.c.*

‘The significance of writing varies widely among the societies discussed [in this edited collection of papers]. But even among pastoral peoples like the Somali, even in societies long cut off from the mainstream of literate cultures, like the Merina of Madagascar, even in religiously very mixed areas, like the western Sudan, the book is an important feature of social life, because it provides a reference point for individual and social behaviour, especially that kind of verbal behaviour we think of specifically as ‘symbolic’, magico-religious, mythopoeic or cosmological – though our given categories do us a great disservice here. So that when Hébert³⁶ offers us a ‘structural analysis’ of divinatory systems in Madagascar and in Africa (it is even less easy to perceive the force of ‘structural’ here than in most usages of the term), he is pointing to certain features of a system of divination, crystallized in writing, that is carried out from Kano to Calcutta, from Tananarive to Samarkand, a ‘symbolic’ system that has little or no intrinsic connection with the myths, beliefs and categories of the peoples among whom they [sic] are found. Even supposing that all the societies in question were equally committed to ‘orthodox’ Islam and acknowledged the Islamic elements in the system of divination (such as the use of the names of caliphs and archangels and the sacred names of God), many elements in the system (e.g. the 9-cell squares) have quite a different derivation, a much wider distribution, which makes them as much (and as little) an intrinsic part of specifically Gonja or Hausa symbolic structures as the mathematical theory of groups is of specifically Japanese or Belgian thought.’³⁷ (Goody 1968: 25f)

Not only is geomancy thus an early example of globalisation, it is also a powerful reminder, especially for anthropologists and then again especially for the Africanists among them, that even conspicuous and central intellectual and symbolic products are not necessarily contained within the idiosyncratic linguistic and cosmological horizons of a localised culture, but may reflect interconnections and transmissions across vast expanses of space and time, which may render them totally incapable of explanation by reference to a local society and culture. Implied are fundamental questions of cultural meaning: in so far as the outcomes of geomantic divination have meaning, as they clearly have for farmer Hinrich and typist Jane, such meaning, although mediated

³⁶ The reference is to: Hébert, J.C., 1961, ‘Analyse structurale des géomancies comoriennes, malgaches et africaines’, *Journal de la Société des Africanistes*, 31, 2: 115-208; and thus primarily to geomancy. Yet Goody’s argument here does not entirely limit itself to this form of divination, as is shown by his references to ‘the names of caliphs and archangels and the sacred names of God’, which are absent at least from the versions of geomancy known to me, as are ‘the 9-cell [] squares’. Obviously, the well-known magical squares are meant, that feature in the magical sciences from Graeco-Roman Antiquity, Islam, South and East Asia, and whose distinctive feature is that the sum of the numbers in all cells in one row (whether horizontally, vertically or diagonally) is identical. Goody’s ‘9-cell square’ would have rows and columns of three cells each. However, although common and wide-spread in its simplicity, this is by no means the standard shape of such squares, since they exist for all numbers from 1 (or, more properly, 2) to 7, each number specific to a particular planet (including the great luminaries Sun and Moon).

³⁷ Goody, J., o.c., p. 25f.

through local concepts of e.g. illness and sorcery, can ultimately derive from and be expressed in, other forms than just the local symbolic system, and may partly refer to conditions and cosmological connections way beyond the reach of the actors using the geomantic system in a particular spatio-temporal setting. Is it this very remoteness – the actors’ awareness of drawing from a fount that is conspicuously not local and that therefore has no resonances in their everyday experience – which adds credibility and legitimation to the system? Is it, in other words, the boundary-crossing nature of the system, its absence of recognisable cultural specificity or perhaps its having absorbed influences from a great many diverse intellectual sources, which explains its power, rather than its power explaining its boundary crossing? What is, among rival divination systems at the local scene (there is nearly always a diversity in this field) the unmistakable competitive power of geomancy?

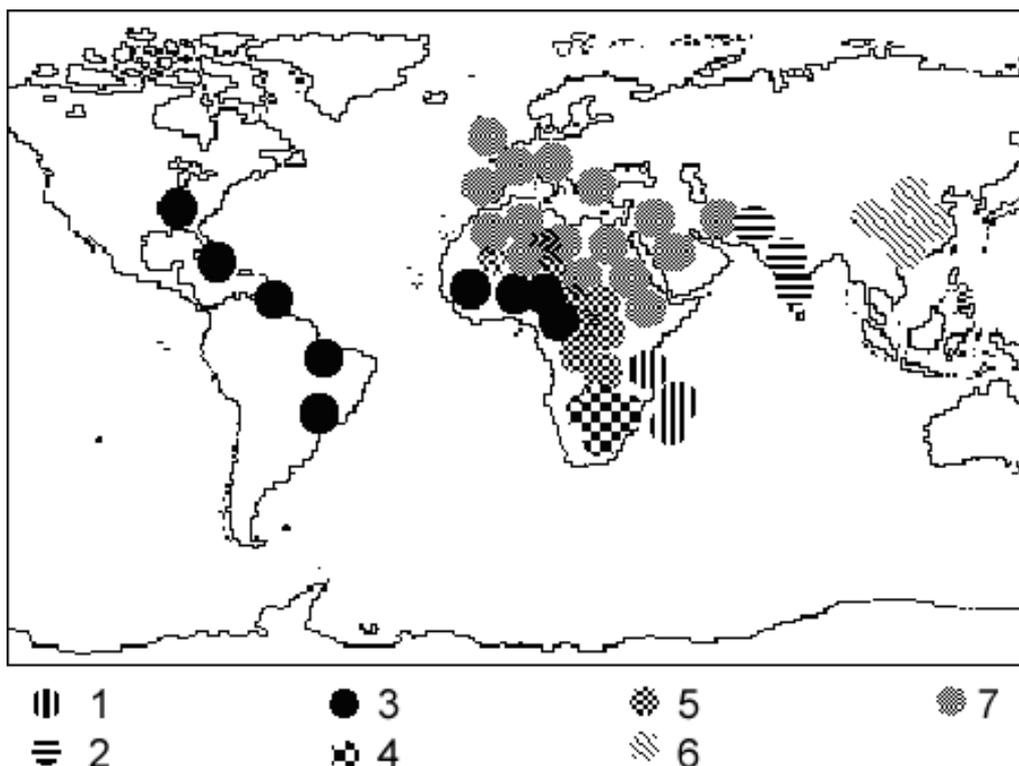


Figure 2. Distribution of the geomantic family of divination systems.³⁸

1. Sikidy of Madagascar and Comoro Islands
2. Ramala-shastra of South Asia
3. Ifa and ‘Sixteen Cowries’ of West Africa and the New World
4. Southern African four-tablet system
5. simple geomancies of the African interior

³⁸ For a fuller discussion cf. van Binsbergen in: ‘Rethinking’, o.c.

6. *I Ching* system of China
7. *khaff al-raml* and European derivatives since the Middle Ages

These are momentous questions, and they are being confronted in the course of my ongoing research on geomancy. However, in the present paper my focus shall be not on transmission, reception and transformation, but on origin. *Where did the incredibly successful geomantic family of divination systems come from?*

In order to answer this question, I shall first summarise the state of the art in this field (section 3); then discuss some of the methodological problems involved and suggest how an anthropologically-inspired typological approach may help to overcome them – but after demonstrating how anthropology can also be a poor guide in approaching these problems (section 4); and finally I shall apply that approach to one of the central features of the geomantic system: the bafflingly obscure nomenclature of its sixteen configurations. This will highlight the tremendous contribution which classical astrology has made to the geomantic system; I shall have to assume in my reader a basic knowledge of astrology, some key notions of which are brought together in the Appendix.

3. THE HISTORY OF GEOMANCY AS A PROBLEM

If the history of science can be said³⁹ to be Clio's step-child (and by implication: neglected) this applies a fortiori to the history of geomancy, which yet for centuries constituted one of the most prominent occult sciences.

In this case the situation is particularly marked since all traces of the genesis of Islamic geomancy appear to have been blotted out. It appears to have sallied forth like Athena, a young adult clad in full armour (and a cleromantic deity, at that!), from her father's forehead.

When in the second half of the nineteenth century scholarly translations became available of major Arabic works such as Ibn Khaldun's *Muqaddima* and Shaykh Muḥammad ibn Umar al-Tunisi's *Voyage au Darfour*,⁴⁰ and when also the

³⁹ Dijksterhuis, E.J., 1990, *Clio's stiefkind*, ed. K. van Berkel, Amsterdam: Bert Bakker.

⁴⁰ Mohammed ibn Omar el Tounisi, 1845, *Voyage au Darfour par le cheykh Mohamed ebn-Omar a-Tounsy ou l'alignement de l'esprit par le voyage au Soudan et parmi les Arabes du centre de*

systematic study of African societies made a beginning,⁴¹ the result was a – regrettably ephemeral – interest in the distribution and history of the geomantic family of divination systems. Within decades, offshoots of the family were described for the medieval classical Arabic culture, West Africa, East Africa and throughout the Indian Ocean, Byzantium, medieval Hebrew literature; also, classic geomantic texts from the occult tradition of Europe since the Middle Ages became available outside the narrowest circle of philological specialists and esoteric dilettante, and began to appear in a new light. On the strength of his phenomenal knowledge of manuscript sources (by then still almost entirely unpublished and scattered) Steinschneider devoted a perceptive early study to the Malagasy ‘*sikidy*’ or geomantic figures,⁴² and established their relationship to the main geomantic family; in his other works, on medieval translations between Hebrew, Arabic, Latin and Greek, and on the Indian *naxatra* or lunar mansions,⁴³ he repeatedly came back to geomancy as a genre of intellectual production. Another major researcher in this field was that great historian of science Paul Tannery, who already in 1897⁴⁴ made a fundamental statement concerning the origin of the term ‘geomancy’, identifying it as the literal

l’Afrique, publié en arabe par le Dr Nicolas Perron, Paris: Duprat; Mohammed ibn Omar el Tounisi, 1851, *Voyage au Darfour par le cheykh Mohamed ebn-Omar a-Tounsy, ou l’alignement de l’esprit par le voyage au Soudan et parmi les Arabes du centre de l’Afrique, traduit de l’arabe par A. Perron*, ed. M. Jomard, Paris: Duprat.

⁴¹ For the study of geomancy in Africa, the work of Richard Burton was important: virtually all his books contain a passage or footnote devoted to this theme: Burton, R.F., 1856 [check 1858], *First footsteps in East Africa*, London, p. 55f; Burton, R.F., 1893, *A mission to Gelele, King of Dahomey*, i - ii, London: Tylston & Edwards, Memorial edition, first published in 1864, i 330f; Burton, R.F., 1893, *The book of Thousand nights and a night*, London, p. 55 n. 1;

⁴² Steinschneider, M., 1877, ‘Die Skidy oder check geomantischen Figuren’, *Zeitschrift der deutschen Morgenländischen Gesellschaft*: 762-765.; of course he made the point that the designation s[i]kidy is from the Arabic *shikl*, figure; also cf. Ferrand, G., 1891-1902, *Les musulmans à Madagascar et aux Iles Comores*, 3 vols (1891, 1893, 1902), Paris: Ernest Leroux, i, 73f.

⁴³ Steinschneider, M., 1956, *Die europäischen Übersetzungen aus dem Arabischen bis Mitte des 17. Jahrhunderts*, rééd. à Graz: Akademische Druck- und Verlagsanstalt; Steinschneider, M., 1864, ‘Über die Mondstationen (Naxatra), und das Buch Arcandam’, *Zeitschrift der Deutschen Morgenländischen Gesellschaft*, xviii: 118-206. Also cf. Steinschneider, M., 1862, *Zur pseudoepigraphischen Literatur insbesondere der geheime Wissenschaften des Mittelalters aus hebräischen und arabischen Quellen*, Berlin; Steinschneider, M., 1893, *Die hebräischen Übersetzungen des Mittelalters*, Berlin, Preisschrift der Pariser Académie des Inscriptions, Paris: Académie des Inscriptions – both of which I have not yet seen.

⁴⁴ Tannery, P., 1897, ‘[short untitled note on geomancy]’, *Comptes Rendues de l’Académie des Insc.* xxv, 1897, p. 519 [check 529]; reprinted in Tannery, P., 1922, ‘La géomancie (Hugo Sanctelliensis)’ [Extrait des Comptes rendus de l’Académie des Inscriptions et des Belles-Lettres, 1897, xxv: 529], in: Heiberg, J.-L., ed., 1922, *Paul Tannery: Mémoires scientifiques*, vol. v: Sciences exactes au Moyen Age, Toulouse: Privat/ Paris: Gauthier-Villars, p. 356.

translation, by the pioneer medieval translator Hugo Sanctalliensis, of the Arabic *‘ilm al-raml*, literally, ‘sand science’.

The point is of some interest, since Hugo by this designation implicitly associated the newly imported divinatory science with the concept of *geomantia*, divination by the earth, which in a world thought to consist of four elements including earth had to exist if only for systematic reasons; but whereas the term itself is attested⁴⁵ in Antiquity there is not the slightest information concerning the procedures constituting this geomancy. In fact Hugo’s was an apt misnomer, since the earth or sand only provides one of the many possible forms the *random generator* necessary for the system can be produced, and once the numbers of the relevant catalogue entries have been produced by chance, the catalogue itself is interpreted in a framework which is not so much an *‘astrologia terrestris’*,⁴⁶ but simplified astrology tout court, as we have seen above for al-Zanātī.

⁴⁵ The word ‘geomantia’ is traditionally associated with the Roman writer Varro (116-27? BCE), cf. Cardauns, B., ed., 1976, *M. Terentius Varro, Antiquitates rerum divinarum*, Teil I Die Fragmente, Mainz: Akademie der Wissenschaften und der Literatur/ Wiesbaden: Franz Steiner Verlag. The standard reference to the – otherwise undefined – ‘Varronic geomancy’ in the early middle ages is in Isidorus’ encyclopaedia: Lindsay, W.M., ed., 1957, *Isidori Hispalensis Episcopi Etymologiarum sive Originum Libri XX*, Oxford: Clarendon; also Migne, J.P., ed., [year] *Patrologia latina*, LXXXII, cols. 73-728 (Isidorus hispalensis). There is not the slightest evidence that Varro had sophisticated and formalised randomising and computational techniques in mind, as would have foreshadowed the Islamic geomancy (*‘ilm al-raml*). Rather, he seems to have dealt with simple and unprocessed natural phenomena such as cracks in the desiccating earth, the fissures created by earth quakes, etc. If so, his geomancy would be another instance of ‘divination by natural, randomly formed cracks’, of which the most famous example comes from the eastern end of Eurasia: reading the natural cracks that appeared in sheep’s scapulars after heating them over a fire was the standard Chinese divination technique during the Shang dynasty, 2nd millennium BCE. Cf. Keighley, D.N., 1978, *Sources of Shang history: Oracle bone inscriptions of Bronze Age China*, University of California Press, Berkeley/Los Angeles/London. Although Rome was in distant, indirect contact with China in Late Republican and especially Imperial times, Chinese scapulomancy had long become obsolete by that time; if there is a historical connection (which given the remarkable uniformity of divination systems throughout Eurasia is quite likely) it would go back to a common cultural fond dating to the Neolithic or even the Upper Palaeolithic, probably in Western Asia. The same fond may be encountered, in fragmented and eroded form, in the well-known genres of omnia literature of, especially, the Ancient Near East and South Asia.

