# Islam as a constitutive factor in African 'traditional' religion

# the evidence from geomantic divination

Wim van Binsbergen

forthcoming in: Breedveld, A., van Santen, J., & van Binsbergen, W.M.J., eds., *Islam and transformations in Africa* 

# 1. INTRODUCTION

Transformation processes in Africa did not in the least start with European colonial rule nor with the advent of Islam on the African continent in the 1st century AH/the seventh century CE. Africa has since long been recognised as humankind's cradle, and in the last decade and a half as the cradle of somatically modern humans, so some of the most significant, earliest transformation processes of human history must have taken place there. Moreover, the Sahara region and the Ethiopian highlands played a major and independent role in the domestication of food crops and animals during the Neolithic, so that these regions deserve pride of place in an extended Fertile Crescent extending from West Africa to the Indus. However, when we see to address Africa transformation processes in the context of Islam -- as is the theme of the conference at which the present argument was first presented -- one fairly common approach is still what we might call the Trimingham model, although its employ was by no means initiated by that seminal Christian writer<sup>2</sup> -- for the same model informs part of the Islamic writing on Islam in Africa. The model consists in juxtaposing

(1) on the one hand African 'traditional' (I prefer 'historical') religion, which is assumed to date from before the advent of Islam and to be historically entirely independent from Islam; and on the other

A more extensive version of this paper was read at the conference on Transformation processes and Islam in Africa, African Studies Centre and Institute for the Study of Islam in the Modern World, Leiden, The Netherlands, 15 October, 1999. I am indebted to the African Studies Centre, Leiden, and to the Netherlands Institute for Advanced Study, Wassenaar, for greatly facilitating my research; to my teachers, colleagues and clients in Southern African *hakata* divination, which provided the starting point for the present analysis; to Rafat Badwy for translating al-Zanātī with (or rather, for) me; to Shaul Shaked for reading with (or rather, to) me the Cairo Geniza geomancy attributed to Ibn Ezra; to Louis Brenner for kindling and re-kindling my interest in Islamic geomancy; and to my fellow-convenors, Anneke Breedveld and Josée van Santen, for their stimulating comments and especially for their patience. Since this paper is written for an audience of Africanists and anthropologists rather than Arabists, and since moreover the contradictions of Arabic translitteration are unsolvable anyway, I have used a greatly simplified Arabic transliteration.

<sup>&</sup>lt;sup>2</sup> Cf. Trimingham 1962, 1964, 1965, 1968, 1976.

(2) Islam, as a more or less alien, coherent body of beliefs and practices which is assumed to be initially alien to the African continent and to have progressively invaded it, striking all sorts of locally specific compromises with pre-Islamic traditions.

However, in the light of recent work claiming a North East African provenance for the Semitic language family and for the Afro-Asiatic language group as a whole,<sup>3</sup> African historical religion and Islam may be surmised to share a common origin on African soil. The recent Afrocentrist movement (as inspired by the writings of the Senegalese natural scientist and cultural philosopher Cheikh Anta Diop,<sup>4</sup> and by his African American predecessors) could profitably have explored these communalities. But it was kept from doing so because, from the 1950s onwards, a different specific role was assigned to Islam in the identity construction of Blacks in the North Atlantic (and of those who, on a global scale, use the latter as role models). In that context, what counted about Islam was not so much where it came from, but the fact that it could increasingly serve as a religious, moral, political, and even economic alternative to dominant, North Atlantic symbolic imports.

Without pursuing this tempting line of analysis, the present paper proposes a partial deconstruction of the time-honoured distinction between African historic religion and Islam. It seeks to demonstrate that at least one major aspect of African historic religion, notably geomantic divination, which is constitutive of the public local and global image of this domain of symbolic expression, has been far from historically independent from Islam but in fact constitutes a *transformative localisation*<sup>5</sup> of dominant aspects of the Islamic occult sciences (*'Geheimwissenschaften'*). The astrologically-based branch of Islamic divination called 'ilm al-raml ('sand science', i.e. geomancy), in Africa has spewn such dominant divinatory complexes as Ifa, Sixteen Cowries (both West Africa), Sikidy (Madagascar) and Hakata (Southern Africa), as well as many less formal and less famous lesser geomancies.

The larger part of this paper will be occupied by the elaboration of this point. In the conclusion I will suggest that the historical dependence on Islam is not limited to divination but extends to boardgames, spirit possession and musical instruments as well. Nor should Islam be considered as the ultimate origin of these complexes, but rather as a partificularly effective vehicle of reformulation and onward spread, of symbolic repertoires whose ancient history encompasses much of the Old World.

The purpose of my argument is not to deprive African societies of their historical heritage, but to demonstrate that they are much more intricately a part of the wider world, and have always been, than would be suggested by the entrenched reified, and utterly othering,

<sup>&</sup>lt;sup>3</sup> Ehret 1996.

Diop 1955, 1959, 1974. On the Afrocentrism debate: Appiah 1993; Asante, 1990; Berlinerblau 1999; Bernal 1996; Fauvelle 1996; Kershaw 1992; Lefkowitz 1997; Van Sertima & Williams 1989; Verharen 1995; Winters 1994.

On this concept, cf. van Binsbergen 1997a, 2003: ch. 8.

On the basis of an vague concept of 'geomantica' circulating in medieval occult sciences, Hugo Sanctgallensis, a major translator of Arabic manuscripts in the early second millennium CE, chose this term as the translation of the Arabic terms *khatt al-raml* and *cilm al-raml*: 'calligraphy, or science, of sand'. *Psammomancy*, i.e. 'divination with the use of sand' would have been much better, considering the established nomenclature of the numerous other forms of divination (cf. le Scouézec *et al.* 1965). The neologism *geomantica*, for divination (mantikē) by the element 'earth' (gē) rather than air, fire or water, as a distinct type, is first attested in fragments from the Roman encyclopaedic writer Varro (second century CE) (Bouché-Leclerq 1975 I, 1: 119). Ancient divination being full of chthonic elements, it cannot be reconstructed if Varro referred to any specific technique. From the late middle ages onwards the Latin term 'geomantia' was exclusively applied by European translators and practitioners to Arabian *khatt* divination, which in their hands became a cornerstone of European esoterism.

images of African religion and culture which are still circulating, both in professional African Studies, and among the general public.

# 2. THE FRANCISTOWN FOUR-TABLET ORACULAR SYSTEM AND ITS IMPLICATIONS

Many herbalists and spirit mediums of Southern Africa use, as the dominant material apparatus by means of which the local variety of *geomantic divination* is carried out (cf. Figure 1), *four rectangular or triangular tablets* (largest dimension about 10 cm) which, fashioned out of wood, bone, ivory or (among the San populations) leather. All four tablets are different from each other (in terms of shape, notches at the basis, and markings distinguishing between the front and the back of each tablet); each tablet has a distinct name and is identified as male or female, and as senior or junior. Thus when the tablets, in the course of a divinatory session, are cast from the cupped hands of the diviner or the client, sixteen different configurations can form.<sup>7</sup> Each configuration is named and interpreted according to a memorised yet highly conventionalised interpretative catalogue of meanings.

Against the background of my training in cultural anthropology, I would have been inclined to consider these tablets as items of a strictly local African culture. However, by 1990, *en route* from being an ethnographer to becoming an intercultural philosopher. I was forced to reconsider cultural specificity.

After twenty years of studying African religion, physically at close quarters as a participant observer but from a reserved epistemological distance, in the course of fieldwork in a Botswana town I had become a traditional diviner-priest (sangoma), an achievement which in itself implied the potential overlap and permeability of African and North Atlantic symbolic domains. Now my newly acquired professional status would seem to be incompatible with further religious ethnography, with all the distancing and subordinating objectification this entails. Neither could I bring myself to write about the details of the social and psychiatric case material which automatically came my way as the therapist of my Botswana patients. What to do? Could I find a perspective from which my transcultural stance could yet be combined with a recognisable professional form of scientific knowledge production?