⁴⁶ A designation used by the Arabic author ‘Ali, e.g.: *Vollkommene geomantia* etc., 1715 -16, *Vollkommene geomantia, deren ersten Theil die aufs neue revidierte...Punctir-Kunst in sich begreift... Der andere Theil aber des berühmten Arabers Abu-Hali-ben-Omar niemals vorhin gedruckte Astrologia Terrestris oder Irrdische Stern-Kunde*, Freystadt; ‘Ali was popularised by de Cattan’s or Catani’s version, also in German editions cf. Steinschneider 1956 o.c., and as: de Cattan, C., 1572 *La géomancie du Seigneur Christophe Cattan, Gentilhomme genevois: Livre non moins plaisant et récréatif, que d’ingénieuse invention, pour sçavoir toutes choses présentes, passées et advenir, avec la Roue de Pythagoras...*, Paris: Jean Corrozet; also cf. Skinner, S., 1980, *Terrestrial astrology: Divination by geomancy*, London: Routledge & Kegan Paul.

Tannery continued to work on the topic, and after his death a section of more than a hundred pages on the topic was published in volume IV of his posthumous *Mémoires scientifiques*, including a contribution by Carra de Vaux on ‘la géomancie chez les Arabes’.⁴⁷

Tannery concentrated on the Byzantine geomancies. Thus al-Zanātī’s geomantic treatise (written by an author about whom no biographical information whatsoever – not even a patronymic – is known, but who by his name could be considered to have begun, or ended, his life as a member⁴⁸ of the maghrebine tribe of the Zanāta) was first introduced into the Byzantine milieu when the monk Arsenius⁴⁹ translated it in 1266 into Greek verse, from the Persian. This was however by far not the earliest geomantic text to reach the West, as the 11th century CE translations by Hugo Sanctalliensis and others demonstrate.⁵⁰ Tannery appreciated that the word *rabolion* does not exist in classical Greek and can only be understood as a Greek mere phonetic rendering of an untranslated Arabic (*raml*, *ramlīyya*), with the *-ml-* assimilated to *-b-* and the foreign root embellished with a Greek morphological ending *-on*. Like this pivotal word, also Hugo’s translation in general became a model for the assumption that, as far as geomancy was concerned, there could only have been a one-way traffic from Arabic to Byzantine and Latin sources.

Neither Tannery, nor even his Arabist co-worker Carra de Vaux, managed to proceed beyond the presence of geomancy in medieval classical Arabic culture.

⁴⁷ Tannery, P., 1920, ‘Le Rabolion – Traités de géomancie arabes, grecs et latins’, in: Heiberg, J.-L., ed., *Mémoires scientifiques [P. Tannery]*, vol. iv: *Sciences exactes chez les Byzantins (1884-1919)*, Toulouse: Privat/Paris: Gauthier-Villars, pp. 295-411; Carra de Vaux, Baron, 1920, ‘La géomancie chez les Arabes’, in: Heiberg, J.-L., ed., 1920, *Mémoires scientifiques [P. Tannery]*, vol. iv: *Sciences exactes chez les Byzantins (1884-1919)*, Toulouse: Privat/Paris: Gauthier-Villars, pp. 299-317.

⁴⁸ In view of the very unusual absence of the patronymic, one might venture to suggest that he was only an adoptive member, from unknown origin.

⁴⁹ I have not been able to identify a text containing Arsenius’ translation. Steinschneider 1956, p. 7, in his typical stenography, refers to a manuscript source which I would not know how to locate:

‘Arsenius, ein Mönch, übs (126) die arab. Geomantie von al-Zanātī aus dem Persischen (daher Z. als ‘Perser’ bezeichnet in griechischen Versen, Probe aus ms Wien in Lambec, Comm. ed. Kollar p. 554 n. 140; Nicoll, Catal. p. 327; vgl. HÜb 855)’.

The latter reference is to Steinschneider 1893 o.c. Note the designation “‘Persian’” for al-Zanātī, which might also be explained in a more direct fashion (that he had actual Persian connections; cf. his appeal to that other authority with eastern connotation, Ṭumṭum al-Hindi) than the use of Persian as an intermediary in translation.

⁵⁰ A rather full if cumbersome catalogue of such geomantic translations can be extracted from Steinschneider 1906; also cf. Carmody, F.J., 1956, *Arabic astronomical and astrological sciences in Latin translation: A critical bibliography*, Cambridge & Los Angeles, which I have not yet seen.

The system's inner workings and variations were described in moderate detail, but the historical questions asked concerned diffusion of the geomantic corpus once already established, not the origin itself of that corpus. Perhaps one considered the problem already solved; for, as Steinschneider⁵¹ had already claimed, it was clear that *‘ilm al-raml* could only have come ‘from the desert’ – for where else could one possibly find the few handfuls of sand necessary for this divinatory practice...? But even if we were to take the message implied in the name *‘ilm al-raml* literally, and situate its origin in a sandy environment, then it is still true that there are plenty of different deserts (including that of Syria in West Asia, the Kalahari and Sahara in Africa, and the Gobi and the Tarim deserts in East Asia) within the distribution area of the geomantic family of divination systems, which after all encompasses the better part of the Old World.

Since, there have – again, to my knowledge – only been very few serious scholarly contributions to the earliest history of geomancy.⁵²

A. Delatte and E. Delatte, Belgian classicists and historians of science, must have realised that sand was not all that rare in Classical, i.e. Hellenic and Hellenistic Antiquity, even outside deserts. As is generally known, sand was the standard medium in which to work out mathematical problems. Plutarch tells us:

‘Just so at Syracuse, it is said, after Plato had arrived [ca. 387 BCE], and an insane ardour for philosophy laid hold on Dionysius, the king's palace was filled with dust by reason of the multitude of men that were drawing their geometrical diagrams in it...’⁵³

⁵¹ 1877 o.c.

⁵² A popular New Age type of account, without references and largely absurd, is: Pennick, N., 1992, ‘Ancient secrets of the earth: The oracle of geomancy’, in: Matthews, J., ed., *The world atlas of divination: The systems – where they originate – how they work*, Boston/Toronto/London: Bulfinch Press/Little, Brown & Comp., pp. 195-201. Pennick includes a map (p. 196) which postulates a possible origin in Greece, subsequent spread to Egypt 8th century CE, Sudanic belt 10th century, which produces Ifa and ‘Sixteen Cowries’, the dominant West African versions of geomancy; from Egypt 9th century alleged spread to Madagascar through Ethiopia etc., and along the same route to India; 12th century western Europe from North Africa via Spain; and finally, 13th century as *rabolion* from the Arabic world back to the Balkan and Eastern Europe in general. Of course, this misses the essential question as to the origin of Arabic geomancy. It fails to realise that Hellenistic science constitutes an absolutely essential link between Hellenic types of divination and Arabic ones. Now Hellenistic science had its centre, never in Greece but in Alexandria – so that whatever Hellenic elements towards a Hellenistic proto-geomancy must have crossed the Mediterranean not in 700 CE but nearly a millennium earlier. Moreover, against all evidence from astrology – I shall come back to this point – Pennick's map links Hellenistic and Indian science by an unnecessary detour via Ethiopia and Madagascar (although some nautical, coastal Indian Ocean connection is likely, as we know since the rediscovery of the *Periplus*), and sees the role of North-west Africa in the development of geomancy as merely passive.

There is also the vignette – a widely circulating and clichéd iconographic theme – of Archimedes working on a mathematical problem in the dust during the sack of Syracuse (212 BCE):

‘ “What an ardour for study, think you, possessed Archimedes, who was so absorbed in a diagram he was drawing in the dust that he was unaware even of the capture of his native city!” ’⁵⁴

Some time earlier Archimedes had found in the grain of sand his inspiration for that amazing mathematical treatise on finity and infinity, *Psammitēs arithmos*, *Sand Reckoning*.⁵⁵ What is important here is not whether these admiring accounts written several centuries after the event are biographically correct, but the fact that they testify to the common use of dust, soil or sand for scholarly purposes in the Hellenic and Hellenistic period. Not unlikely, sand was also not only mathematical drafts but also for scribbles of a more occult nature.⁵⁶

In A. Delatte’s *Anecdota Atheniensia*, vol. i⁵⁷ and – from both Delattes – in their comment on yet another Byzantine geomancy,⁵⁸ connections were traced

⁵³ E.g. Plutarch, *Quomodo adulator ab amico internoscatur*, 52, D/7; in: Plutarch’s *Moralia*: In sixteen volumes, vol. I, F.C. Babbitt, tr., Loeb Classical Library, no. 197, Cambridge (Mass.): Harvard University Press/London: Heinemann, p. 283.

⁵⁴ Cicero, 1971, *De finibus*, tr. H. Rackham, Loeb Classical Library no. 40, London/Cambridge(Mass.): Heinemann/Harvard University Press, p. 451: book V 50 (xix). The famous adage ‘Noli turbare circulos meos’ [‘please, do not disturb my circles’], attributed to Archimedes on this occasion, can only be found in Valerius Maximus, *Factorum et dictorum memorabilium libri*, 8, 7, and is probably merely legendary.

⁵⁵ Cf. Hulstsch, 1965, ‘Archimedes’, in: *Paulys Realencyclopädie der classische Altertums-wissenschaft*, ed. G. Wissowa, Stuttgart: Druckenmüller, 3. Halbband, repr. of the 1895 edition, col. 507-539, espec. 515f, 537.

⁵⁶ Cf. Jesus writing with his finger on the ground (‘*eis tēs gēs*’, using the same word ‘*gē*’ as is constitutive of the term ‘geomancy’), in the puzzling, little commented upon passage in John 8: 6-8, which is often discarded as corrupt, probably because, in ways unwelcome to confirmed Christians, it seems to confirm Celsus’ allegation that the founder of Christianity was, after all, a magician.

⁵⁷ Delatte, A., 1927, *Anecdota Atheniensia*, vol. i.: *Textes grecs inédits relatifs à l’histoire des religions*, Bibliothèque de la Faculté de Philosophie et de Lettres de l’Université de Liège, fasc. 36, Liège: Vailant & Carmanne/Paris: Champion.

⁵⁸ Delatte, A., & Delatte, E., 1936, ‘Un traité byzantin de géomancie – codex Parisinus 2419’, *Mélanges Franz Cumont, Annuaire de l’Institut de philologie et d’histoire orientales et slaves*, t. iv, Bruxelles, pp. 575-658. Incidentally, in the Byzantine context the word *laxeutērion* (stone mason’s chisel, often specified as Pythagoras’) is often used as a synonym for *rabolion*. I suppose that a particular graphic notation (cf. the hammer-like example in Tannery 1920) of the full, 16-figure geomantic theme in a wedge-shaped grid produced, in connection with the precise and sharp nature imputed to geomancy as a divinatory instrument, the association with a stone-worker’s tool; or was it

with clearly similar forms of Hellenic and Hellenistic divination based on lot-casting, numerology, onomancy, and the divinatory manipulation of beans, grains and wheat. These publications are welcome sources for divinatory systems as circulating in the Byzantine environment and they do exemplify some of the basic procedures also found in geomancy; we shall come back to them below. However, from an analytical and historical perspective it does not seem unfair to say that the correspondences pointed out by the Delattes are far too superficial, too general and too commonly known as standard features of Hellenic and Hellenistic occult sciences⁵⁹ than that they can simply account for the emergence of such a highly specific and elaborate system of divinatory procedures and concepts as geomancy is.

Even less of an analytical or systematic treatment is given to geomancy in T. Fahd's monumental study of *La divination arabe*.⁶⁰ Among the hundreds of divinatory methods discussed over hundreds of pages, *ilm al-raml* occupies only a minor place. Fahd's great command of primary sources both in Arabic and in other languages allows him to trace the earliest attestation⁶¹ of a very

the dust that is associated with both? Also cf. Desrousseaux, A.M., 1886, 'Sur quelques manuscrits d'Italie', in: *Mélanges d'archéologie et d'histoire de l'École française de Rome*, 6: 483-553, who presents similar Greek texts but apparently without yet realising their significance for the history of geomancy. No doubt modern scholarship has, since the Delattes, unearthed similar texts which have escaped my attention so far.

⁵⁹ Cf. Betz, H.D., 1986, *The Greek magical papyri in translation: Including the Demotic spells*, Chicago/London: University of Chicago Press; Bouché-Leclercq, A., 1879-1882, *Histoire de la divination dans l'antiquité*, 4 vols., Paris: Leroux; 1975, 2 vols., New York: Arno Press, reprint of the original edition in four volumes, 1879-1882; related texts have also been published in the volumes of the *Catalogus Codicum Astrologorum Graecorum*, ed. F. Cumont, F. Boll et al., vols. 1-12, Bruxelles, 1898-1951.

⁶⁰ Fahd, T., 1966, *La divination arabe: Etudes religieuses sociologiques et folkloriques sur le milieu natif de l'Islam*, Leiden: Brill; also: Fahd, T., 1978, '*Khatt*', in: C.E. Bosworth, E. van Donzel, B. Lewis & C. Pellat, eds., *The encyclopaedia of Islam*, new edition, volume IV, fasc. 77-78, Leiden: Brill, pp. 1128-1130.

⁶¹ Another apparently early reference to geomancy is given by Morony, M.G., 1984, *Iraq after the Muslim conquest*, Princeton (N.J.): Princeton University Press, ch. 13.

'Conditions in the early seventh century are summarised by *Djahiz* [this author lived c. 776-868/9, so rather in the ninth century – WvB], who tells how Muslaylima toured the marketplaces of Ubullā, Anbar, and Hira, where Arabs and Persians met to buy and sell their goods. In these places he learned magic, sleight of hand, and the tricks of astrologers, of false prophets, of the keepers of idol temples, of soothsayers who practice ornithomancy and *geomancy* [italics added], of fortunetellers, of magicians and of those who claimed to be inspired by jinn'.

Djahiz's text (cf. al-*Djahiz*, Abu Utman 'Amr b. Bahr, *Kitab al-hayawan*, 1408 H/ 1988 CE, ed. A.M. Harun, Cairo, 7 vols; earlier edition 1356-64/ 1938-45; the reference is in vol. IV, p. s369) has *khatt* and although this might be read as 'calligraphy', the context strongly suggests that this is a (probably anachronistic) reference to geomantic practice in the 7th century CE; that, however, would make it a real, and very welcome and revealing, reference to such practice in the 9th century, when

crude form of *‘ilm al-raml* to al-A’rabi of the late 8th and early 9th c. CE (already cited above), to reiterate the claim of a semantic and generic link with the, admittedly often sandy, desert environment, and to remind us of the system’s kinship with other cleromantic procedures in Islam (notably, belomancy and especially ornithomancy – i.e. divination by shooting of marked arrows, and by the behaviour of birds, respectively). These however in no way display the complexity of geomancy as a fully-fledged formal system, and therefore can only have the most general genetic link with geomancy. Fahd’s stress on al-Zanātī and the latter’s better documented, presumable contemporary al-Munadjjim (whose name means ‘astrologer’ in the sense ‘star-gazer’, cf. *nadjm*, ‘star’) merely confirms what we already learned from Ibn Khaldun’s discussion of the topic: the system’s very close links with astrology. Ibn Khaldun’s position is ambivalent. For although he exempts geomancy from the severe criticism which he applies to related systems current at his time, and although he himself consults the system⁶² so as to elicit from it statements on its own origin (finding as several others⁶³ have claimed before him in the Arabic

Djahiz wrote. The summing-up of occult practices in itself is telling: such series form a standard feature of medieval literary, didactic, judicial and theological texts, both in Arabic and in the European languages, but I have the impression that it is only around the turn of the first millennium CE that geomancy was included in the list.

⁶² Of course, like Ibn Khaldun before me in his own explorations into the history of geomancy, I drove this point to extremes by using both classic geomantic, and Southern African geomancy-derived, divination methods to produce statements on the origin of *‘ilm al-raml* itself. The results were most entertaining and detailed. They by and large confirmed the historical analysis that was shaping up in my mind at the time of the experiment and which I have since greatly revised. This supports my growing conviction (cf. my *Intercultural encounters*) that, when all is said and done, divination is a technique intended to facilitate the practitioner’s uninhibited (and occasionally inspired) introspection, often at normally inaccessible layers of the individual and/or collective consciousness. Thus divination remains highly subjective, despite the quasi-objective complex procedures it may involve and which try to persuade the client, and even the practitioner, of the contrary view.

⁶³ E.g. the strongly astrological treatise by al-Zanātī, *al-fasl fi usul ‘ilm al-raml*, o.c., p. 7, cites as the conventional chain of traditional authorities: Gabriel, Idrīs, Enoch, Ṭumṭum, Ptolemy, Hamidani, and ‘Ali ‘Abd Allah al-Tamimi:

We have been told that the first to conduct divination by drawing lines in the sand [litt.: *khatt al-raml*] was Jibril – peace upon him – . Then he taught this science to the prophet Idrīs. The latter in his turn passed it on to his son Ikhnuakh. From there this science was kept in the shed of secrets until the time of Ṭumṭum. And then Batlimus added more and divided the paragraphs, elements, and zodiacal signs. Then Idrīs was the first wise man of geomancy, the second his son ‘N’, Ptolemy ‘B’, ‘Abd Allah al Tamimi ‘T’, Hamadani ‘H’, Ṭamtam ‘Ṭ’, ‘Abd Allah al-Fakir’

No unequivocal information as to time and place of the origin of geomancy can be derived from these mythical attributions, although there may be a certain Asian (Persian or Indian) suggestion; not only in the name of Ṭumṭum al-Hindi, but also in the person of Idrīs, who is often identified not only with Enoch but also with Alexander the Great’s Persian cook; Wensinck, A.J., [year] ‘Idrīs’, in: *Encyclopaedia of Islam*. Leiden: Brill.

tradition, that the system was first revealed by the Angel Jibrīl to the Prophet Idrīs), his basic view is that geomancy is merely *adulterated astrology*.

To my knowledge, the most serious attempt to confront problems of origin in the context of Islamic geomancy was made by Klein Franke,⁶⁴ whose sixteenth-century CE vintage point (when Ahmad b. ‘Ali Zunbul flourished) however leads to perspective distortion. He insufficiently appreciates the mythical, arbitrary and charter-like nature of the legendary authorities (including Ṭumṭum and Idrīs) cited in the context of geomancy, tries to derive geographical and historical clues from these conventional embellishments. Of course, the listing of intellectual forbears is a standard passage in many medieval geomancies, whether in Arab, Hebrew, Greek, Latin, Provençal or French. But these are lines of transmission, not stages of creation, and most of the authorities cited in such chains of transmission are legendary, the fictitious authors of pseudo-epigraphic works, rather than historical: Idrīs (Enoch) and Ṭumṭum al-Hindi feature most prominently. Another shortcoming of Klein Franke’s contribution is that he has little grip on the intricacies of astrology. Even so he is essentially right in presuming that the most likely context for the emergence of geomancy was that of the *Ikhwan al-Safa*^c.

Finally, mention should be made of my friend and colleague Louis Brenner’s attempt⁶⁵ to situate geomancy, and its success especially in West-Africa, against a sound background of Arabist scholarship, drawing on additional manuscripts, trying to interpret the significance (an oriental connection?) of such mythical attributions as those to Idrīs and to the mysterious but frequently cited Ṭumṭum al-Hindi, but above all adding further relief to the idea first launched by Becker⁶⁶ at the beginning of the twentieth century: that the success of Islam in Africa depended less on deliberate surrender to the One who is Compassionate and Merciful, than on the converts’ hopes of a greatly increased access to a superior yet familiar form of magic. Brenner’s is an argument about geomancy

⁶⁴ Klein Franke, F., 1973, ‘The geomancy of Ahmad b. ‘Ali Zunbul: A study of the Arabic corpus hermeticus’, *Ambix*, 20: 26-35. Also cf. Savage-Smith & M.B. Smith, 1980, *Islamic geomancy and a thirteenth-century divinatory device*, Studies in Near Eastern Culture and Society, Malibu (Cal.): Udena, which however is less a contribution to the study of the origin of geomancy, than a description of an intricate mechanical device – directly related to astronomical and astrological apparatus, from astrolabes to the *zairdja* – producing geomantic figures.

⁶⁵ Brenner, L., 1985, ‘La géomancie pratiquée par des musulmans’, ch. IV, in: idem, *Reflections sur le savoir islamique en Afrique de l’ouest*, Bordeaux: Centre d’Étude d’Afrique noire, pp. 78-98.

⁶⁶ Becker, C.H., 1911, ‘Materialien zur Kenntnis des Islam in Deutsch-Ostafrika’, *Der Islam*, 1: 1-48; Becker, C.H., 1913, ‘Neue Literatur zur Geschichte Afrikas’, *Der Islam*, 4: 303-312.

in Africa and although he reminds us of the mythical traditions concerning the ultimate, and ultimately divine, origin of *ilm al-raml*, he does not tangibly add to our understanding of its origin and earliest history in human, specifically Arab hands.

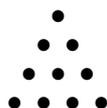
This is the question which I seek to address in my current research and specifically in the present paper. But how to arrive at a method by which it can be answered?

4. IN SEARCH OF A METHOD

Struggling for a feasible method by which to approach our central question as to geomancy's origin, I was tempted, as basically an anthropologist by training, to look at symbolic products as being rather specific to distinct societies and cultures, each identified in space and time. Therefore, my naïve initial strategy aimed at identifying the precise, and presumably unique, conceptual, spiritual and intellectual milieu in which geomancy as a complex package – but still retaining the fundamental features of that milieu – would have been conceived and launched for the first time. In an earlier stage of the project, reading through whatever materials (mostly of a secondary nature) on divination and related topics in the Ancient Near East, Graeco-Roman Antiquity, and the early Middle Ages came my way, I would be constantly shaken from one infatuation to the next. One day I would know for sure that geomancy with its basic dichotomy between even and odd and its insistence on a foursome (the four vertically arranged lines) must be an Iranian invention: reflecting the four primary gods one of which, Zurvan, produced the central antagonists Ahura-Mazda and Ahriman. The next day this euphoria would be supplanted by another, seeking the underlying dichotomy in the Chinese concepts of Yin and Yang, the foursome as an adulteration of the five Chinese elements or the six lines of the duplicated trigrams that constitute the I Ching formalism, and interpreting the geomantic kinship idiom of the construction of daughters and nephews out of mothers, as a transformation of Taoist cyclical schemes of the transmutation of the five elements, and relying⁶⁷ on the Silk Road or the Indian Ocean trade to

⁶⁷ Not unreasonably; cf. Needham, J., with Wing Ling, 1961, *Science and civilization in China, vol. 1. Introductory orientations*, Cambridge: Cambridge University Press; first edition 1954, which

take all to the West. One week later, I would give all this up for an exploration of the extent to which the Egyptian world-view, dwelling on the sacred soil as fertilised by the sacred river, with in the background the perennial struggle between riverside Osiris and desert-based Set, as well as the alternation between favourable and unfavourable days in the calendar, could account for the geomantic repertoire, either directly in the form of ancient Egyptian religion, or, even more attractive, the latter as it was filtered through Hellenistic, Alexandria-based magic, mystery cults, Hermetism etc. Only a few days later to realise that the dichotomy between even and odd, male and female numbers was already Pythagorean, and that Pythagoras himself (although alleged to have been unfavourably disposed towards divination and beans) reputedly exhorted his followers to swear by the *tetraktus*,



the holy foursome whose four lines of dots constitute a likely prototype for geomancy if ever there was one...! Or should I explore, for an explanation of the foursomes so prominent in geomancy, the doctrine of the four elements which Empedocles, Pythagoras' near-contemporary, introduced in Western thought but whose antecedents ramify far away from Graecia Magna (Graecised Southern Italy) into Ancient Egyptian, African and East Asian cosmologies? Or was the foursome, after all, primarily an expression of the – from a geomantic perspective so aptly named –*tetragrammaton*, $\aleph\aleph\aleph\aleph$, with a fundamental dichotomy at least hinted at by the division between the Urim and the Tummim as mysterious oracular instruments, or the Jachin and the Boaz (the two pillars flanking the entrance to the temple), so that the origin of geomancy might primarily be sought in early medieval Jewish circles?... Did not the puzzling discussion, in the Babylonian Talmud,⁶⁸ of the odd and even number of cups of wine (with emphasis on four) to be taken or avoided, suggest as much? Was such a suggestion not reinforced by the Jewish connotations of the Moroccan Zanāta tribe?

discusses in detail the interaction between China and the West in the course of human history; also cf. Needham, J., with Wing Ling, 1956, *Science and civilization in China, vol. 2. History of scientific thought*, Cambridge: Cambridge University Press, for an excellent introduction to the Chinese trigrams and their role in the Taoist worldview.

⁶⁸ Goldschmidt, L., ed., 1906-1935, *Die Babylonische Talmud*, Leipzig/Berlin: Jüdischer Verlag; the reference is: *Pesahim*, X, i, Fol. 108a ff.

Or should my main attention rather follow hints from Ancient Coptic magic, as to the magical significance of the act (reminiscent of that of the slaying pharaoh – for three millennia a dominant iconographic theme in Ancient Egypt) of hitting the ground with a stick, so central as a random generator (the number of indentures made in one stroke is assessed in terms of even or uneven, and this yields one of the horizontal lines for the geomantic figure) in many attested forms of Islamic geomancy? For if earth is the opposite of heaven, then geomancy is divination not by the stars but by the earth, while the earth is the typical place where magicians, by hitting the very ground with a stick or a wand (e.g. Exodus 7: 8-12 on Aaron's rod, and Exodus 17 on water from the rock), assert their autonomous right to divine status and power, and by implication their kinship with Satan, as in the following Coptic formula for love magic (first millennium CE):

‘...Shurin, Shuran, Shutaban, Shutaben, Ibonese, Sharsaben,... Satan the devil, who beat with his staff upon the earth saying: “I am a god also”...’⁶⁹

Here the magician is speaking, in all likelihood, not only *to* the earth but also *on behalf of* the earth, thus asserting the latter's powers as the Great Mother, which despite repeated attempts in many later religions was never completely deprived of its divine nature and never completely subjugated to ethereal gods who literally represent the more advanced levels of sublimation.

Having started to think about the earth as a fundamental symbol the emphasis on the number four, in geomancy, perhaps no more than a celebration of the earth (after which it got its name, both in Greek and – although more specifically limited to sand – in Arabic), and must we not situate the Islamic invention against the entire background of chthonic cults throughout the Old World? This opens up a veritable Pandora's box. We are dealing here with one of the most powerful symbols that Man has developed. Its antiquity is suggested not only by its ubiquity,⁷⁰ but also by the way in which the earth appears as a

⁶⁹ *Papyrus Berlin 8320* (Koptische Texte), as quoted in: de Jong, K.H.E., 1921, *De magie bij de Grieken en Romeinen*, Haarlem: Bohn, pp. 238f; further brief reference to this text in: Meyer, M., & Smith, R., 1994, *Ancient Christian magic: Coptic texts of ritual power*, San Francisco: Harper Collins, p. 367, n. 75, l. 18, cf. p. 161; also cf. Isaiah 14: 13-14; Ezekiel 28: 2.

⁷⁰ E.g. it is a major aspect of religions throughout Africa (cf. Schoffeleers, J.M., 1979, ed., *Guardians of the Land: Essays on African territorial cults*, Gwelo: Mambo Press) and around the Mediterranean (van Binsbergen, W.M.J., forthcoming (a), *Religion and social organisation in north-*

fundamental, independent moral category in myths, oaths and rituals from Mesopotamia, Greek and Roman Antiquity, West and East Africa, while even the pacifist marabouts of North West Africa, administrators of collective oaths by saints associated with local shrines, may also be considered land priests in Islamic garb.⁷¹ Many layers of reference are piled up here, making for a multi-referential coding whose co-ordinates in space and time are typically complex and confused, but together elucidating the implied symbolism and the possible original inspiration of geomancy in particular, and more implicitly of board-games. There is the maternal (and psychoanalytically oedipal), nurturative, agriculture-related symbolism of unfathomable and ungraspable earth as the source of life. But there is also the symbolism of fragmented and tangible earth, dust, mud, dirt, pebbles, as the lowly (psychoanalytically anal) origins of man and of life in general. There is the combination of these two themes in the ‘black and red’, the fertile alluvial soil (symbolised by Osiris) as against the barren desert (symbolised by Set), which was how Ancient Egyptians conceptualised their country – and an inspiration (besides the moon’s phases and the hemerology of lucky and unlucky days) for the binary symbolism underlying e.g. geomancy. There is earth with its four cardinal directions (essentially derived from the specific symmetry structure of the human body: left and right, back and front, which makes for square representations (reproduced in many square game-boards), rectangular grids as subdivisions, and in general a preponderance of the figure 4 or higher powers of 2.⁷² There is earth as the timeless repository of the dead, as the underworld or the gate to the underworld, hence the alternative source of power, knowledge, legitimacy of political and ritual office...

western Tunisia, Volume I: Kinship, spatiality, and segmentation, Volume II: Cults of the land, and Islam; and references cited there.

⁷¹ Cf. Gellner, E.A., 1969, *Saints of the Atlas*, London: Weidenfeld & Nicholson.; van Binsbergen & Wiggermann, 2000; Fontenrose, J., 1980, *Python: A study of Delphic myth and its origins*, Berkeley etc.: University of California Press; paperback edition, reprint of the 1959 first edition; Fortes, M., 1945, *The Dynamics of Clanship among the Tallensi*, London: Oxford University Press for International African Institute; Fortes, M., 1949, *The Web of Kinship among the Tallensi*, London: Oxford University Press for International African Institute; Simonse, S., 1992, *Kings of disaster: Dualism, centralism and the scapegoat king in southeastern Sudan*, Leiden etc.: Brill.; van Binsbergen, W.M.J., forthcoming (a).