I had now in my possession these mysterious rough wooden tablets of the sangoma oracle, consecrated in the blood of sacrificial animals and periodically revived by immersion in rain water and application of the fat of sacrificial animals. They seemed to represent the epitome of strictly local cultural particularism. They seemed to have risen from the village society of Southern Africa at some indefinite Primordial Age, and the same seemed to apply to the interpretation scheme which names the sixteen specific combinations which may be formed by the tablets when these are ritually cast. The local oracle of four tablets had been described by missionaries as long ago as four hundred years. The old woman like a stone', 'the old male witch like an axe', 'itching pubic hair like a young woman's', 'the uvula like a youthful penis' -- this is how the four tablets are named, and their various combinations have connotations of witchcraft, ancestors, taboos, sacrificial dances, and all varieties of local animal totems. Could it possibly be more authentic and more African? For god reason had I, at the time, described my initiation (which confirmed me as an accomplished specialist in this divination and therapy system) as

The general formula is  $C = n^k$ , where

C = the number of possible different configurations

n = the number of different values each tablet can assume (in this case 'front up' or 'front down', which means that n= 2), and

k = number of tablets (here: <math>k = 4)

In this case,  $C = 2^4 = 16$ .

<sup>&</sup>lt;sup>8</sup> van Binsbergen 1991.

<sup>&</sup>lt;sup>9</sup> Cf. dos Santos 1901.

'the end point of a quest to the heart of Africa's symbolic culture'. <sup>10</sup>

But soon I had to admit that this romantic suggestion of extreme locality was a mere illusion, under which lurked a reality which had enormous consequences for my theoretical and existential stance as an ethnographer and a world citizen. The interpretational scheme, right up to the nomenclature of the sixteen combinations, turned out to be an adaptation of fourth-century (AH)/ tenth-century (CE) Islamic magic, with a Chinese iconography (consisting, just like I Ching, out of configurations of whole and broken lines), and at the same time astrological implication such as had been elaborated another fifteen or twenty centuries before, in Babylonia. The local cultural orientation in which the inhabitants of Francistown had entrenched themselves, and from which I initially felt painfully excluded to such an extent that becoming a *sangoma* was the only way out left to me, turned out not to be at all the incarnation of the absolute other, but -- just like my own cultural orientation as a North Atlantic scholar -- a distant offshoot of the civilisations of the Ancient Near East, and like my own branch of science it turned out to have been effectively fertilised by an earlier offshoot from the same stem: the Islamic civilisation. <sup>11</sup>

This amounted to a head-on collision with the central theory of classic cultural anthropology since the 1930s: the temporal and spatial specificity of distinct, for instance African, societies, the assumption of their being closed onto themselves and bounded, of their having a unique internal integration and systematics, and in general the idea that something like 'a culture' exists.

This insight was for me the trigger to start a comprehensive research project, which has kept me occupied throughout the 1990s, and of which the present paper is another installment.<sup>12</sup> But before we discuss some of the results of this project, let us first familiarise ourselves with the four-tablet oracle in action:

'As one of the many daughters of Mr R. Sinombe, the high priest of the Nata shrine deep in rural Northern Botswana, of the ancient and widespread Mwali territorial cult, Jane (21 years of age), an unattached typist living in Botswana's booming Francistown, has grown up in a milieu where divination, mediumistic cults and herbalism are 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 pursued the local continuity of the Mwali cult in a formal organisational shape well within Botswana's Societies Act —, with over a dozen 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<sup>13</sup> of the novices of MmaShakayile, a particularly prominent cult leader, to Nata for official registration with her father's guild. By that time Jane 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-tofind job has not lasted long: within a few months she finds herself the centre of a 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 occupies a towering position in the cult but he himself does not engage in divination, he is not staying in Francistown, and ever since her parents's 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; yet the yard is foremost, in popular perception, a cultic lodge, where junior adepts (Ndebele: amathwaza, singular thwaza) 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-

<sup>11</sup> Van Binsbergen 1994, 1995, 1996a, 1996b, 1996c.

Van Binsbergen 1991: 314.

The project has meanwhile resulted, among other publications, in an edited collection on the work of Martin Bernal (van Binsbergen 1997), and a book manuscript entitled *Global Bee Flight: Sub-Saharan Africa, Ancient Egypt and the World: Beyond the Black Athena thesis*.

<sup>13</sup> The present writer.

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 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, 14 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 Johannes<sup>15</sup> — 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 the tablets' first fall as Chilume<sup>16</sup> (one of the sixteen configurations that result 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 in its turn, 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 shapes 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 deploying. 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. The sangomas reassure her that she will keep her job and will even gain a supervisory rank in the near future. (This soon came true, incidentally.) Momentarily relieved, Jane leaves the yard, and stops a taxi to take her all the way back to her room in the Block VII residential area, a distance of some fifteen kilometres all across the sprawling town.'17

	gender	
age	female	male
senior	K wani	Chilume
junior	Nak wak	Lun se

Figure 1. A four-tablet divinatory set from Southern Africa. shaded symbols: reverse side up

Before we can state the case for the Southern African four-tablet oracle being essentially geomantic, and spell out the implications of this finding for the relation between Islam and so-called African traditional religion, we need an introduction to geomancy in general.

5

.

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

<sup>15</sup> The present writer.

<sup>16</sup> p, i.e. the configuration where all tablets are upside down except for the senior male tablet.

Author's field-notes.

### 3. GENERAL CHARACTERISTICS OF THE GEOMANTIC SYSTEM

First introduced into West European intellectual life in the 11th century CE, when numerous Arabic texts were translated into Latin, 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. In Arabic the geomantic system was originally known as cilm al-raml, *khatt al-raml* or *khatt bi'l raml*. It was treated extensively by such learned authors as Muhammad al-Zanātī, 'Ali b. Umar, Fadhl b. Sahl al-Saraksi, and Ahmad b. 'Ali Zunbul. In Europe, this imported system was pursued by major Renaissance magicians such as Agrippa and Fludd, and subsequently popularised through mass-produced 'Books of Fate'. 'Punctuation' (as it was called after its characteristic patterns of dots) became a self-help oracle even in the rural peripheries of European life right up to modern times. An example of West European popular geomancy comes to us in the person of the nineteenth-century farmer Hinrich Fehse, one of the characters in the Theodor Storm's (1817-1888) novelette 'Draussen im Heidedorf':

"...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 [ = configurations ] with chalk on the table.' '18

One of the earliest documentary attestations of geomancy in an Islamic context was identified by Fahd in his monumental study *La divination arabe*, in the writings of Ibn al-A<sup>c</sup>rābī, who died 230 AH./844 CE.<sup>19</sup>

'Ce procédé [ i.e. geomancy ] , considéré par Doutté comme une modernisation d'at-tarq bil-'hasat<sup>20</sup>, est déjà décrit par Ibn al-A'rabi <sup>21</sup> 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''<sup>22</sup>! S'il n'en reste à la fin que deux lignes, c'est signe de succès; mais s'il n'est reste qu'une, c'est signe d'échec et de malheur.'' <sup>23</sup>

Helm 1985: 72f. My English translation is based on the Dutch text, since I could not locate the German edition.

<sup>&</sup>lt;sup>19</sup> Fahd 1966: 196

<sup>&</sup>lt;sup>20</sup> 'Casting of pebbles', i.e. lithoboly, which is incidentally a prescribed ritual feature of the *hajj*, the sacred pilgrimage to Mecca.

Died c. 230 AH/844 CE, 81 years old; cf. Brockelmann 1937-42, Supplementband I: 179; the source is: al-Alusi, n.d.: II, 323; cf. Fahd 1966: 195 n. 4. This Ibn al-CArabi is of course not to be confused with that great religious writer of the same name, who flourished several centuries later; cf. Chittick 1995.