⁷² Pennick, N., 1992, *Secret games of the gods: Ancient ritual systems in board-games*, York Beach (Maine): Weiser, reprint of the 1989 ed; first published London: Century, 1988; this is an utterly unscholarly text which yet makes many good points.

Was all this merely New Age, Coca Cola-ized scholarship, the flotsam of avid but amateur reading, or did it contain shimmerings of true insight? What could be the context where so many, apparently similar and converging, themes could be absorbed, digested, mediated? In the process, how could I be sure that I was making any progress, or even, that I was comparing the comparable? Was it enough to have – somewhere in a Near Eastern or Mediterranean cosmology or religion – some disconnected geomantic traits, such as a fundamental dichotomy and a foursome, to jump to historical conclusions, or was it necessary that the milieu displaying such features had used them specifically for the construction of, specifically, a *divination* system? In the absence of a rich corpus of transitory and preparatory forms of geomancy, such ideas (and the predictable alternatives, toying with possible contributions from Marconites, Manichaeans, Mandaeans, Sabaeans, Harranites proper, Marcionism, Talmudic and other Jewish literature, the extensive Hellenic and Hellenistic body of magical and divinatory texts and procedures, real and pseudo-epigraphic references to the Pythagoreans and Neo-Pythagoreans, etc. etc.), brought home the fact that not only my knowledge and skills were utterly deficient to cut my way through this primal forest of possibilities, *but that the real problem was that of method*. The hit-and-run method that had first presented itself, had to be replaced by something rather more systematic and controllable.

4.1. A heuristic typology of geomancy

The only way out of this confusion seems to consist in the adoption of a method which rigorously defines a typology of geomancy as a *complex* package, and which seeks not so much for the unique context in which this total package may have emerged, but for the composite history of the constituent items in the typology. This means rephrasing our central research question as follows: where, then, does one find a divinatory and cosmological tradition containing all the following characteristics:

- | |
|--|
| <ol style="list-style-type: none">a. A focus (conceptual, often also material) on sand (Arab. <i>raml</i>) or earth (<i>geomantia</i>, <i>astrologia terrestris</i>)b. The use of multiple unmarked elements. |
|--|

- c. Simple procedures of casting or tracing, and subsequently sorting or eliminating these elements
- d. A fundamental dichotomy (cf. two-valued tablets; standard lines of one or two dots)
- e. Mathematical representation of that dichotomy in terms of ‘odd’ and ‘even’
- f. A propensity for the number 4 (cf. four tablets; four geomantic lines forming a tetragram; therefore, 4 is the power to which 2 (as derived from the fundamental dichotomy underlying the geomantic system, i.e. one dots or two) has to be raised in order to create 16 configurations; also cf. the number of four tablets, to produce essentially the same result⁷³)
- g. A propensity for the numbers 16, 64 and 256, clearly resulting from the repeated duplication of 2 or 4 as basic numbers in geomancy
- h. A graphical representational system featuring dots, which may be combined or connected so as to form lines
- i. A graphical representational system featuring tetragrams, e.g. symbols consisting of four horizontal lines, each line consisting of one or two dots (or a line)
- j. A basic kinship idiom (with its classification in terms of age, gender and biological reproduction) serving to derive certain configurations from others, in the production of a full geomantic theme or horoscope
- k. The distinction between a primary level determined by chance (the ‘mothers’ in geomancy), and secondary levels (‘daughters’, ‘nephews’, ‘witnesses’ and ‘judges’) produced by a simple derivative calculation and not involving chance inputs in their own right.
- l. A catalogue of the names of all mathematically possible configurations, with their associated oracular interpretations.
- m. That catalogue is consistently built so as to accommodate various dimensions between which the interpretation may toggle *at libitum*.
- n. Extensive use of astrological notions.

Table 2. An exhaustive descriptive definition of Islamic geomancy

4.2. Getting focused as to time, place and topic

Formulated with such detail, we now have a finely-meshed net in which to catch whatever historical evidence on the origin of geomancy.⁷⁴ Of course, these items need not be present simultaneous but may turn out to be gradual

⁷³ Considering the ubiquitous emphasis on ‘4’ as the earth’s number throughout Old World cosmologies, it is unlikely that the prominence of foursomes in geomancy is simply based on a duplication of two and nothing more.

⁷⁴ The typological notions developed above now enable us to formulate the research question with such precision that superficial parallels from Graeco-Roman Antiquity (e.g. Fortuna’s oracle at Praeneste, Italy; Heracles’ shrine at Bura, on the Peloponesus; or Varro’s ‘geomantia’ (see above), can be ruled out as immediate, let alone unique, ancestors of Islamic geomancy. The actual geomantic package that materialised by the end of the first millennium CE in Abassid Mesopotamia is far more specific and complex.

accretions from different sources. It is only the combination which makes for a specificity identifiable as geomantic. Some elements may in themselves be so general as to be almost universal and even biologically anchored, such as the fundamental dichotomy which is found in all cultures as a recognition of gender differences and of left/right symmetry (yet only a few cultures have made dualism a really decisive feature of their world-view), the binary opposition which informs much of human thought anyway, the ubiquitous Old World feature of the four directions (which may well result from the combined left/right symmetry and front/back asymmetry of the human body).

My intention is to try and explore the history of geomancy as a composite of the histories of each of these fourteen items *before* the high-tide of Arabic geomancy in the beginning of the second millennium CE. This is not to claim that these items have developed in total independence from one another, but each can be traced – to a certain extent – in its ramifications across linguistic, political, religious and cosmological boundaries far further back than that we have attestations of geomancy as an integrated, finished product.

Depending on the audience, some of my fourteen items would be more interesting than others to concentrate on. One would like to see, e.g., an argument about the emergence of formal compendia, probably emerging from Old Babylonian or perhaps even earlier prototypes, and soon tending to standardised formats, internal consistency, and the addition of hypothetical cases meant to complete and balance the records of actual omens taken in concrete situations.⁷⁵ If ‘books of fate’ form the standard format for later geomancies, how much did such texts, from Astrampsychus and the *Sortes Ovidianae* or *Homericae* to medieval Arabic and Hebrew versions, owe to the Ancient Mesopotamian prototypes of omen compendia? How did they become streamlined, and amenable to numerological, onomamantic and cleromantic use, through the imposition of a numerical or graphical classification upon the entries – so that they could be addressed by the outcomes of chance processes producing numbers (through dice) or visual patterns. And how and when did they become saturated, like almost all divinatory and occult sciences in Late Antiquity,⁷⁶ with astrology? Alternatively, one would like to see the range of

⁷⁵ Jeyes, U., 1989, *Old Babylonian extispicy: Omen texts in the British Museum*, Istanbul: Nederlands Historisch-Archaeologisch Instituut.

⁷⁶ On this problem, cf. Bouché-Leclercq, A., 1879-1882, *Histoire de la divination dans l'antiquité*, 4 vols., Paris: Leroux.; 1975, 2 vols., New York: Arno Press, reprint of the original edition in four

cleromantic and otherwise stochastic procedures for divinatory and ludic purposes, even if cleromantic divination is scarcely attested in Mesopotamia in the earlier millennia, and was never considered worthy, by those who practised it, of a formal, written compendium spelling out its interpretational catalogue.

However, given the astrological emphasis in the Arabic and later geomancies, it is to be expected that considerable insight can be gained by an exploration of the extent to which the origin of geomancy can be understood from an astrological perspective. I shall devote the remainder of this paper to an exploration of *the origin of the sixteen geomantic names*, since this is the one item⁷⁷ in my typology of geomancy where the astrological dimension can be studied in some depth.

Of course there is a danger in taking apart a working intellectual product like the geomantic divination system: although the various constituent parts of course each have their history, and perhaps a rather heterogeneous history (e.g. hitting the sand with a stick appears to belong to a very different intellectual idiom and history than interpreting the configurations, once found, in an astrological format of houses and planetary correspondences), they only work after they have been assembled. In evolutionary biology this kind of problem is often illustrated by reference to the very complex eye of the vertebrates:⁷⁸ admittedly one can imagine some process of evolution to produce, little step by little step, some tissue modification ultimately leading to that complex optical organ, but how is it possible that such blind steps – in the double sense – can in the end suddenly produce something which can actually see? Tracing the history of geomancy cannot just be reduced to the history of its components: if possible, we would like to capture the magical moment when the ingredients were put together and a new, competitively powerful, divinatory tool was created. And, if at all possible, we would like to understand what suddenly brought about this creative transformation of material which, in all likelihood, had been available in discrete form for centuries: astrology, numerical operations reminiscent of the generations of daughters and nephews, arithmetical and mystical juggling with even and odd, etc. But without the one felicitous find that shows us

volumes, 1879-1882; and the more recent but patchy: Tester, S.J., 1989, *A history of western astrology*, New York: Ballantine, repr. of 1987 first edition. Also cf. van Binsbergen & Wiggermann, *o.c.*

⁷⁷ See table 2 above: ‘1. A catalogue of the names of all mathematically possible configurations, with their associated oracular interpretations’.

⁷⁸ Cf. Vroon, P., 1992, *Wolfsklem: De evolutie van het menselijk gedrag*, Baarn: Ambo.

geomancy *in statu nascendi* (perhaps we shall encounter just that towards the end of my argument), we have to contend ourselves with circumstantial evidence – and not pass a final verdict.

In general, what we are looking for is the complex history of origin of a complex, internally heterogeneous system of magical representations and practices – the result, no doubt, of an amazing bricolage by some school of occultism, using elements of great specificity and heterogeneity.

If the geomantic system can be truly said to have come into the world fully-fledged, this simply means that this particular concerted combination of elements was never seen before. This in itself is a historical fact of considerable significance. For here we are not charting some illiterate cultural domain in the shady beginnings of history – like in the reconstruction of the pre-colonial history of African religious systems including divination – but a literate field of scholarly production, whose intellectual links with the philosophical and magical traditions of Ancient Egypt and Mesopotamia, Graeco-Roman Antiquity, Judaism, early Christianity, Iran and India are in principle open to detailed investigation – even if the relevant texts have often gone lost and many of those that survive still await formal publication. If in this context a composite bricolage of existing and newly-invented elements produces something unprecedented, like geomancy, this strongly suggests that we can put the date for the first formation of the geomantic system not too long before the first attestation and the rapid spread of the system in the early second millennium CE. In other words, geomancy emerged in the late first millennium AD.

This also provides a clue as to where to look for the location in which the system was first formulated. This must of necessity be sought among the few main centres of the preservation and innovation of scholarly knowledge at the time – which for the date mentioned almost inevitably points to Mesopotamia under Abassid rule, with the academies of Mosul, Baghdad and Basra.

The composite nature of the geomantic system also means that the obvious acceptable way of tracing its early history is to break down the system into its arguable constituent components, and trace the history of each of these components. These histories may be very different, and point to very different geographical and intellectual milieus in very periods of time. But then again, magical systems display traditional, accumulative, conservative inward-looking tendencies just as much as they are prone to innovation and experiment. The documented history of magic, divination, cosmology, and philosophy in general

from Sumer and pre-dynastic Egypt right through to Neo-Platonic, Sassanid, Coptic and Arabian times on the eve of Islam, presents the picture of basically one widely ramifying and internally contradictory system in motion, not of as many discrete systems as cultural and political history chooses to define separate cultural, ethnic and statal units. Therefore it is likely that some of the components meeting in geomancy have already been brought together and amalgamated earlier on in the history of magic. One cannot trace the history of geomancy without tracing the entire history of magic, and that, clearly, is way beyond my scope in the present paper, and beyond my competence in general.

When appreciating the composite nature of geomancy and dissolving its history in the part histories of its components, much depends on making the right kind of distinctions when identifying the various components, and giving each its proper weight. This can only be done – and then of course only partially and conjecturally – on the basis of a broad, historically involved, comparative approach to magic, astrology, cosmology and philosophy in general, in the centuries preceding the emergence of the system and in the cultural environments known to have influenced the presumable intellectual milieu where geomancy was created. In some cases merely the possibility of intellectual contact is established, while the fact of borrowing remains to be argued; this for instance in the case for the contributions from China and North West Africa⁷⁹ to the geomantic system. In other cases continuity is so unmistakable that the real question is whether there has been any continuity but whether that continuity allowed for any change and variation; this is for instance the case with regard to the dominant astrological component of the geomantic system, which may not be totally main-stream Ptolemy-derived, still is very much along the accepted lines of astrological orthodoxy as established since late Antiquity.

In fact, astrology does occupy a central position in this kind of argument, since this particular, astronomically-based divination technique, which – whatever its history in Egypt – up to the first millennium BCE was merely ancillary to other Mesopotamian divination techniques especially extispicy, from the middle of that millennium imposed itself on all other magical arts, a

⁷⁹ China is touched upon at various points in the present paper. The North West African link is argued briefly in: van Binsbergen, W.M.J., 'Rethinking', *o.c.*

process that was to be continued in Hellenistic and Imperial times.⁸⁰ Therefore we may expect that by the end of Late Antiquity, when the scene is set for the emergence of geomancy, astrology was not just one ingredient among many – much more than that, it henceforth was to be and remain the dominant component of any magical art in the Near Eastern and Western tradition.

Although Hebrew contributions to geomancy as a finished products, and although there are Hebrew geomancies, there is no reason to assume that geomancy was an invention of medieval Hebrew scholars.⁸¹ I have no evidence yet of Iranian, Pahlavi etc. versions of geomancy. Inspection of such Indian sources as may exist is unnecessary since David Pingree, the greatest living authority on Indian astrology and related sciences, tells us that geomancy in India is an Arabic import, which cannot even boast a local Indian name but has retained the word *raml*:

‘XIII AND XIV. RAMALA AND TAJIKA

Finally, Yavana is an authority on *ramalashastra* (from the Arabic *raml*, ‘geomancy’) and *tajikashastra* (the science of *Tajiks*); here, of course, Yavana means ‘foreigner’ rather than ‘Greek’. Several ramal texts are ascribed to Yavana.’⁸²

Thus for geomancy we can rule out a history parallel to that of chess: from an origin in India, the latter invention spread to Iran, was there transmitted to the Arabic culture of the early Middle Ages, and thus reached Southern Europe.⁸³

⁸⁰ Cf. W.M.J. van Binsbergen & F.A.M. Wiggermann, 2000, ‘Magic in history: A theoretical perspective and its application to Ancient Mesopotamia’, in: T. Abusch & K. van der Toorn, eds., *Magic in the Ancient Near East*, Groningen: Styx; and extensive references cited there.