Here Fahd gives a long philological footnote citing passages from the work of al-Alusi and al-Zabidi; and refers to: Goldziher 1902: 139f.; all of which is suggestive of an intimate link between geomancy, belomancy (divination by the shooting of arrows) and ornithomancy (divination by observing the behaviour of birds).

<sup>&</sup>lt;sup>23</sup> Fahd 1966: 197f.

In subsequent centuries, the system's astrological format and idiom became more and more pronounced. It rapidly spread over the Islamic and Jewish intellectual world, and hence into Europe, Africa and the Indian Ocean region. After the thirteenth century, much of this spread was due to a famous and much circulated treatise known, among other titles, as *Kitaab al-façl fi uçūl cilm al-raml* ('Book on the Discrimination of the Principles of Sand Science') written by Abū cAbd Allāh Muhammad al-Zanātī. He probably flourished in the first half of the thirteenth century CE. Two arguments support this dating. In the first place, Zanātī is considered a contemporary of 13th-century geomancer Ibn Mahfūf al-Munadjdjīm, who died before 664 H./1265 CE.;<sup>24</sup> and secondly, his treatise on geomancy was translated into Greek verse, from the Persian, by the monk Arsenius<sup>25</sup> in 1266 CE.<sup>26</sup> Exceptionally for an Islamic author, Zanātī's name always appears without a patronym, as if he was an adopted stranger in the context where he gained fame and where his works were preserved. The epithet al-Zanātī links him with the Moroccan tribe of the Zanata.<sup>27</sup> In other contexts however he is considered a Persian, probably because the *Kitaab al-façl fi uçūl cilm al-raml* gained fame particularly in its Persian version, which may or may not have been the original.

Although there is -- as we shall see -- an overwhelming scholarly consensus that the latter-day Ifa and 'Sixteen Cowries' in West Africa derive directly and demonstrably from the Islamic prototypes, an early, original North West African input into the overall geomantic system is suggested by the early circulation of Berber names for the sixteen basic geomantic configurations, 28 and by the prominence of proto-geomantic cultural forms in the latter-day North West African material.<sup>29</sup> Considering this great variety of local geomancies one is tempted to hypothesise that North West Africa was one of the original independent source areas for the later, classic geomantic system, before its codification in Abassid Iraq by the turn of the first millennium CE Al-Zanātī, with his obscure origin, may then perhaps have been not so much a Berber shaykh, let alone a Persian, but a West African who mediated the West African proto-geomantic tradition and formalised it in line with the evolving geomantic format of mainstream Islamic scholarship at the time. Blacks could and did rise to positions of great esteem and authority in the classical world of Islam, e.g. the Iraqi literary writer Djahiz is reputed to have been black. However, a far more likely explanation for the absence of stated antecedents of al-Zanātī is suggested by Corcos' insistence that there are extensive Jewish influences in various Moroccan tribes especially the Zenata; the latter continued in large numbers to adhere to Judaism or Christianity despite the Islamic conquest; Zenata or

<sup>&</sup>lt;sup>24</sup> Fahd 1966: 201.

Steinschneider 1956: 7, in his typical stenography, refers to a MS copy of Arsenius's translation, which however I failed to locate:

<sup>&#</sup>x27;Arsenius, ein Mönch, übs (126) die arab. Geomantie von al-Zanati 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 coded 'HÜb' is to: Steinschneider 1893. Note the designation 'Persian' for al-Zanātī, which Steinschneider exclusively interprets in terms of the use of Persian as a medium in translation. Perhaps al-Zanātī had actual Persian connections; cf. his appeal to that other legendary authority with eastern connotation, Tumtum al-Hindi. But the name Zanātī suggests a North West African origin.

<sup>&</sup>lt;sup>26</sup> Fahd 1978.

<sup>&</sup>lt;sup>27</sup> Cf. Monteil 1931: 89; Fahd 1966, 1978.

Steinschneider 1877, where a table gives the Berber nomenclature of geomantic configurations, among others; also cf. Steinschneider 1864: 177f.

<sup>&</sup>lt;sup>29</sup> Cf. Pâques 1964; van Binsbergen 1997b.

Znata is even openly used as a Jewish name.<sup>30</sup> Rather than admitting a Jewish background to so popular an author of Islamic magic, tradition may simply have stripped al-Zanātī of all background identity.

Geomantic divination can be said to consist of three interrelated features:

## (1) a physical apparatus serving as a random generator

e.g. the diviner strikes four times with his walking stick on the ground in a sideways, bouncing movement, thus producing four separate sets of a fair number — say, 23, 17, 32, 12 — of distinct indentures on the soil.

Les seize figures du sikidy.

# Fig. I

Figure 2. Striking the soil in order to form a geomantic configuration.<sup>31</sup>

# (2) a set of rules which allow for the translation, i.e. coding, of the numerical outcome of the random generator in terms of culturally agreed specific values with a divinatory meaning

in the same example, the totals of 23, 17, 31 and 12 yield, for bottom to top, distinct scores for the our lines out of which the geomantic configuration is to be composed: two dots or a horizontal line for even, one dot for uneven, so:  $\frac{1}{8}$  or  $\frac{1}{2}$ ; in the most elaborate, standard variants of geomancy four independent configurations are produced initially (out of sixteen runs of the random generator, here: sixteen times striking the soil), and through simple algorithms (see Figure 3) twelve dependent configurations are calculated out of these four; the fifteenth and sixteenth configuration are then decisive for the overall interpretation, while the first twelve configurations provide additional shades of interpretation in the light of the widely-held conventional meaning of the twelve astrological

ziranu 1091-190

Corcos 1964, espec. (54:) 273, 278f n. 18; when Corcos traces the West African peregrination of the Muslim Zenata tribe of Kunte, we are perhaps hitting on a possible transregional source of West African geomancies.

<sup>31</sup> After Ferrand 1891-1902: I, 76.

houses,<sup>32</sup> the imaginary aspects (meaningful angles) to be constructed between the various configurations, etc.

(3) an interpretative catalogue listing such divinatory meanings and accessing them through the assigned codes

(in our example,  $\ ^{\circ}_{8}$  or  $\ ^{\circ}_{1}$  is named<sup>33</sup> 'Inside Threshold' (al- $^{c}$ ataba al- $d\bar{a}$ kila') or 'Flag of Joy' ( $r\bar{a}$ yat farah), a name inspired by the formal, strictly graphic characteristics of the geomantic configuration (cf.  $\ ^{\circ}_{8}$  or  $\ ^{\circ}_{1}$ , al- $Tar\bar{\imath}q$  'Path'; in  $\ ^{\circ}_{8}$  or  $\ ^{\circ}_{1}$  t the upper horizontal line then becomes the threshold — i.e. where the road ends — or a flag, in the latter case the three lower dots a flagpole), underneath which lurks the astrological concept of the Dragon's Head (al- $R\bar{a}$ s al- $Tinn\bar{\imath}n$ , Latin: Caput Draconis).  $^{34}$  The interpretation varies considerably but is often positive, exulting, regal, subject to qualifications and refinements depending on a more elaborate astrological reading of the configurations in combination.

In geomancy, the features (2) and (3) as outlined above tend to considerable standardisation, which is mainly enforced by the literate Islamic context within which the geomantic system has spread all over the world: interregional trade, conquest, and the spread of Islam. Whatever the specific forms and internal mechanics of the random generator used in a particular time and place, the divinatory process stands out as geomantic in so far as its numerical outcome tends to be translated into the conventional geomantic configurations: sixteen different configurations which 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. Figure 2) 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 configurations 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):

A further point of standardisation is that these configurations tend to be interpreted according to literate or memorised catalogues in which these geomantic configurations continue to carry an association, however remote and distorted, as (e.g. in the case of these three examples) with the astrological concept of the 'Dragon's Head'. By contrast, the first feature, the material apparatus serving as a random generator, shows enormous variation as well as a tendency towards localisation: the numerical outcomes needed for geomantic interpretation can be elaborate or simple, involving dice, wooded or ivory tablets, stones,

E.g. House I: bodily, psychological and intellectual constitution; House II: finance, mobile property; House III: siblings; House IV: parents, heredity; etc.