⁸¹ Medieval Hebrew geomancies are referred to by Steinschneider 1864, 1877 o.c., and in: Trachtenberg, J., 1939, *Jewish magic and superstition: A study in folk religion*, New York ; my colleague at NIAS, Shaul Shaked, who catalogued the famous texts from the Cairo Geniza (cf. Shaked, S., 1964, *A tentative bibliography of Geniza documents*, Paris/ The Hague: Mouton) tells me that he encountered several geomantic fragments among this material, in addition to a very extensive geomancy claiming to be composed by Abraham ibn Ezra (c. 1089-1164 CE). However, as we ascertained in a provisional reading (for which I am greatly indebted to Professor Shaked) this geomancy is little original and scarcely deviates from the pattern established in Arabic texts a century or longer earlier. Steinschneider still considered the attribution of a geomancy to ibn Ezra pseudo-epigraphical, but in the face of this Geniza text there is little reason to doubt the author’s identity, even though it was a later copy. When ibn Ezra wrote the great diffusion of geomancies had already started, and whatever his great qualities in other domains, here he did not lead, but follow.

⁸² Cf. Pingree, D., 1978, *The Yavanajātaka of Sphujidhvaja*, Harvard Oriental Series 48, 2 vols., Cambridge (Mass.)/London: Harvard University Press, i 38. In corroboration, Pingree mentions six ramal manuscripts of which three are dated as to the time when they were copied: the oldest in 1662 the most recent in 1837. Also cf. Steinschneider, M., 1877, ‘Die Skidy [sic] oder geomantischen Figuren’, *Zeitschrift der deutschen Morgenländischen Gesellschaft* (Leipzig), 31: 762-765

All the various clues which I gradually detected, can be accommodated in the eclectic and intellectually eager environment of the *Ikhwan al-Safa*^c, where the Hellenistic and Imperial astrological corpus including Ptolemy was received by the middle of the tenth century CE, while substantial Indian influences (in themselves highly indebted to the same Graeco-Roman sources)⁸⁴ were on their way. Here, due to the Indian Ocean trade which actually brought Chinese ships to the Persian Gulf, knowledge on China was available in sufficient detail so as to produce, already in the 9th century CE,⁸⁵ a fairly factual travelling guide. The persecution which soon was the fate of the Brethren makes it very plausible that specific traces of their presumably vital contribution to the origin of geomancy were effectively concealed or destroyed, especially since within a century geomancy rose to be the dominant divination technique throughout the world of Islam – from which it was translated and emulated, in many versions, into Persian, Hebrew, Greek and Latin. Such a postulated concealment could very well have produced the remarkable effect of geomancy emerging suddenly and without documented preparation, fully-fledged, like Athena sallying forth in full armour from her father's skull.

Arabist scholarship has considerable experience in tracing such attributions on the basis of mere circumstantial evidence, e.g. in Kraus's brilliant analysis of the *DJabir* corpus,⁸⁶ or Halm's approach to the *Umm al-Kitab*.⁸⁷ Further work along this line, for which I lack the specific competence, will greatly help to bring in focus the creative moment when Islamic geomancy was actually formulated. Meanwhile, we can only appreciate the originality of the actual creation once we have sorted out the various building materials that went into it. And it is here that the present paper seeks to make a very specific substantive

⁸³ Murray, H.J.R., 1913, *A history of chess*, Oxford: Oxford University Press; Trend, J.B., 1947, 'Spain and Portugal', in T. Arnold & A. Guillaume, eds., *The legacy of Islam*, Oxford: Oxford University Press, first ed. 1931, p. 1-39, on chess p. 32f.

⁸⁴ This indebtedness has especially been established by Pingree, *o.c.*

⁸⁵ Ferrand, G, ed. & tr., 1922, *Voyage du marchand arabe Sulayman en Indie et en Chine*, Paris: Brossard; Sauvaget, J., ed., 1948, *Relation de la Chine et de l'Inde: 'Ahbar as-sin wa -hind: rédigée en 851*, Paris: Les Belles Lettres.

⁸⁶ Kraus, P., 1935, *Jabir ibn Hayyan: Contribution à l'histoire des idées scientifiques dans l'Islam*, vol. 1, Cairo; vol. 2. *Jabir et la science grecque*, Paris: Belles Lettres; photomechanical reprint of earlier edition, 1942.

⁸⁷ Halm, H., 1982, *Die islamische Gnosis: Die extreme Schia und die 'Alawieten*, Zürich/München: Artemis.

contribution, beyond the comparative and methodological points made so far in the course of my argument.

5. THE GREATEST PUZZLE OF ALL: THE ORIGIN OF THE SIXTEEN GEOMANTIC NAMES, AND THE CASE FOR AN ASTROLOGICAL SOLUTION ON THIS POINT

Since the whole geomantic exercise revolves around identifying which of the sixteen configurations apply in a particular context, it is clear that the names and attributions of each of these configurations should occupy a strategic position in any attempt to explore the history of geomancy. Now the amazing thing is that all modern scholars writing on geomancy have summed up the names of the sixteen configurations in Arabic, Latin, Greek, various West African or Malagasy languages etc. but that – to my knowledge⁸⁸ – the meaning of these puzzling terms in their puzzling combination has never been investigated from a historical or systematic point of view. Assuming, apparently, that these terms were arbitrary and meaningless anyway, the analysts have contented themselves with offering literal translations, instead of coherent systematic interpretations.

Tannery's tabulation of the names of the sixteen geomantic configurations in one standard Arabic version,⁸⁹ two Greek manuscripts versions, a medieval Provençal version and three Latin versions, may serve as a good introduction to the puzzles geomantic nomenclature represents, and to some possible – if far from equiprobable! – solutions. For this purpose, let us first inspect the semantic referents of the names given to the sixteen standard geomantic figures in Arabic.

⁸⁸ I have so far seen most of the extensive and often obscure scholarly literature on geomancy, but not yet, e.g., Blier, S., 1983, 'African geomancy: Art and the idiom of knowledge revelation', paper presented at the African Studies Association meeting, Boston.

⁸⁹ Which corresponds with al-Zanātī, o.c.

5.1. Semantic heterogeneity in the Arabic geomantic nomenclature

Within each series (column) in Table 3, the names appear to come in clusters, as far as their semantic connotations are concerned. For the Arabic names (also cf. Table 1) we can distinguish⁹⁰

- human physical features indicative of gender and age ('beard'; 'scarce beard'⁹¹ ; 'with smooth cheeks')
- a widespread human artefact symbolic of group or religious identity ('flag')
- emotions ('joy')
- colours ('white'; 'red');
- abstract conditions describing logical relationships between abstract elements ('link', 'reversion');
- abstract conditions describing social relationships between people or groups ('meeting'; 'victory when going out'; 'victory when coming in', 'accord')
- abstract conditions describing legal or pragmatic relationships between animate subject and inanimate or animate object ('taking when coming in'; 'taking when going out'; 'agreement'; 'link'; perhaps again: 'meeting')
- concepts marking either boundaries in space ('threshold when coming in', 'threshold when going out', 'internal/external') or the connection between points in space ('road')

Here I would like to invoke an argument which over the years I have used time and again to make history out of apparently history-less, synchronic distributional cultural phenomena:⁹² cultural phenomena, when passing through the hands of symbolic innovators (like the creators of religious cults, divination systems etc.), tend to a certain unity and internal systematics; if we find that the internal structure of a symbolic system displays very heterogeneous elements which have scarcely accommodated to one another within an overall framework, we have there indications not just of synchronic social cleavages (between genders, classes, different residential and productive section of the population etc.) but also of a long and diverse history, which the assessed heterogeneity

⁹⁰ I largely limit the discussion to the Arabic terms, although a perusal of the translations in various European languages (columns 5 to 8) could be argued to reveal semantic implications which at the time of the transmission of the geomantic corpus to Europe existed also in the Arabic corpus.

⁹¹ I do not think that Tannery's addition 'growing up with' or even 'having grown up with' is strictly implied in the Arabic terms.

⁹² van Binsbergen, W.M.J., 1981, *Religious change in Zambia*, London/Boston: Kegan Paul International; van Binsbergen, W.M.J., 1992, *Tears of Rain: Ethnicity and history in central western Zambia*, London/Boston: Kegan Paul International.

no.	fig.	nom arabe @)	signification	MS grec 2419 ±)	traité provençal édité par M. Paul Meyer	Hugo Sanctaliensis Lat 7420 A	7349 secundum Hermem #)
i		al-Hahyan/ al-ahyan	barbe	anōferē	alegris	5 barbatus ridens	11 letitia
ii		al-kabd al-dakhil	prise intérieure	eisodos; tōn chrematōn	aquisieto	1 comprehensum intus	5 acquisitio
iii		al-kabd al-kharidj	prise extérieure	exodos; tōn chrematōn	perda	2 comprehensum foris	6 amissio
iv		djama'a	réunion		poble	14 Congregatio	1 populus
v		djaudala/ kausadj/ farkh	qui grandit, imberbe	spapos; ēgoun ho fulako	donzela	16 Inberbis	8 puella
vi		uklah	lien	fulakē	carcer	13 Carcer constrictus	9 carcer
vii		ankis	renversement	katōferē	tristetia	6 Transversus diminutus	12 tristicis
viii		hamrah	couleur rouge	eruthrotēs ēgoun ho polemos	ros	8 Rubeus	14 rubeus
ix		bayad	blanc	leukotēs	blancor	9 Candidus Albus	13 albus
x		al-nusrat al-kharidj	victoire exteme	eisodos tēs doxēs	aventura minor	3 auxilium intus	4 fortuna minor
xi		al-nusrat al-dakhil	victoire inteme	exodos tēs doxēs	aventura major	4 auxilium foris intrans	3 fortuna major
xii		at-'ataba al-kharidj	seuil extérieur	exerkhomenon anōflion	portal reversat	11 Limon exterius	16 Cauda draconis
xiii		naky al-khad	qui a le visage (litt. les joues) gracieux	annēbos ēgoun ho arsenikos	donzel	7 Mondus facie	7 puer
xiv		rayat farah', al-'ataba al-dakhil	etendard de joie/ le seuil inteme	eiserkhomenon anōflion	portal alzat	10 Limon interius	15 caput draconis
xv		idjima'a	l'accord		conjunctio	12 Coadunatio vel conjunctio	10 conjunctio
xvi		tarīq	chemin		via	15 Via	2 via

Table 3. The geomantic nomenclature according to Arabic, Greek and Latin sources

(from: Tannery 1920, *o.c.*; for notes see next page).

invites us to explore and for which it suggests specific clues and leverage. If thus a mere sixteen configurations are described in terms of at least six different clusters of concepts, there can hardly be an overwhelming suggestion of a systematically produced, coherent semantic domain, in the Arabic nomenclature.

Tannery based his analysis in part on the Greek manuscript 2424. This however is not going to make an independent contribution to our understanding, since the Greek ‘words’ contained there are merely transliterations of the Arabic terms, making up meaningless sounds in Greek; e.g. Greek *nakhoulkhat*, *istima*, *tarikh*, which follow the Arabic to the letter.

This cannot be said for the Greek manuscript 2419, whose terms all belong to one consistent semantic field, as I shall presently demonstrate

5.2. The astrological contents of the nomenclature in the Greek manuscript 2419

In an attempt to establish the technical astrological nature of the geomantic nomenclature, let me concentrate on just one column, that of the Greek manuscript 2419. In fact, it is the only set of names of configurations, albeit incomplete, to display semantic consistency. A detailed discussion will demonstrate that here, by contrast with all other versions in Tannery’s table, the nomenclature does not consist of a multitude of different, mutually unrelated clusters which each produce their own independent, complex semantic space, but that they all spring from one principle: astrology, more specifically the doctrine of planetary dignities and planetary interrelations in general.

The astrological interpretation of the standard geomantic nomenclature turns out to be exhaustive, as far as the Greek manuscript 2419 is concerned.

[@]) Table 3: Originally Tannery listed in his second column, under ‘nom arabe’, the names of the configurations in Arab script, and in his fourth column the transliteration in European script inspired by French orthographic usage. Since it is difficult to combine Arabic and European script here, I have combined Tannery’s two columns here, but following a different transliteration system.

[±]) Table 3: For reasons given in the main text I leave out Tannery’s fifth column, describing the names of the configuration according to Greek manuscript 2424.

[#]) Table 3: I leave out Tannery’s right-hand column, which only contains six entries largely identical to the Hugo Sanctalliensis column.

no.	configuration	Greek name	literal translation	likely astrological significance
1		anōferes	in upward movement	planet or sign rising
2		eisodos tōn chrēmatōn	coming in of things	the planet precedes ☉*)
3		exodos tōn chrēmatōn	going out of things	the planet follows ☉**)
4		— °)		
5		spapos, ēgoun ho thēlukos	scarce, female	cadens position, specifically of a female planet ☉)
6		fulakē	prison, watch; Pythagoreans: centre of universe; astrologically: fulakē = tapeinōma = dejection #)	dejection
7		katōferes	in downward movement	planet or sign setting
8		eruthrotēs ēgoun ho polemos	redness of the war	angle between ☉ and any other planet less than 12° &)
9		leukotēs	whiteness	especially close aspect between ☉ and ♀ perhaps by extension between any two planets %)
10		eisodos tēs doxēs	coming in of fame	planet enters sign/house of its exaltation / rulership
11		exodos tēs doxēs	going out of fame	planet leaves sign/house of its exaltation / rulership
12		exerkhomenon anōflion	the lintel when going out	specific upper limit of planetary movement
13		anēbos ēgoun ho arsenikos	the minor or the male one	cadens position, specifically of a male planet \$)
14		eiserkhomenos anōflion	the lintel when coming in	specific upper limit of planetary movement
15		— @)		
16		— §)		

Table 4. The astrological contents of the geomantic nomenclature in the Greek manuscript 2419

notes continued on next page

*) Table 4: This interpretation still needs to be underpinned with textual evidence from the medieval Arabic astrological literature.

It is clear that the references, in the geomantic nomenclature, to thresholds and lintels constitute technical terms of an astronomical/astrological nature. They cannot refer to everyday concepts: the literally Janus-like nature of the ordinary threshold of a room does not allow for the existence of two thresholds, one for going in and one for going out. Pingree⁹³ calls our attention to an Indian linear planetary theory which goes back to a Babylonian prototype and

**) Table 4: This interpretation still needs to be underpinned with textual evidence from the medieval Arabic astrological literature.

°) Table 4: Although there is no Greek term and therefore no astrological interpretation for this configuration in the present manuscript, all the other manuscripts including the Arabic one list here the term for an *accumulation* of several planets in one sign or house.

°°) Table 4: In this sense Ptolemy uses *thēlukos* as a technical term in *Tetrabiblos* 20, 33.

) Table 4: Liddell, H.G., & R. Scott, 1968, *A Greek-English lexicon*, ed. H.S. Jones with R. McKenzie, with a supplement, Oxford: Clarendon, reprint of the 1940 9th ed. Dorotheus Sidonius' *Carmen Astrologicum* V 27, 1-13 applies the same notion specifically to the position of the Moon, and reserves the idiom of imprisonment for this specific case. Cf. Dorotheus Sidonius, 1976, *Dorothei Sidonii Carmen Astrologicum: Interpretationem Arabicam in lingvam Anglicam versam vna cum Dorothei fragmentis et Graecis et Latinis*, ed. Pingree, D., Leipzig: Teubner: 264f.

&) Table 4: Cf. the astrological terms 'Cazimi position' and 'combust' for the planet Mercury (17 seconds of arc, and 5°, respectively, from the sun).