<sup>&</sup>lt;sup>33</sup> al-Zanātī 1923

The Dragon's Head is the astrological term for the northern lunar node, i.e. the northern end of the imaginary line marking the intersection between the ecliptic (the plane shared by earth and sun), and the plane in which the moon revolves around the earth; with its counterpart, the Dragon's Tail marking the southernmost extension, this imaginary point moves along the zodiac. Both Dragon's Head and Dragon's tail received, in Indian, Arabian and in (medieval and later) European astrology, the connotations of additional planets, and as such were marked on horoscopes, were involved in the calculation of aspects i.e. meaningful angles between planets, etc. For Dragon's head and Dragon's tail, these aspects were largely interpreted in negative terms.

pebbles, grains, palm kernels, marks on the ground or on a rimmed board covered with sand, dots on paper, etc. These surface forms may differ so much, and reflect the local culture's technology, style of decoration, and cosmological orientation to such an extent, that it is often difficult to detect, underneath the visible random apparatus, the converging geomantic features of the encoding rules and of the interpretative catalogue. Indeed, in many peripheral, localised forms of geomantic divination the encoding rules have become eroded and simplified (like in many geomancies of the African interior), even the production of recognisable geomantic configurations may have been dispensed with (like in the case of the Southern African hakata system), and besides decontextualised, isolated conceptual reminiscences of the original Islamic catalogue, it is merely the catalogue's 2<sup>n</sup>-based mathematical structure which reminds us that we are still dealing with geomancy.

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 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 has so far gone unnoticed, the interpretative catalogues as applied by individual diviners tend to be very idiosyncratic yet, as will be shown below, they derive from the same original geomantic corpus as the catalogues found throughout the Islamic world and in Europe.

A central feature of classic, Islamic 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:

```
even + odd = odd, i.e. oo + o = o,
odd + even = odd, i.e. o + oo = o,
even + even = even, i.e. oo + oo = oo,
odd + odd = even, i.e. o + o = oo.
```

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 elements.<sup>35</sup> In very rare variants it is fathers and sons, rather than mothers and daughters, that are being constructed.<sup>36</sup>

-

Carra de Vaux 1974; mothers as 'the elements' also among the Ikhwan al-Safa<sup>c</sup>, cf. de Boer 1921: 90; also cf. de Boer 1967.

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 matrilateral. 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

Figure 3 should suffice to to explain the complex construction of the full geomantic theme of sixteen configurations, out of the original input of the four mothers -- which forms the only original information which the system contains, since all the other twelve configurations to be constructed are completely determined by fixed operation of the derivative rules upon the four mothers. The feet of the four mothers, in reverse order, and rotated from horizontal to vertical position, produce configuration V. In the same way, configuration VI is produced from the mothers' legs, configuration VII from their bodies, and VIII from their heads. Configuration IX is produced by adding, line by line, the dotes of configurations I and II, applying the computations rules specified above. In the same way, configuration X is produced from configurations III and IV; XI from V and VI; and XII from VII and VIII. Configuration XIII is then obtained by adding, line by line, the dotes of configurations IX and X; XIV is similarly obtained from XI and XII; XV from XIII and XIV; while configuration XVI, the judge, is produced by addition, line by line, of configurations I and XV.<sup>37</sup>

For the mathematician, these procedures offer all sorts of possibilities for further combinatorial and (since they involve all kinds of symmetries) topological manipulation,<sup>38</sup> 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 configurations (16 possible 'mothers'), only eight can be produced as judges. This means that while 16 different combinations are equiprobable inputs into the calculation, only 8 of them are possible outcomes. Now it just so happens that among the eight possible outcomes those with a positive meaning prevail — as if to further the geomantic oracle's public relations! This tilted 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 tends to be enriched by taking into account the planetary and zodiacal associations of each of the sixteen names, and interpreting the sixteen configurations of the full geomantic theme as sixteen houses, of

Near East — as another example of the widely attested general rule, first expressed by Meyer Fortes (1953) 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. matrilaterally 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.

11

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:

<sup>(</sup>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 configuration is constructed by means of a chance process, one and only one of these sixteen will be produced;

<sup>(</sup>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 configurations, several of which may occur more than once, as is clear from the example in Figure 3, where only and cocur only once.

<sup>&</sup>lt;sup>38</sup> Jaulin 1957, 1966, 1968.

which the first twelve at least were given fairly standard astrological interpretations, while a new nomenclature from the legal sphere was invented for the remaining four. Thus a kind of geomantic (or 'terrestrial; Greek gē = 'earth') astrology results. From astrology the geomantic system could then derive the complex pattern of correspondences (planets, zodiacal signs, parts of the body, houses as defining specific spheres of life, hours of the day, etc.) though which a total world view and a rich and resourceful divinatory framework is produced.

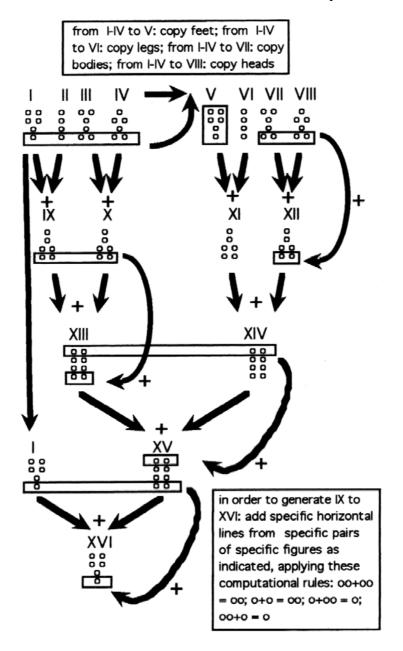


Figure 3. An example of the production of a full geomantic theme of 16 configurations, starting from the four 'mothers'

In the more complex versions like al-Zanātī's<sup>39</sup> the first twelve of these sixteen

al-Zanātī1320 H./1923 CE, 1341 H./1902 CE.

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 imprecise, elliptical style of this author:

'In the name of ALLAH, the Compassionate, the Merciful and peace be upon Our Lord Muhammad, 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 Idrisian<sup>40</sup> facts. Shaikh Zanātī -- may the forgiveness of Allah be upon him<sup>41</sup> -- 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 Idris, may the forgiveness of Allah be upon him and upon our prophet Muhammad and all other prophets before him. Idris 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, Earth<sup>42</sup> 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 Muhammad is four letters<sup>43</sup> and each house<sup>44</sup> must have four corners. Then everything is stabilised on four corners, four configurations, 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, 45 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

41 I.e. 'the late'; al-Zanātīi is here implied not to have written this book himself.

Reference to the prophet Idris, i.e. Enoch; see further.

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

Sc.: 'four letters in Arabic'. In Arabic, Muhammad is written with four letters; the central 'm' has a duplication sign but is apparently still counted as but one letter. CIsa, likewise composed of four letters in Arabic, is the Arabic name for the founder of Christianity.

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

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

The planetary correspondences attributed to the zodicacal signs in subsequeent sections of Zanātī's argument, as well as those attibuted by other Islamic 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 state of our knowledge of the history of astrology in the Babylonian, Greek, Hellenistic, Hebrew, Islamic, Indian and Chinese contexts — they may help to situate the emergence of geomancy in time and place.

Ibn Khaldun's Muqaddima, 48 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)<sup>49</sup> as if the horoscope would be based not on the painstaking calculation of the heavens at the time of birth, but on the mere casting of dice.<sup>50</sup>

-

Repetition of first and third element in the original.

<sup>&</sup>lt;sup>47</sup> al-Zanātī 1995.

<sup>&</sup>lt;sup>48</sup> Ibn Khaldoun, 1863-68, 1980.