%) Table 4: There is an extensive astrological doctrine about the colour of planets (e.g. Bouché-Leclercq o.c.: 313-315; Pingree, D., 1978, *Yavanajātaka*, o.c., ii: 248f): 'White' (*leukos*) in general refers to Jupiter although it is also used for Venus, *leukotaton* (Plato, *Republic*), *leukē* (Teucer, =Valens and 'Rhetorius'), *ksanta* (Ptolemy), *alba* (George of Antioch); and 'red' normally refers to Mars (although it may also be seen to refer to the Sun or Venus (in the dubious 'Palchus'), while George of Antioch uses it for the Sun at dawn. If the other geomantic names in the table could be construed to refer to individual planets rather than to relations between planets, I would interpret the colour references in this light instead of looking for interplanetary clues. However, this is a rather fine point, given the emphasis on planetary correspondences (i.e. links with individual planets) of the geomantic figures. The important point is that there is a choice of possibilities for attributing a specific astrological meaning to the term *leukotēs*.

\$) Table 4: This point needs further evidence.

@) Table 4: Although there is no Greek term and therefore no astrological interpretation for this configuration in the present manuscript, all the other manuscripts including the Arabic one list in this row the standard term for conjunction (*coniunctio*, *ijtima*'), the 0° aspect.

§) Table 4: Although there is no Greek term and therefore no astrological interpretation for this configuration in the present manuscript, the 'burned path' is very much an astrological concept; cf. Pingree's rendering of Dorotheus Sidonius' *Carmen Astrologicum* V 5, 8 (Pingree 1976 o.c.):

'If the Moon in its motion is in the path which the learned call "the burned path" (the burned path is the middle of the equator, which is Libra and Scorpio) and if the Moon is in the last degrees of a sign, then it is according to this in the term of Saturn or Mars, and none of the terms which are at the end of the signs are harder than the terms of these two.'

⁹³ Pingree 1978: ii, 411 (1959); cf. Neugebauer, O., 1969, *The exact sciences in Antiquity*, New York: Dover, 2nd edition; 1st ed. 1957, Providence (R.I.) [check] : Brown University Press.

which, considering the influence of Indian (largely Hellenism-derived, as he has conclusively shown) astrology on Arabic astrology,⁹⁴ almost certainly has an Arabic counterpart. It contains the following parameters or boundary conditions:

‘G[amma]	= first visibility in the East
Ph[i]	= first stationary point = <i>sthitva</i> [Sanskrit]
Th[ēta]	= opposition
Ps[i]	= second stationary point
Ō[mega]	= last visibility in West = <i>asta</i> [Sanskrit]
Phi → Psi	= retrogression = <i>vakra</i> [Sanskrit]

This would largely make astronomical/astrological sense of the puzzling ‘thresholds’: Phi would be the point where the planet becomes retrograde; probably the ‘entrance threshold’ i.e. ‘stationary point when coming in’; while Psi would be the point where the planet becomes direct again, i.e. the ‘exit threshold’ i.e. ‘stationary point when going out’.

Alternatively, the thresholds might be taken to refer to the ‘orb’: since the planets are in constant motion, it is only during an infinitesimal fraction of time that they make a specified angle vis-à-vis each other, e.g. the exact angle by which a particular aspect is defined; assuming that the actual influence of that condition is likely to last considerably longer, astrology reckons not only with the exact angle but with a sector O:

$$O = A \pm B,$$

where A = the exact aspect angle as defined, and

B = a specific number of degrees (many astrologers take as much as 10° in the case of aspects involving the Sun).

B and -B then constitute boundary values for the aspect to become effective. In other words,

$$\text{orb} = | B |$$

Also there are in-going and outgoing aspects, as well as increasing and decreasing ones.

Even where the present Greeks manuscript fails to specify a geomantic name for some of the sixteen configurations, there is overwhelming evidence for an

⁹⁴ Ramsay Wright, R., ed. & tr., 1934, *al-Biruni's Elements of astrology*, London; Alberuni, 1910, *Alberuni's India*, tr. Sachau, 2 vols

astrological reading in the other columns, referring to the Arabic, Latin and Provençal manuscripts.

This concludes, in my opinion, the case for a primarily astrological reading of the basic geomantic nomenclature. It means the demise of the ‘Girl’-with-the-‘Beard’: both concepts, however featuring in the final geomantic corpus and however conducing to juicy anecdote of the kind on which divinatory repertoires thrive, dissolve in the austere abstractions of planetary motion. We see that even the geomantic term ‘prison’, so becoming in the soap opera series, means actually a simple astrological term referring to dejection, i.e. when a planet finds itself opposite the sign or house of its rulership. The various hurdles, upper and lower thresholds, to be taken in life, when entering and (could it be less fair) again when going out, and all the other puzzling anecdotal terms of the geomantic repertoire, turn out to be reduced to very technical characteristics of planetary positions. Even if some of my astrological explanations may turn out to be capable of improvement and replacement by others, the overall message is clear: in its least adulterated form the geomantic nomenclature is astrology of a particularly technical nature.

5.3. Semantic erosion in the Arabic nomenclature

With the extremely positive results of our analysis of the Greek geomantic nomenclature, let us now go back to the Arabic version.

Let us not forget that geomancy as such was (if we may accept Ibn Khaldun’s view) already an attempt to simulate the effects of astrology without having to command the very complex skills needed for the astrological apparatus itself. As one came to be further and further removed from an understanding of the underlying astrological meanings of the nomenclature, more and more space opened up for systematic bricolage on the basis of iconographic fantasy. This bricolage could all the more satisfactorily converge towards a consistent pattern (e.g. a remarkable fit between nomenclature and dot pattern) because one was not longer impeded by the kind of genuine astrological knowledge which would have made it only too clear that the link between dot pattern and nomenclature was merely conventional, arbitrary, and not substantial.

It is striking that already in the Arabic nomenclature itself we can detect this same process of lessening understanding of the underlying astrological meanings. As the Arabic geomantic nomenclature stands, it is extremely heterogeneous (appealing to six different semantic domains) and rather meaningless (certainly from an astrological point of view), but it does generate associations: with profound emotions (success, loss, glory, joy, union), with gender and generational oppositions, with a life's road full of hurdles which have to be taken. It is not surprising that such a semantic hotchpotch produces a successful divination systems which managed, in all sorts of transformations, to spread across half the world: vagueness, and absence of internal systematics, render it possible for each diviner and each client to project new and topical personal and local circumstances as well as deep-seated archetypes onto the system. The *'ilm al-raml* is a divination system with the semantic structure of a late twentieth-century soap opera! But how could it ever have been designed that way? The answer is that it was not: it was designed in a different, far more specifically astrological way, and became what it is under the impact of the eroding and streamlining effects of the human mind – it was popularised, turned into symbolic and conceptual pulp.

There is no denying that besides the predominant astrological reference there is in Islamic geomancy a secondary, conventionalised source of nomenclature: the imagery based on the strictly graphic appearance of the geomantic figures. If the figure  is associated with incarceration, this can hardly be unrelated to its closed, cyclical form. The same applies when  is called 'path',  'inward threshold' (where the road ends – even more conspicuous in the Arabian notation, .

The 'beard cluster' is quite suitable to argue the erosion and the secondary, graphical re-interpretation of the geomantic system already in the Arabic form as presented in Tannery's table:

5.4. The puzzling beard complex

It is noteworthy that the Arabic column in Tannery's table contains multiple entries for the following configurations:

- ☉☉☉ *al-lahyan* (the beard, a sign of masculinity and seniority but not an established astrological term; contrary to what was probably the original word here, *al-ahyan*: ‘propitious times’) and
- ☉☉ *al-djaudala*, ‘downy, feathery’; *kausadj*, ‘with a scarce beard’; *farkh*, ‘chick’; *farkh* could also be a Persian loan word⁹⁵ meaning ‘joy’ and in that case it does refer to a specific astrological concept, see above; and
- ☉☉ *rayat farah*, ‘flag of joy’; *al-atabat al-dakhilat*, ‘threshold when entering’

It should be noted that the orthographic difference between *farkh*, ‘chick’ and *farah*, ‘joy’ is merely one dot on the č in the former word, and that dot’s presumably spurious addition might well have been the humble origin of the whole series revolving on beard and varieties of beardlessness: ‘joy’, contrary to beard, is a proper astrological concept, referring to a situation when a planet is in the sign or house of its rulership, e.g. ♁ in ♈ , ☉ in ♌ , etc.

Such sheer textual corruption seems to offer the best explanation for the appearance of the beard/ scarce beard/ clean cheek complex in the Arabic series.⁹⁶ Could it be a mere accident of a confusion between *farkh*, ‘chick’ (i.e. ‘downy cheek’) and *farah*, ‘joy’ i.e. planetary rulership? It is noteworthy that in Hugo’s translation from the Arabic the name of the configuration ☉☉☉ retains, in ‘*barbatus-ridens*’ (‘the laughing bearded man’), both the beard and the rulership aspect. Would this be an indication that the Arabic geomantic texts, even if the subsequent transmission of geomancy over a large part of the Old World is largely due to them, are not the most original version but in themselves are translations – perhaps from the Latin, Hebrew or Greek, or even, like Arsenius’ Greek rendering, from the Persian? An analysis of this translation against the various, far from identical, Arabic versions that exist of al-Zanāṭī might be very revealing on this point, but this must wait till I have located Arsenius’ text.

Meanwhile we have to admit that the three multiple entries in Tannery’s table, including the beard complex, may also be attributed to a secondary, merely graphical reading of the signs by those employing them in the early

⁹⁵ As the iranologist S. Shaked tells me.

⁹⁶ Of course, the beard as a sign of male authority and symbolic purity (as against the threats from adolescent men, and from women) is a widely ramifying theme in the cultures, mythology and iconography of the Ancient Near East, Graeco-Roman Antiquity, and the Islamic World. Further research is needed on this point. I would also suggest that the beard complex, once established in geomancy, in its turn probably produced the classification of Southern African geomancy-related four divination tablets according to gender and generation; cf. van Binsbergen, 1994 and in press (a), (b).

second millennium CE. Such a secondary reading tallies very well with Ibn Khaldun's historical explanation of the rise of geomancy as a poor man's astrology, in the hands of those who had no longer access to the detailed and complex astrological science with its sound foundation in computational astronomy. Above I have demonstrated that most geomantic nomenclature has an astronomical (or astrological) background. If this background fades away in the hands of ignoramuses, they will find themselves deprived of a systematic aids to remember the names and oracular implications of the sixteen configurations, and instead will resort to far-fetched aids to memory.

If we imagine a human face with the top (the single dot) of the 'alahyan'/'beard' sign  projected onto the place of the mouth, the appropriateness of the term 'beard' will be immediately apparent. The 'jaudala'/'downy'  sign is linked with the 'beard' sign through two simple transformations: the beard sign is rotated 180°, and then the contents of the two bottom rows is reduced from two dots to one dot each – as if the beard had been thinned out or had not yet reached its full maturity! Now that this rather convincing case reminds us of the fact that the geomantic symbols may have been rotated in the process of naming or re-naming, we may look at the 'flag of joy'  with different eyes. The sign could be seen as a flag on a pole – although this effect is belied by the 'flag's symmetrical placement on the top of the three vertical dots forming the pole. Rotating the symbol 180° produces the sign for 'al 'ataba al-kharidj'/'outward threshold', for which Tannery records no dual meaning. A hidden obscene implication of the sign becomes now apparent: it resembles an erect penis supported by two testicles, – surely a 'flag of joy' (the top corresponding with the swollen gland, symmetrically placed on the shaft) from the point of view of male chauvinism which was taken for granted in the Ancient Near East, Graeco-Roman Antiquity and medieval Islam. If specific knowledge is lost, obscenities (involving bodily parts and functions which are always close at hand) form excellent aids to memory.

Meanwhile this suggestion of the signs having been rotated prior to receiving the names under which they were subsequently mainly known, implies the possibility of a much longer process of preparation, experimentation, transmission and erosion for geomancy than would correspond with the image of having sprung forth fully-fledged and practically without preparation.

5.5. Is the Arabic nomenclature truly older than the Greek one?

Our analysis so far has brought us to a point where we may begin to question the conventional wisdom that geomancy starts with the Arabs, and to consider the existence of hypothetical earlier forms, less eroded and more consistently astrological, than the Arabic versions at our disposal.

There is an extensive literature concerning the translation, into Greek and Latin, of pre-existing Arabic geomantic texts; therefore, the overall historical situation would assign greater age to the Arabic texts, so that the Greek and Latin versions would be secondary derivations. But the case is not so straightforward as all that. When Tannery⁹⁷ describes ‘La géomancie chez les Latins’, he deals with MSS which, through an oversight or deliberately, he fails to assign a date to; as a non-Latinist, I am certainly incapable of assessing whether these texts belong to either the early second millennium CE (which would make translations from the Arabic) or to Late Antiquity (which would make them parallel developments to, or possibly sources for, the Arabic texts). By the same token, the accepted wisdom is that the Greek texts, marked by their neologism *rabolion* which does not mean anything in Greek but phonetically refers, directly or via a Persian corruption, to the Arabic *raml*, are necessarily secondary derivations.

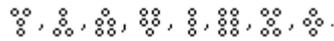
Then how could we find in a Greek manuscript a geomantic nomenclature that is less eroded than the standard Arabic version?

The easy answer would be to hypothesise the existence of an early, unadulterated, consistently astrological, Arabic geomancy from which both the later adulterated Arabic and the Greek unadulterated manuscript 2419 would derive.

But there is a shocking alternative to this attractive view. One Greek manuscript – the Codex Harleianus 5596, British Museum, from the 15th century CE – ⁹⁸ presents a simplified geomancy based not on tetragrams but on trigrams, i.e. only three lines of one or two dots each – out of which of course only eight different configurations can be constructed:

⁹⁷ 1920 o.c.

⁹⁸ A. Delatte (1927, *Anecdota Atheniensia*, vol. i.: *Textes grecs inédits relatifs à l'histoire des religions*, Bibliothèque de la Faculté de Philosophie et de Lettres de l'Université de Liège, fasc. 36, Liège: Vailant & Carmanne/Paris: Champion, pp. 387-396.



At first glance one would consider this to be merely a simplified, adulterated geomancy derived from an richer Arabic original. But why could it not be the other way round: a more original, proto-geomancy inspiring a subsequent Arabic development, and then dating back to perhaps the third quarter of the first millennium CE, or even earlier?

Delatte describes this manuscript in the following terms:

“Cléromancie astrologique: ‘Ce petit traité de cléromancie décrit la valeur prophétique de vingt quatre combinaisons (*skhēmata* ou *klēroi*) de sept demeures (*oikoi*) ou signes figurés par des points. Ces signes, à leur tour, sont formés vraisemblablement par les diverses dispositions de trois nombres, pairs et impairs, de même que, dans le traité arithmomantique qui précède, les figures sont formées des combinaisons de quatre nombres pairs et impairs (cf. infra, ad. codic. Paris 2494). En outre, chacun d’eux représente une planète et des signes du Zodiaque, comme on le voit dans l’introduction et dans une figure placée au f. 4v. Voici quels sont ces rapports:⁹⁹

- ‘☉ Cronos’ ♄ (♄, ☿)
- ‘☽ (or ☿) Zeus’ ♃ (♃, ♃)
- ‘♂ Arès’ ♂ (♁, ♁)
- ‘♀ Aphrodite’ ♀ (♀, ♀)
- ‘☿ Hermès’ ☿ (♁, ♁)
- ‘☾ Lune’ ☾ (☾)
- ‘☼ Soleil’ ☼ (☼)’

Could this be a proto-geomancy providentially preserved to reveal this system’s true, Greek-language i.e. Hellenistic, origin?