A full discussion falls outside our present scope. Let me merely mention as an example the once enigmatic Tabula Bianchini, which was effectively and lucidly interpreted as a dice-operated pseudo-astrological divination instrument; cf.: Boll et al. 1966: 60, 191f.

In fact, geomantic dice are being used in India and Iran: Culin 1890-91: 65. Of course, the Southern African *Hakata* four-tablet oracle could be regarded as consisting of geomantic dice, but (despite the extensive South Asian influences on Southern African *sangomahood*, cf. van Binsbergen 2003: ch. 8), it is difficult to regard these tablets 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.

بيت النفوس ثم أنَّهم أقاموا شكلًا ثانيًا ف

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

# 4. THE WORLDWIDE DISTRIBUTION AND DIFFUSION OF GEOMANCY

Let us now turn to the distribution and diffusion of geomancy.

The available evidence allows us to map the geographical distribution of the geomantic

family as in Figure 5, as a basis for the reconstruction of its geographical diffusion in Figure 6. From our above discussion one would prefer to approach the history of geomancy along three, not necessarily coinciding, lines: the history of the random-generating apparatus (which is often strictly local and reflects local technology and symbolism); the history of the coding procedures and that of the interpretative catalogue — the latter two being more universal and often supported and standardised by literacy.

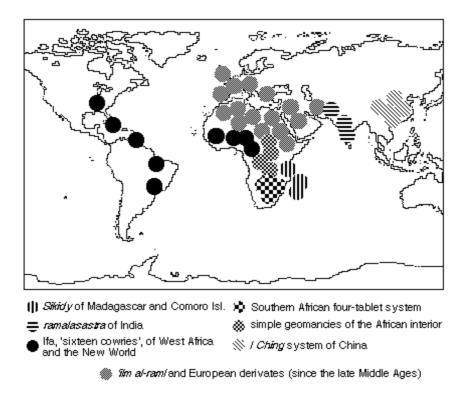


Figure 5. The distribution of systems of geomantic divination

According to the current state of historical reconstructions, the Hellenic, Hellenistic, Hermetic, Jewish,<sup>51</sup> Persian, African, Indian and Chinese borrowings<sup>52</sup> into the Islamic

Although there have been Hebrew geomancies, there is not enough to suggest that geomancy was an original invention of medieval Hebrew scholars. Yet al-Zanātī's possibly Jewish connotations, the possibly astrological symbolism of masoretic vowel pronunciation signs (Cf. Ettisch 1987) which came up a few centuries before geomancy, and the prominence of another tetragram (that of the Divine Name) in Jewish religion and magic, remind us not to rush to conclusions on this point. Medieval Hebrew geomancies are referred to by Steinschneider 1864, 1877, and in: Trachtenberg 1939; my colleague at the Netherlands Institute for Advanced Study, 1994-95, Shaul Shaked, who catalogued the famous texts from the Cairo Geniza (cf. Shaked 1964) tells me that he encountered several geomantic fragments among this material, in addition to a very extensive geomancy claiming to be composed by the well-known Rabbi Abraham ibn Ezra (c. 1089-1164 CE). However, as we ascertained in a provisional reading, this geomancy is little original and scarcely deviates from the pattern established in Arabic texts a century or longer earlier. A Latin version of a geomancy by Ibn Ezra from the fourteenth century CE is cited by Skinner 1980 as: 'Royal 12.C, xviii f, 26, Abraham Ben Meir Aben Ezra, Spanish Rabbi and astrologer (d. 1174), Electiones Abraham'. Steinschneider still considered the attribution of a geomancy to ibn Ezra pseudo-epigraphical, but in the face of the Geniza text there is little reason to doubt the author's identity, even though we are dealing with a posthumous copy. At the time that 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.

literate corpus of geomancy point to a drafting (after unsystematic earlier forms) of the classic, astrological geomantic system in Southern Mesopotamia (probably Basra) in an Ismā<sup>c</sup>īlī context in the tenth century CE. The Indian Ocean trade took care of any spread from China to the Persian Gulf. The land route via the various ramifications of the Silk Road appears to have been less important in this exchange although it cannot be ruled out as a possible channel of diffusion: Chinese trading vessels frequently called at the port of Basra, a fairly factual nautical guide to the lands of Hind and Sin was available from the late first millennium CE.<sup>53</sup> However, when a few centuries later Marco Polo, Rubroeck and others travelled the Silk road and among many other things reported on divination methods there, not a trace of geomancy perspires.<sup>54</sup>

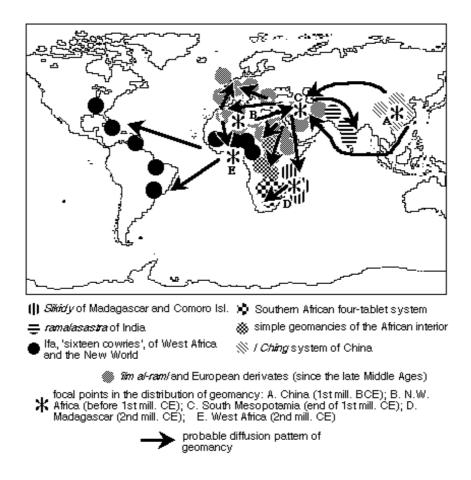


Figure 6. Probable diffusion pattern of geomantic divination.

Geomancy was a central feature of Islamic high civilisation,<sup>55</sup> capable of spreading not

Not by accident, a similar mix (except the Indian and Chinese material) went, in the same period, into the compilation of that famous piece of Arabic magic writing, *Ghāyat al-hakīm* also known as Picatrix (Pingree 1980; Hartner 1965; Ritter & Plessner 1962).

<sup>&</sup>lt;sup>53</sup> Ahmad 1989; Sauvaget 1948.

<sup>&</sup>lt;sup>54</sup> Muller 1944; Bellonci 1985.

<sup>55</sup> Ibn Khaldûn 1958: I, 226-234.

only (in Hebrew, Byzantine, Greek and Latin versions) over Europe, but all over the Old World:

'Like oneiromancy [the interpretation of dreams as a form of divination], Arab geomantic science extends beyond the frontiers of the Muslim empire, both to the Indian coasts and the coasts of Byzantium, and to the Latin West and Black Africa and Madagascar (...). This expansion has led to a great number of manuals and treatises, examples of which can be found in almost all the Arab collections in the East and the West.'56

After the geomantic system was formulated in Islamic circles, the Indian Ocean was again the main context for its broadcasting.

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.

Meanwhile it is important to realise that Arsenius' translation of Zanātī was by far not the earliest geomantic text to reach the West, as the 11th century translations by Hugo Sanctalliensis and others demonstrate.<sup>57</sup> In Greek geomantic texts, presumably from the Byzantine period, we encounter the word *rabolion* — which, as Tannery appreciated can only be understood as a Greek mere phonetic rendering of an untranslated Arabic ([ *cilm al-* ] *raml*, with a predictable insertion of -b- between -m- and -l-, and a domesticating -ion suffix). Scholarly consensus<sup>58</sup> is that there was only one-way traffic from Islamic to Byzantine and Latin sources.

Finally, with the Atlantic slave trade the geomancy-based divination systems of West Africa crossed into the Caribbean, Central and South America.<sup>59</sup>

Geomancy must therefore 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 and 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, bean, 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 common designation of the geomantic system of divination as *khatt alraml*, i.e. 'sand calligraphy', with a definite reference to writing, to literacy.

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 the German

<sup>&</sup>lt;sup>56</sup> Fahd 1978: 1129.

A rather full if cumbersome catalogue of such geomantic translations can be extracted from Steinschneider 1906; also cf. Carmody 1956 (non vidi). It remains a point for further research to ascertain to what extent these early, pre-Zanātī geomancies, in Arabic, Hebrew, Greek, Latin and presumably also Persian, had already taken on the full astrological science of symbolic correspondences which made Zanātī's treatise so very effective and attractive.

Yet there are indications of an older, Hellenistic Greek contribution to the geomantic corpus; cf. van Binsbergen 1996b.

<sup>&</sup>lt;sup>59</sup> Bascom 1980; Bastide 1968: 423f.

farmer Hinrich and the Botswana typist Jane, such meaning, although mediated 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 not ordinarily utilised in their everyday socio-economic experience which adds credibility and legitimation to the system? Is it, in other words, the boundarycrossing 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? Where did the incredibly successful geomantic family of divination systems come from? Why should virtually all concrete traces of the genesis of Islamic geomancy appear to have been blotted out, so that the geomantic system, when we first encounter it in the classical Islamic setting of Abassid Iraq around the turn of the first millennium CE 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?

I would suggest that Islam served not only as a vehicle for geomantic divination, on its way to produce a number of fragmented local geomancies whose practitioners have lost all awareness of the transregional, Islamic roots of their practice. I think that Islam also lend its imposing, alien authority to these systems when they were being practices in non-Muslim religions: an oblique reminiscence of what was locally perceived as a distant, more powerful and richer culture, of a more powerful god, Allah.<sup>60</sup>

### 5. GEOMANCY IN AFRICA

In the various regions of Africa where geomantic divination is practised, the material apparatus is very different, ranging from divination chains:<sup>61</sup> or shells cast in a square, rimmed wooded board covered with sand in West-Africa, or four tablets in Southern Africa, to piles of grain or pebbles in the Indian Ocean area,<sup>62</sup> and the forceful 'hitting of the sand' (*darb al-raml*) with a stick, in North Africa and North East Africa.

-

Superficially there might seem to be an echo here of Robin Horton's 'intellectualist' theory of African conversion (Horton 1975), which may be summerised in the following terms: when in West Africa the local microcosmic horizon was shattered by the inroads of mercantilism and state formation, a more universal god was needed be commensurate with the more comprehensive political, economic and social world of changing everyday experience. But there are considerable differences between his position and mine -- the latter tends more towards that of the Islamologist Fisher (1973; also cf. my discussion in van Binsbergen 1981). What I am concerned with here is not the revival -- under specific conditions of political, economic and social transformation -- of a pre-established Islamic monotheism in those parts of Africa which nominally had been Islamic for centuries, but the distant but nonetheless awareness of Islam as a Great Tradition in many parts of Africa there had always been, or that lapsed back to end up, outside the 'House of Islam'.

Their essential feature is a string along which, or at whose end, a number (k, often k=8) elements (cowries or coins) are attached, in such a way that each element can pivot independently around its point of attachment; since each element has an identifiable upper side and lower side and thus can take 2 different values, the total number of possible configurations is C=n<sup>k</sup>, e.g. 2<sup>8</sup> = 256. Cf Bascom 1969; Abimbola 1976.

<sup>62</sup> E.g. Hébert 1961.

With the exception of the Southern African variant (where the tablets' fall is interpreted directly, i.e. without the construction of a standard geomantic symbol) the result produced by the apparatus is interpreted, through a process of transformation and elimination, as contributing one line, of one or two dots, to a four-line geomantic symbol. More complex procedures may raise this number to any higher power of 2. A written or memorised key (the catalogue) provides the interpretation of each geomantic symbol, and of their combinations.

In many discussions of African culture and philosophy, 63 local geomancies are paraded as examples par excellence of African symbolic genius and mathematical achievement, leaving little doubt as to the allegedly primordial African nature which these authors attach to the this divinatory complex. Yet Steinschneider's perceptive early analyses were duplicated in African Studies, where e.g. the great explorer and Arabist Burton lost few opportunities<sup>64</sup> to draw attention to manifestations of geomancy, both in the Thousand and One Night (whose pioneer translator he was) and in West Africa. Later Africanists like Maupoil, Hébert, Jaulin and Bascom have identified the same links.65

It is no accident that the prominent anthropologist Jack Goody concludes his introduction<sup>66</sup> to a seminal collection on *Literacy in traditional societies* with an extensive reference to geomancy:

'The significance of writing varies widely among the societies discussed [in Goody's edited collection]. 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 Hébert<sup>67</sup> offers us a 'structural analysis' of divinatory systems in Madagascar and in Africa (...), 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.'68

Finally, mention should be made of Louis Brenner's attempt<sup>69</sup> to situate geomancy, and its success especially in West-Africa, against a sound background of Arabist scholarship, drawing on African Islamic manuscripts, trying to interpret the significance (a easterly

<sup>63</sup> E.g. Abimbola 1976; Traoré 1979; Apostel 1981: ch. vii. For a critical overview, also cf. Bewaii 1992.

<sup>64</sup> Burton 1987: I, 40, n. 2, 1893a: I, 330f, 1893b: III, 55, n. 1.

Maupoil 1943a, 1943b; Hébert 1961; Jaulin 1957, 1966, 1968, 1991; and Bascom 1969, 1980. Cf. Abimbola 1971; Ardant du Picq 1930; Trautmann 1939-1940; Kassibo 1992. A detailed treatment of the West African system as derived from cilm al-raml also in: Skinner 1980

Goody 1968.

The reference is to: Hébert 1961; 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', refer to specifically West African forms of cilm al-raml (cf. Brenner, n.d.). They are absent from the Southern and East African versions of geomancy known to me, as are 'the 9-cell [ i.e. magic, and not necessarily 9-cell, for they exist for the squares of each number under 8, each number specific to a particular planet ] squares'.

Goody 1968: 25f.

Brenner 1985, 1999.

connection?) of such mythical attributions as those to Idris and to the mysterious but frequently cited Tumtum al-Hindi, but above all adding further relief to the idea first launched by Becker<sup>70</sup> at the beginning of the twentieth century CE: 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 in Africa and although he reminds us of the mythical traditions concerning the ultimate, and ultimately divine, origin of *cilm alraml*, he does not tangibly add to our understanding of its early history in human, specifically Islamic hands.

Uncritically copying Jaulin,<sup>71</sup> Adler & Zempléni<sup>72</sup> situate al-Zanātī's work in the sixteenth century, at least three centuries too late. Elsewhere<sup>73</sup> I have presented a detailed historical and formal analysis demonstrating the essential unity of Southern African cleromantic divination systems, in their convergence towards the Zimbabwe hakata fourtablet system as first attested in missionary documentary evidence in the earliest 17th century, and in local archeological evidence from the Khami ruins dating from the same century. To postulate an influence from Islamic geomancy, and particularly in the thirteenth-century al-Zanātī variant, at the Zimbabwean highlands in the sixteenth century (when the first missionary, Silveira, was tried with the use of hakata, and executed, at the Monomotapa's royal court)<sup>74</sup> would at any rate not be anachronistic. But beyond this mere historical possibility, there are also more positive reasons for such an assumption.

# 6. THE ISLAMIC CONNECTION IN THE CONTEXT OF THE SOUTHERN AFRICAN FOUR-TABLET ORACLE

These indications include the designation *hakata* itself, at least if we are allowed to stress, with von Sicard, similarity between the name *hakata* and the Arabic stem *hqq*. The latter means 'truth; speaking the truth' and in its various conjugations may produce the sound 'hakat'.<sup>75</sup> The four tablets would then literally be 'sooth-saying' ones, and have at least partially Islamic connotations. More convincing arguments for the Islamic indebtedness lie in the considerable formal parallels between the four-tablet system on the one hand, and, on the other, the divination systems (related to one another and undoubtedly derived from Islamic sources) of West Africa, the Swahili coast, the Comoro Islands and Madagascar. In contrast with the microdramatics<sup>76</sup> of elements which retain their individual meaning and reference within the ensemble, a more or less fixed, conventionalised interpretative catalogue (in which, without microdramatics, the constituent tablets and their individual meanings dissolve

<sup>&</sup>lt;sup>70</sup> Becker 1911, 1913.

<sup>&</sup>lt;sup>71</sup> Jaulin 1966: 14.