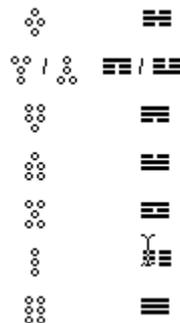
The number of eight configurations is interesting in the light of the fact that, given the astrological orientation of geomancy, the emphasis is on planets not signs. Well, one does not need four lines, yielding 16 different configurations, to accommodate all seven planets known in Antiquity: ☉, ☽, ♀, ♀, ♂, ♃, ♄; after allocation of these seven planets we would still have to fill the eighth slot ad hoc, as in the case discussed by Delatte, where 5 has received two figures instead of only one.

This tallies with the stress on planets, rather than on zodiacal signs, in geomancy, and marks a rather early phase in the development of Hellenic and

⁹⁹ Delatte does not give the astrological glyphs but presents exactly the same information in discursive French prose.

Hellenistic astrology.¹⁰⁰ As a non-specialist I also wonder whether the names of Greek deities would have been used – as usual in Antiquity – to designate the planets, if this text in the Codex Harleianus 5596 hailed from post-geomantic, Christian Byzantine times (the historically less controversial interpretation) instead of from Late Antiquity or earlier.¹⁰¹

Where would the idea have come from, of graphically representing up to eight different options in a divinatory system, by three lines of single or double dots? To my knowledge, such a system does not seem to have any precedents in Greek and Roman Antiquity, Egypt or the Ancient Near East. It could however very well have come – through whatever detours, like so many other Chinese intellectual products – from China, where our Greek geomantic trigrams have obvious counterparts in the eight sacred trigrams (*pa kua*) that permeate the entire Chinese cosmology. Making use of the fact that, in the Chinese symbolism, a broken line means odd and an unbroken line even, one could match the Greek trigrams in the Codex Harleianus 5596 with Chinese ones in the following way:



The Chinese trigrams are of great antiquity,¹⁰² communications between Europe and China were relatively open during certain periods in Late Antiquity when e.g., from the 1st century CE onwards, silk was the main luxury article

¹⁰⁰ Cf. Bouché-Leclerc, o.c., and Tester, o.c.

¹⁰¹ A quick glance at the Catalogue, o.c., which contains much Byzantine astrology, should suffice to demonstrate the futility of this argument, but I do not have that publication available right now.

¹⁰² In the Chinese tradition, they are attributed to a prehistoric culture hero king Fu Hsi, and they actually appear on artefacts from the first millennium BCE; the oldest tangible, archaeological evidence for the I Ching ‘omen compendium’, featuring hexagrams traditionally considered to be constructed out of combinations of pre-existing trigrams, dates from the 1st century CE: Ngo Van Xuyet, 1976, *Divination, magie et politique dans la Chine ancienne: Essai suivi de la traduction des “Biographies des magiciens” tirées de l’ “Histoire des Han postérieurs”*, Bibliothèque de l’Ecole des Hautes Etudes, Sciences religieuses, vol. lxxviii, Paris: Presses Universitaires de France.

among the Roman elite. After a chance diffusion of the idea of the Chinese trigrams (most probably without any of the attending Chinese cosmology and divination techniques) one can imagine how only later such a proto-geomancy was diversified and complicated by replacing, under whatever influence or inspiration, the three lines by four, which then necessitated twice the number of configurations to be filled with meaningful correspondences and names. At least two possibilities seem to present themselves for accommodating 16 configurations:

- (a) A doubling of the presumed original planetary attributions, so that each planet takes care of a pair of configurations with minor differences in meaning; while this only fills 14 configurations, one needs an additional 2 to fill, e.g. by Caput Draconis (☊) and Cauda Draconis (☋), abstractly calculated astronomical points which significantly each occur only singly, not (like the planets) doubly – even although they are further treated at a par with the other planets. (It would look as if this was finally implemented, so as to produce classical or advanced geomancy)
- (b) The introduction of a fresh, if related, basis for all sixteen configurations; this basis could not be found in the otherwise so prominent lunar mansions,¹⁰³ but it *could* be found – and the extensive evidence from Greek manuscript 2419 suggests it *has* been found – in the very rich astrological doctrine on the various interrelations between planets, and between planets and signs, such as defined under the heading of planetary dignities.¹⁰⁴ (This would then presumably constitute the first astrological form of geomancy.)

¹⁰³ Of which there are 27 or 28, and not 16; but one could imagine yet a further development towards complexity in geomancy, working with five lines, which yields 32 configurations, i.e. sufficient to accommodate all lunar mansions, which a few more attributions to be added ad hoc. In fact, a five-line geomancy does exist, not only in the standard commentaries to Dante, but also in one of the most popular modern ‘books of fate’, the pseudo-epigraphical *Napoleon’s Book of Fate*, – which admittedly does not seem to be older than the 19th century CE, and which has hardly penetrated outside the British Isles; cf. *Napoleon’s Book of Fate and Oraculum*, ca. 1925, London: W. Foulsham & Co; Parker, B., ed., 1988, *Napoleon’s Book of Fate: Ancient Egyptian Fortune-Telling for Today*, by H. Kirchenhoffer, 1822, revised and edited by B. Parker, Wellingborough: The Aquarian Press; Skeat, T.C., 1954, ‘An early mediaeval Book of Fate: the Sortes XII Patriarcharum: With a note on “Books of Fate” in general’, *Mediaeval and Renaissance Studies*, iii: 41-54.

¹⁰⁴ Further research would have to extend the detailed analysis of the nomenclature of the Arabic and Greek manuscript 2419 version to the Latin and Provençal versions. Here the Hermetic manuscript 7349 might turn out to occupy a key position, especially if it can be analysed against the wider family of Hermetic astrological texts, and suggestions can be made as to the likely date of its production and/or copying. Cf. Gundel, W., 1936, *Neue astrologische Texte des Hermes Trismegistos*, Abh. Bayer. Ak. Wiss. Philos.-his. Abt., N.F. 12.; Festugière, R.P., 1943, *La révélation d’Hermès Trismégiste*, I: *L’astronomie et les sciences occultes*, Etudes bibliques, Paris: Lecoffre/Gabalda, 2e éd., 1950; Massignon, L., 1950 (1943), ‘Inventaire de la littérature hermétique arabe’, appendice iii, in: Festugière, o.c., pp. 384-400.

This exploration into the possibility of a Greek or Latin (or, for that matter, Pahlavi, Hebrew, or Mesopotamian) Chinese-influenced proto-geomancy in Late Antiquity or the early middle ages preceding any Arabic version, is highly hypothetical. For the time being I do not think we should try to proceed beyond the insight into the astrological basis of geomancy, and into the eroded nature of even the standard Arabic version of that occult science.

In a next phase of the research I hope to develop an argument according to which certain astrological elements in the various geomancies can be used as indicators for periodisation. E.g. although ♁ and ♃ were already available in Hellenistic astrology¹⁰⁵ they are reputed, like other immaterial points such as ⊕,¹⁰⁶ to have only become a major topic in astrology with the Arabs. Or again, while we now take the correspondence between certain planets and signs for granted, different attributions have been made in the long history of astrology; now since, as the prominent astrologer Hamaker-Zondag remarked,¹⁰⁷ the correspondences as found in the medieval and Renaissance body of geomantic texts in the European tradition go against the pattern as agreed on in mainstream astrology, this may help to pinpoint the period of origin of geomancy as a breakaway from mainstream astrology.

6. CONCLUSION

An analysis of one of the key features of the geomantic family of divination systems, the nomenclature of the sixteen configurations, has yielded important insights for the history of the system before it appeared, fully fledged, in documentary evidence towards the end of the first millennium CE.

The question as to which particular nation, ethnic group, language group, religion or sect would have been the system's cradle, turns out to be rather

¹⁰⁵ Bouché-Leclercq, A., 1899, *L'Astrologie grecque*, Paris: Leroux, p. 122-123 and passim; caput draconis: *anobibazōn*; cauda draconis: *katabibazōn*.

¹⁰⁶ The astrological symbol of the earth, and of the Pars Fortuna; its iconography of course shows the chthonic foursome in the form of a cross.

¹⁰⁷ Hamaker-Zondag, K., 1981, *Oude Europese voorspelkunst*, Amsterdam: Schors; a useful summary of these correspondences in European geomancies since the middle ages (virtually all based on Arabic sources) is also offered in: le Scouézec, G., 1965, 'Géomancie', in: Le Scouézec, G., H. Larcher & R. Alleau, 1965, *Encyclopédie de la divination*, n.p.: Tchou, pp. 392-459.

irrelevant. Although further detailed analysis of the many other features of the system may reveal certain culture-specific contributions, it is clear that as an intellectual development geomancy situates itself primarily within the international free floating, increasingly universal repertoire of advanced astrology, which emerged as a product of Hellenism and already then, as in its later development, absorbed and transformed within a new unity the many heterogeneous inputs of the rival yet converging intellectual, cosmological and religious idioms of Antiquity and the early middle ages. The point is not to deny that identifiable intellectual traits specific for a national culture, a philosophical school, a creed, have found their way into the body of advanced geomancy, *but that such contributions were invariably filtered or mediated through astrology*: e.g. if there was ever a Pythagorean contribution to geomancy in terms of number symbolism, this would only be indirectly reflected in geomancy to the extent to which the number four (which, and not by accident, the number of the *earth*, which gave geomancy its name) found expression in the astrological doctrine of the four cardinal, fixed and cadent signs, and in the doctrine of aspects which, for each different aspect, each of the sacred numbers featuring as divider of the total circle of 360° – thus yield 360° (or 0°), 180° , 120° , 90° , 72° , 60° , 45° etc. as aspects to be considered; cf. Appendix 1.

This view also helps to bring the astounding achievement of geomancy in perspective: it was as an adulterated form of astrology, that geomancy conquered the world – greatly facilitated by the fact that a large part of that world had already given in to astrology as an international, boundary-crossing, intellectual framework in which to discuss fate, character and the vicissitudes of life and relationship in general.

While earlier, more primitive forms of ‘striking the sand’ have been attested, and while my research in progress suggests an important contribution from north-west Africa in towards the chance procedures and iconography of the geomantic system as a whole, in the case of geomancy at least astrology yet cannot be said to be the secondary imposition it was in the case of chiromancy, numerology, oniromancy, herbalism, mineralogy, etc. Our decision, in the present argument, to concentrate on the history of the geomantic nomenclature was strategic: it has begun to persuade us that the central corpus of the geomantic family can be largely understood on the basis of the state of astrology in Late Antiquity, possibly with some modifications from subsequent developments in Indian and Arabic astrology. It remains a matter of academic

interest, and national pride perhaps, to pinpoint the specific milieu (Harranite, Arabic, Jewish, Persian) in which the true, astrological geomancy was first formulated as a total package, but this must be seen as merely a particular intellectual innovation within the well-established tradition of astrology.

And the latter field is no longer *terra incognita*, since the twentieth century has seen a host of studies (including Neugebauer's, Franz Cumont's, the *Catalogus*¹⁰⁸ of the Greek astrological corpus whose publication was initiated by the latter, more recently Pingree's studies) which have made the history of astrology one of the best documented fields of ancient studies, and one in which continuity can be traced and demonstrated not so much by the centuries, but by the millennia.

I have broken down the standard geomantic package into fourteen constituent items. When the detailed analysis of merely one of these items, the geomantic nomenclature, already offers so much that is exciting and that questions established wisdom in this field, one wonders what the results will be of similar analysis of the remaining items.

¹⁰⁸ *Catalogus*, 1898-1951, *Catalogus Codicum Astrologorum Graecorum*, ed. F. Cumont, F. Boll et al., vols. 1-12, Bruxelles.

Les seize figures du sikidy.