<sup>&</sup>lt;sup>72</sup> Adler & Zempléni: 63.

<sup>&</sup>lt;sup>73</sup> Cf. van Binsbergen 1995.

<sup>&</sup>lt;sup>74</sup> Mudenge 1988; dos Santos 1901; von Sicard 1959.

von Sicard 1959; Al-Faraïd 1967. Within the Bantu language family, *hakata* conveys a sense of 'round', 'ring', 'beads strung on a string', which appeares to be unrelated to the Arabic etymology.

Werbner (1989) speaks of microdramatics with reference to divination systems, if the pattern according to which the constitutent elements in such a system (tokens, tablets, counters) present themselves in time and space in the course of a session, is taken by the diviner to reflect real-life protagonists and to tell a concrete story. The alternative is that a mere formal analysis is pursued, in which the concrete spatial arrangements of the elements when these are cast, is not taken into account.

into the combined single meaning of the foursome the constitute together) somehow strikes one as a typical product of a class of literate intellectual specialists — like the classical Islamic civilisation, to which a considerable part of Africa has served as periphery ever since the first millennium CE.

A first indication of a more than accidental correspondence lies in the mathematical properties of the Southern African hakata system and East African geomancies. Above I stressed, in general, the importance of the mathematical aspect of divination systems. Their underlying mathematical structure can be a most effective pointer to otherwise hidden relationships, because this structure may well survive regardless of the transformations the systems go through at the surface. A careful examination of the binary, 2k pattern dominating the mathematical structure of both the Southern African four-tablet divination system, and the more directly Islamic-derived forms of geomancy found in the Indian Ocean region (including the well-studied Sikidy system at Madagascar) led me to hypothesise historical connections which were subsequently substantiated when I found identical items in the interpretative catalogues attending the divination system in these two more or less adjacent regions. It turned out that the four horizontal lines of the standard geomantic symbols (e.g. 🖔 **Ξ**), where each line can take two values (uneven or even, one dot or two, a dot or a line), were redefined as four tablets, whether each tablet can take two values (obverse or reverse); in the process, the attending Islamic interpretative catalogue was partly maintained (it is still very conspicuous in the Madagascar and Comoro Islands variants), partly localised and transformed.

In this connection it is illuminating to consider the spread, from one clearly identified geographical focus, of Islamic geomancy over Madagascar, in the form of the *Sikidy* system, on whose early forms we are well informed through the writings of the seventeenth-century French traveller de Flacourt:

'According to Flacourt,<sup>77</sup> Matatane country in southeastern Madagascar (...) where the Antemoro (...) live was a center of astrological study as early as the fourteenth century (...). This area was also the site of early Arab settlements, although strict Islamic observances were lost centuries ago (...). Historical evidence shows that Antemoro diviners, bearers of the astrological system, infiltrated nearly all the ancient kingdoms of Madagascar beginning in the sixteenth century. (...) Today, although many persons claim to be *ombiasy* [diviners], only the Antemoro diviners are considered true professionals. The area is still a famous place of learning where specialists go for training and then return to their home communities with a certain body of knowledge. Now we can better understand the degree of similarity of divination forms found throughout Madagascar. For centuries Matitanana has remained a training center for diviners who have migrated widely, usually attaining important positions in their home communities and with various royal families.'<sup>78</sup>

In view of the relatively short distance between the Zimbabwean highlands, Madagascar and the Comoro Islands we must now ask ourselves whether, in the early history of the Southern African four-tablet system, similar conditions for geographical spread in the hands of literate specialists might have obtained. Beach<sup>79</sup>estimates that on the Zimbabwean highlands in the sixteenth century CE. from one thousand to two thousand Muslims were involved in diplomatic and trading activities. Islamic influence on the Mutapa court was very considerable, as e.g. brought out in style of dress. Local Muslims felt the arrival of Father Silveira, the representative of a rival world religion and of a rival expanding network of

-

<sup>&</sup>lt;sup>77</sup> de Flacourt 1661: 172, 195.

<sup>&</sup>lt;sup>78</sup> Vérin & Narivelo Rajaonarimanana.

<sup>&</sup>lt;sup>79</sup> Beach 1980; cf. Gregson 1973.

mercantile and political relations, as a serious threat; the juridical divination, with four tablets, which ensured this missionary's death sentence was, as all authorities agree, most probably conducted by Muslims. In its earliest recorded form the Southern African fourtablet oracle appears in Zimbabwe in the sixteenth century CE. in a contact situation between Muslims (presumably furnishing the khatt interpretative catalogue) and African courtly culture.

Beyond the circumstantial evidence of identical underlying mathematics and the presence of a demonstrable literate Islamic periphery both in West-Africa, Madagascar and the Zimbabwean Plateau, there are concrete, decisive points of correspondence between the Islamic system, *Sikidy*, and the four-tablet system. These I have presented in great detail elsewhere<sup>80</sup> and there is no need to repeat them here. The most salient points are that the common Islamic-geomantic odd and even turns out to translate systematically into 'face up' or 'face down' of the tablets; and that semantically many of the standard geomantic names of configurations ('the road', 'the assembly', 'the girl', 'the boy') reappear in the *hakata* system, with the same positive or negative meanings associated.

Thus, unmistakably, the four-tablet system has at least partially sprung from northern, Islamic-associated predecessors

# 7. DISCUSSION AND CONCLUSION

We have established an Islamic background for have effectively become Africa's major divination systems — and hence the continent's major system from the production of therapeutic and diagnostic knowledge, in which tens of thousands of African engage every day, right up to today. But we should not overlook perhaps the most important message of the present argument: there is not only the Islamic connection but also its suppression from consciousness. By and large, in the process of transformative localisation, the Islamic connotations of the geomantic practices have been lost, they are massively oral practices in illiterate contexts dominated not by a recognised and conscious Islamic identity, but by historical African religious forms.

Whereas on Madagascar the interpretative catalogues still betray their literate origin and abound with Arabic words and concepts, in West and Southern Africa they have for centuries been in the hands of illiterates, who memorise and transfer the complex and often massive contents<sup>81</sup> mainly by means of the praises — without any specific reference to the Islamic origin of this body of knowledge, and in a local cultural environment where other Islamic elements are largely inconspicuous or even absent. Also the forms of the four-tablet systems, their iconography and interpretative catalogues, have become decidedly African: the themes of the Great Pool, crocodile and snake (even if possibly local projections on more widely distributed themes such as the circle-dot motif<sup>82</sup> and the astrological concept of the Dragon's Head and Dragon's Tail); the central symbolism of the family unit in which (in a very un-Islamic way) a senior and a junior wife occupy decisive positions; as well as an aetiology in which sorcery and ancestors constitute the central concepts — all this leaves no doubt that the four-tablet system, even if developed under Islamic influence, has been effectively localised

<sup>80</sup> Van Binsbergen 1996d.

E.g. Bascom 1969, a book of nearly 800 pages, mainly contains one Nigerian diviner's interpretative catalogue in verse.

<sup>82</sup> Segy 1953.

to become Southern African culture.

The process is similar to what happened for instance to the Semitic religious traditions which in the course of two thousand year have been localised so as to become fully-fledged parts of West European Christian culture.