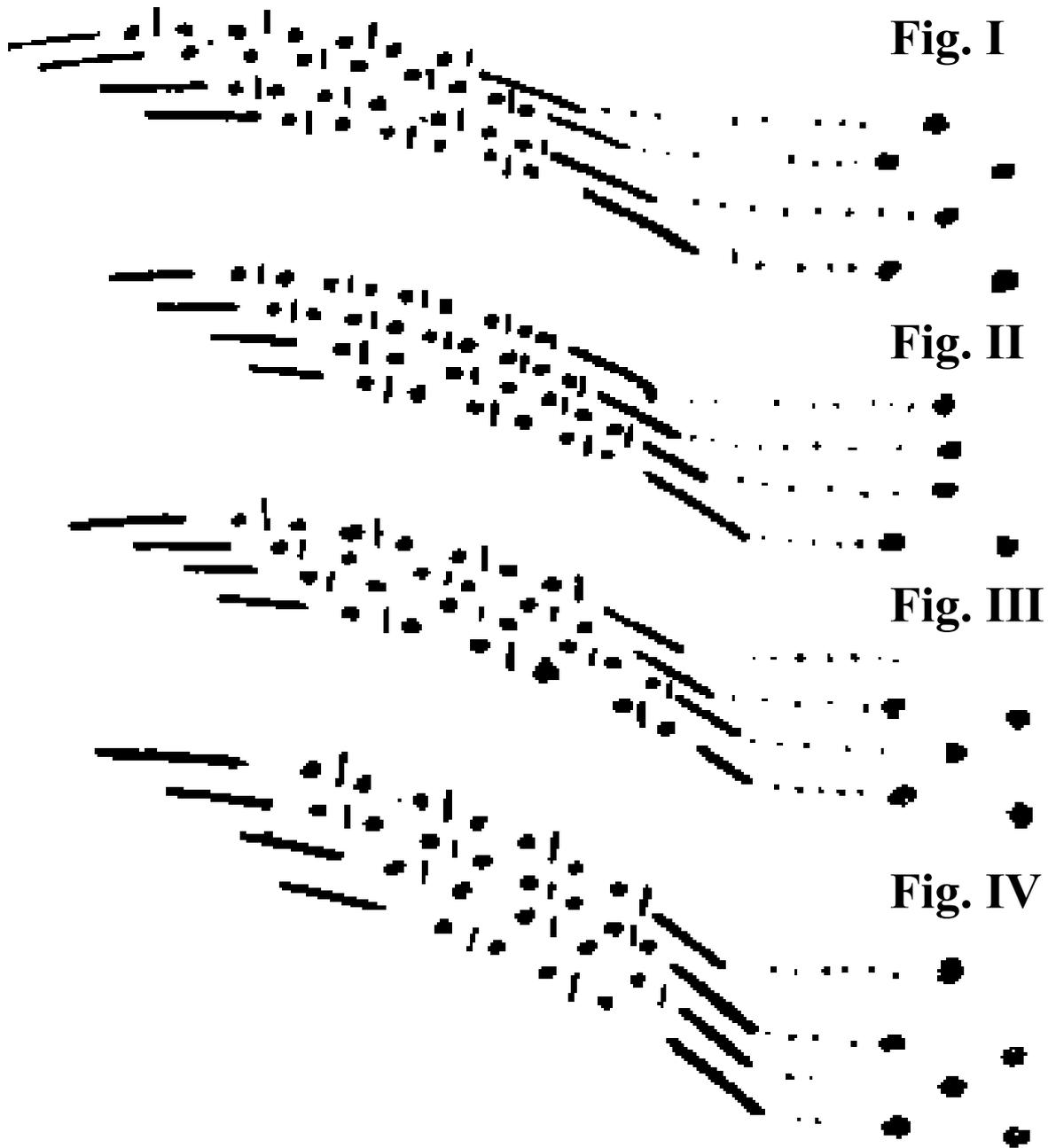
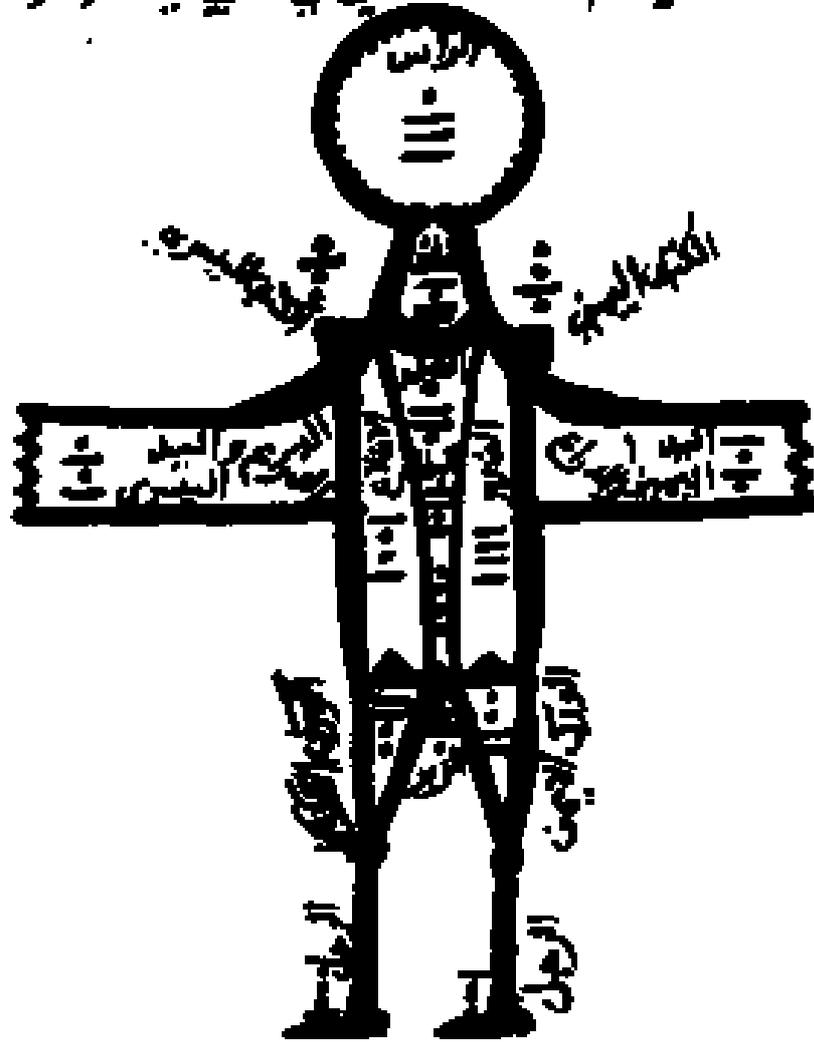


Plate 1. An illustration from a pioneer, 19th century study of geomancy on Madagascar: Ferrand, G., 1891-1902, *Les musulmans à Madagascar et aux Iles Comores*, 3 vols (1891, 1893, 1902), Paris: Ernest Leroux, p. i 76. It nicely visualises how ‘striking the sand’ (*ḍarb al-raml*) with a stick produces a series – of change length – of dots; counting subsequently yields, for this series, the value ‘even’ or ‘odd’, which then defines the entry ‘two dots’ or ‘one dot’ on one of the four lines of a geomantic tetragram to be formed. For each tetragram therefore one has to strike four times. For complete geomantic themes one has to strike sixteen times, but of course this only yields the four initial mothers; the remaining twelve figures have to be calculated following the algorithm set out in my argument.

أمراض البلغم بأعجزهم وتقدر نفس على هذا القياس وهذا
صورة بنو آدم لاجل ما تصدق على الطريق أي عضو هو



يصل يوم معرفة الحبايا والكسوز والله هاجم جاناً الرنة
معرفة

Ms. arabe 2631, f° 64 v°:

TALISMAN CONTRE LES MALADIES QUI PEUVENT ATTEINDRE
LES DIFFÉRENTES PARTIES DU CORPS DE L'HOMME

Plate 2. 'Geomantic man', from a Paris manuscript attributed to Tūmṭum al-Hindi. *Melothesia* (the doctrine of specific correspondences between parts of the human body on the one hand, celestial bodies, zodiacal signs and immaterial astrological points on the other) formed an integral part of classical astrology (cf. Bouché-Leclercq 1899 o.c.; Pingree 1978), and from there this approach was copied into geomancy.

LIBER SECVNDVS

CXCV

CHARACTERES VENERIS.

Ab amissione ☐ ☐ ✕ △ ✕ ☐ ✕ ✕ △ ⊗

A puella ♀ ♀ † † † †

CHARACTERES SOLIS.

A fortuna maiore, ☐ ☐ ☐ ☐ ☐ ☐ ♀ ♀

A fortuna minore. ☐ ☐ △ △ △ ☐ ♀

Charasteres Martis.

A rubeo ☐ ☐ ☐ △ ☐

A puero † † ♀ ☐ † †

Characteres Iouisi

Ab adquisitio ☐ ☐ ✕ ☐ ☐ ☐ ☐ ✕ ✕ ☐ ☐ ☐

A laetitia ☐ ☐ ☐ △ ☐

Characteres Saturni

A carcere ☐ ☐ ☐ ☐ † △ ☐ ☐

A tristitia ☐ ☐ ☐ ☐ ☐

Characteres capitis Draconis.

☐ ♀ ♀ ☐ ☐ ☐

Characteres causa Draconis.

☐ ☐ ☐ △ △ △

Plate 3. Geomantic glyphs (from Agrippa, as copied in le Scouézec, o.c.)

APPENDIX 1: AN OVERVIEW OF WESTERN (≈ PTOLEMAEAN) ASTROLOGY

For a good understanding of the preceding argument, a basic knowledge of the Western (more or less: Ptolemaean) tradition in astrology is needed. The following pages offer an overview in tabulated form.

SIGNS	
	the first sign begins at the point where ☉ is at the spring equinox, and from there one counts counter-clockwise
♈	(Aries) energetic, passionate, direction, head
♉	(Taurus) slow, phlegm, citizen, practical, neck, throat
♊	(Gemini) restive, vagrant, mediate, book, commerce, science, arms, hands, breath
♋	(Cancer) slowly butting, diplomat, music, breast
♌	(Leo) constant force, leader, education, spinal column, heart
♍	(Virgo) weak irregular movement, melancholy, subordinate, intestines
♎	(Libra) lively, quiet, mediator, realist, leader of associations, loins, kidneys
♏	(Scorpio) slow but constant, doctor, metaphysics, leader, sexual organ, throat, nose
♐	(Sagittarius) vagrant, idealist, monist, sports, legs
♑	(Capricorn) slowly butting, ambition, steward, natural science, politics, knees, skin
♒	(Aquarius) constant slight movement, humane, intuitive, sense of community, lower legs
♓	(Pisces) slight uneven movement, phlegm, altruist, feeling, inspiration, feet, womb

HOUSES	
	the first house begins at ASC (=ascendant), and from there one counts counterclockwise; houses only coincide with signs if 30° house system is adopted (i.e. no allowance is made for geographical latitude) and if ASC is at 0° ♈ 0
1	bodily, psychological and intellectual constitution
2	finance, mobile property
3	siblings
4	parents, heredity
5	animal instincts, offspring
6	subordinates, working relationships, illnesses
7	association, marriage, the counterpart
8	death
9	higher spiritual life, morality
10	profession, social position
11	friends
12	seclusion, self-denial, purification

PLANETS
☉ Sun: life force, will to power, father, heart, eyes
☾ Moon: fertility, assimilation, mother, metabolism
☿ Mercury: mediation, intellect, commerce, science, literature, nervous system
♀ Venus: sexuality, veins, kidneys, throat, luxury, art
♂ Mars: accumulation of heat, muscular force, courage, nose, force, gall, sexual organs, technique, struggle
♃ Jupiter: increasing, liver, fat, swelling, expansion, journey, higher studies, finance, the law
♄ Saturn: shrivelling, bones, skin, spleen, kidney stone, lumps, hearing, concentration, ambition, bottom, conservation
♅ Uranus: revolution, finer nervous system, intuition, speed, occultism
♆ Neptune: the occult, music, chaos, intoxication, inspiration, psi, fraud
♇ Pluto: beginning and end, secrecy, turning point
immaterial points include
⊕ Pars Fortunae=A+ ☾-☉
A (Ascendant) parents, heredity
MC (Medium Coeli) prime of life
♈ (Caput Draconis, ascending node: northern end of intersection ecliptic/lunar orbit); interpretation varies
♏ (Cauda Draconis, descending node: southern end of intersection ecliptic/lunar orbit); interpretation varies

ZODIAC and LUNAR MANSIONS
The planets including ☉ and ☾ all more or less orbit in the ecliptic plane. By a perspective illusion, the border of the ecliptic appears to be formed by twelve optical clusters of fixed stars, which together form the zodiac. Astronomical convention has been to allocate 1/12 or 30° of the zodiac's 360° to each sign. Depending on whether one reckons with the apparent lunation (of which the earth's own movement is a component), or with the objective sidereal lunation, it takes the ☾ between 27 to 29 days to complete its course along the ecliptic; one can calibrate the zodiac so as divide it in 27-29 equal portions, one to be occupied by the moon on each day between one New Moon and the next. These points are called lunar stations or mansions, and in addition to their technical astronomical and chronological significance (they formed the oldest stellar clocks), they have played an enormous role in astrology, having been personified, saturated with demonic attributions, brought to bear on the interpretation of heavenly bodies passing along them, etc. One standard way of naming the lunar mansions is by reference to the head, body (belly) or tail of the zodiacal sign in which they find themselves. This symbolism must also be the origin of the designation Dragon's Head and Dragon's Tail, for the ascending and descending lunar node.

ASPECTS	
aspect=the longitudinal angle between any two astrological elements; \$=major aspect; #=minor aspect; one speaks of incoming and outgoing aspects, depending on the position (cf 0°V0) of the faster moving of the two planets involved; and of increasing or decreasing aspects, e.g. if on subsequent moments of time the angle is 85°, 87°, 90°, 92°, the □ aspect is at first increasing to full, and then decreasing.	
♌	conjunction, 0°=360°/∞, conceivably 360°/1: strong, intensification of planetary contents \$
♌	opposition, 180°=360°/2: hard, equilibrium or separation \$
♌	inconjunct (quincunq), 150°=360°/(12/5): fairly strong, vague discomfort, tension #/\$
±	biquintile, 144°=360°/(5/2): mild, weaker than quintile, creative #
□	sesquiquadrate, 135°=360°/(8/3): hard, expulsion, elimination #
△	trigon, 120°=360°/3: mild, harmony, what ever comes automatically \$
□	square, 90°=360°/4: hard, obstacles to be overcome, tension, conflict \$
Q	quintile, 72°=360°/5: mild, self-expression and sensation #
*	sextile, 60°=360°/6, mild: hesitation, assistance from others \$
∠	semi-square, 45°=360°/8, hard but less than square: imitation #
⊥	semi-quintile, 36°=360°/10: ? #
∨	semi-sextile, 30°=360°/12: mild, small inconveniences #
<p>MC</p> <p>♃ at 179° from 0°V0 = 29 II 0</p> <p>ASC</p> <p>☉ at 89° from 0°V0 = 29 II 0</p> <p>☉ ♃: Sun in quartile aspect with Jupiter</p>	

PLANETARY DIGNITIES OR RULERSHIPS															
	☉	☽	♀	♀	♂	♋	♌	♍	♎	♏	♐	♑	element (triplicity)	dynamics	gender
♃	4	0	0	-5	5	1	-4	0	0	5	fire	cardinal	m		
♄	0	4	3	5	-5	0	2	-4	0	-4	earth	fixed	f		
♅	0	0	5	2	0	-5	3	1	0	0	air	common	m		
♆	0	5	0	0	4	4	-5	0	4	0	water	cardinal	f		
♇	5	0	0	0	2	1	-5	-5	0	2	fire	fixed	m		
♈	0	0	5	-4	0	-5	2	0	-5	0	earth	common	f		
♉	-4	0	1	5	-5	0	4	1	0	-5	air	cardinal	m		
♊	0	-4	0	-5	5	3	0	4	3	4	water	fixed	f		
♋	3	0	-5	0	2	5	0	0	0	2	fire	common	m		
♌	0	-5	3	1	-4	4	5	0	-4	0	earth	cardinal	f		
♍	-5	0	1	2	0	0	5	5	0	0	air	fixed	m		
♎	0	2	-4	4	1	5	0	0	5	0	water	common	f		
				≈♂	≈♂	≈♂									
	b	b	n	b	m	b	m	m	m	n					
	fast					slow									
+5 rejoicing (in sign or house of its rulership); +4 exaltation; +3 as diurnal ruler of triplicity; +2 as nocturnal ruler of triplicity; +1 as participant of triplicity; 0 peregrine (alien); -4 cadent; -5 dejected; b=benefic, m=malefic, n=neutral															

It uses the traditional sixteen geomantic figures and the astrological framework we all love! Wim van Binsbergen, "The Origin of Islamic Geomancy in Graeco-Roman Astrology". James Sibree, "Divination among the Malagasy, Together with Native Ideas as to Fate and Destiny". Marion Smith, "The Nature of Islamic Geomancy with a Critique of a Structuralist's Approach". Emilie Savage Smith et al., "Islamic Geomancy and a Thirteenth-Century Divinatory Device". UPDATE (2017-10-01): Added Fludd's "Fasciculus Geomanticus" to the books list, and other minor changes. Share this In nearly all Islamic lands, geomancy and related methods of divination are still practiced. The popular forms vary from the simple casting of favorable or unfavorable geomantic figures to the complex interpretation of tableaux employing a large number of procedures. [See also Astrology; Divination; Numerology.] BIBLIOGRAPHY. Bascom, William R. Ifa Divination: Communication between Gods and Men in West Africa. Bloomington, 1969. Definitive study of the Yoruba form of geomancy (ifa) practiced in Dahomey and Nigeria. Includes an extensive bibliography.