Identifying, far beyond the recognised realm of popular Islamic expansion in Black Africa, an unmistakable Islamic connection in a cultural complex, notably 'bone throwing', which to most researchers would be self-evidently and undeniably Southern African (its untraced origins subconsciously projected in some particularly archaic and stereotypical local village order), raises at least three major questions for further research:

- What about the origins, in Africa, in the Ancient Near East, in Graeco-Roman magic, or in East Asian symbolic and divinatory practices, of Islamic *khatt* itself? We have already breifly indicated how Basra by the end of the first millennium CE found itself at the crossroads of Old World intellectual traditions, in which the occult sciences occupied a major place. The unraveling of the antecedents of geomantic divination before its seminal formulation in Abbasid Iraq has received detailed attention in my ongoing historical and comparative research into geomancy,<sup>83</sup> but since the African contribution remains conjectural at best, a discussion of these antecedents falls outside our present scope.
- Is the indebtedness to Islam, demonstrated in the present argument for major African divination systems, limited to that specific domain of symbolic expression, or can the same relationship be established in other fields of African life? Limitations of space do not permit me to pursue this question any further here, but elsewhere<sup>84</sup> I have discussed the Islamic connections of the major African family of boardgames: mankala, generally known as the game consisting of parallel rows of holes along which counters (pebbles, grains) are repeatedly redistributed until they are captured by any of the players. Remarkably, the reconstructed pattern of origin and diffusion of mankala boardgames is almost identical to that of geomantic divination, in the Old and the New World. Ecstatic religion may be another domain to be explored. Here again we have a symbolic expression which in recent centuries has so captured sub-Saharan Africa that it has come to appear as eminently and traditionally African. Yet Frobenius already made a convincing argument about the relatively recent inroads of shamanism into Africa.85 I have recently<sup>86</sup> taken up this argument at considerable length and once again stressed the probable role of Islam as a vehicle for the African spread of shamanism as an essentially Asian expression. Finally there is the claim from several leading musicologists that major African musical instruments, such as the xylophone and the hour-glass drum, are essentially Asian in origin;87 while the African diffusion of the Indonesian wood percussion instruments may antedate the penetration of Islam in South East Asia, Nketia lists various other instruments and musical styles that, while now totally localised as traditionally African, would seem to owe their introduction into sub-Saharan Africa to the vehicle of Islam.
- What about the possibility or more comprehensive intercontinental exchange patterns?

<sup>83</sup> Cf. van Binsbergen 1996b.

<sup>84</sup> Cf. van Binsbergen 1996a, 1996c.

<sup>85</sup> Frobenius 1954: 208f, map 27.

<sup>&</sup>lt;sup>86</sup> Cf. van Binsbergen 2003.

Kwabena Nketia 1975; Jones 1964.

Must we consider African divinations systems, with all their ramifications and variations throughout the continents, as just one manifestation among many, of the fact that throughout cultural history Africa has been much more part of the wider world, — both receiving certain major cultural influences to the other continents, and offering other major achievement to these continents? Current globalisation research has largely concentrated on the twentieth century, but in its wake we have seen a groweing awareness of 'proto-globalisation': the world-wide spread of cultural achievements carried by the technologies, not of the airplane and the Internet, but at least those of the written word, the sailing ship, and the caravan trade. Recognising Islam as a major globalising project (in the Prophet Muhammed's days no less than today), will help us focus on proto-globalisation and appreciate Islam as some of its major vehicles.

Further research on these three topics is certainly needed. Meanwhile the present paper will suffice to draw scholarly attention to the Islamic antecedents of certain major aspects of 'African traditional religion'. This will help us to avoid false juxtapositions in our approach to both Africa and Islam, and to appreciate better the continued appeal of Islam in Africa today.

### **BIBLIOGRAPHY**

Abimbola, 'W., 1971, 'Ifa divination poetry and the coming of Islam to Yorubaland: A preliminary investigation', *Pan-African Journal*, 4, 4: 440-454.

Abimbola, 'W., 1976, Ifa: An exposition of the Ifa literary corpus, New York: Nok.

Adler, A., & Zempléni, A., 1972, Le bâton de l'aveugle: Divination, maladie et pouvoir chez les Moundang du *Tchad*, Paris: Hermann.

Ahmad, S.M., translator, 1989, Arabic classical accounts of India and China: Book One: Al-Masalik wa'l-mamalik: Roads and kingdoms, by Ibn Hkurdadhbih: d.c. AH 300/AD 912: Book Two: Akhbar al-Sin wa'l-Hind: An Account of China and India: by Sulayman al-Tajir et al., compiled in AD 851, Shimla: Indian Institute of Advanced Study, with Calcutta: RDDHI India.

Al-Faraïd, 1967, *Al-Faraïd Classique: Petit dictionnaire Arabe-Français*, Beyrouth: Dar el-Machreq/Imprimerie Catholique, reprint of the 1965 edition.

al-Zabidi, Muhammad Murtadah, Taj al-'arus min jawahir al-Qamus, i-x, éd. du Caire 1286/1869-1287/1870.

al-Zanātī, Muhammad, 1320 H./1923 CE, al-Fasl fi usul cilm al-raml, Cairo, University of Leiden library.

al-Zanātī, Muhammad, 1341 H./1902 CE, al-Aqwal al-mardiyya fi ma'rifat al-a'mal al-ramliyya, Cairo, University of Leiden library.

al-Zanātī, Sīdī al-Shaīkh Muhammad, 1995, 'Treatise on the principles of sand-science: A provisional English translation by Rafat Badwy with the assistance of Wim van Binsbergen, of: Zanātī (Muhammad al-), Kitāb al-façl al-kabīr fī uçūl <sup>c</sup>Ilm al-raml. Wa-yalīhi: risāla fi'l-Jafr wa-Qur<sup>c</sup>a li-Sayyidī Ja<sup>c</sup>far al-Çadiq, Wassenaar: Netherlands Institute of Advanced Studies in the Humanities and Social Sciences, typescript.[ vervang alle uitzonderlijke fonts door gewone ]

Apostel, L., 1981, African philosophy: Myth or reality, Gent: E. Story-Scientia.

Appiah, K.A., 1992, *In my father's house: Africa in the philosophy of culture*, New York & London: Oxford University Press. .

Appiah, K.A., 1993, 'Europe Upside Down: Fallacies of the New Afrocentrism', *Times Literary Supplement* (London), 12 February, 24-25.

Ardant du Picq, le Colonel, 1930, 'Étude comparative sur la divination en Afrique et à Madagascar', *Bulletin du Comité d'Études Historiques et Scientifiques de l'Afrique Occidentale Française*, 13: 9-25.

Asante, M. K. 1990. Kemet, Afrocentricity, and Knowledge, Trenton, N.J.: Africa World Press.

Bascom, W., 1969, *Ifa divination: Communication between gods and men in West Africa*, Bloomington: Indiana University Press.

- 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, eds., 1968, *La divination*, tome second, Paris, Presses Universitaires de France, pp. 393-428.
- Beach, D.N., 1980, The Shona and Zimbabwe, 900-1850: An outline of Shona history, Gwelo: Mambo Press.
- 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, .
- Bellonci, M.,1985, *Il milione: Het originele reisverslag van Marco Polo*, Weesp: Fibula-van Dishoeck, Ned. vert. van *Il millione*, 1982, Torino: Edizioni Radiotelevisione Italiana.
- Berlinerblau, J., 1999, Heresy in the University: The Black Athena controvery and the responsibilities of American intellectuals, New Brunswick etc.: Rutgers University Press.
- Bernal, Martin, 1996, 'The Afrocentric Interpretation of History: Bernal Replies to Lefkowitz', *Journal of Blacks in Higher Education*, 11: 86-94.
- Bewaji, J.A.I., 1992, 'A critical analysis of the philosophical status of Yoruba Ifa literary corpus', in: H. Nagl-Docekal & F. Wimmers, eds., *Postkoloniales Philosophieren Afrika*, vol. 6, Wien: Oldenburg, pp. 140-154.
- Boll, F.J., C. Bezold & W. Gundel, 1966, Sternglaube und Sterndeutung: Die Geschichte und das Wesen der Astrologie: 5. durchgesehene Auflage mit einem bibliographischen Anhang von H.G. Gundel, Darmstadt: Wissenschaftlichte Buchgesellschaft, first published Leipzig 1926: Teubner Verlag, p. 60, 191f.
- Bouché-Leclerq, A., 1975, *Histoire de la divination dans l'antiquité*, 2 vols I-II, New York: Arno Press, reprint of the original edition in 4 vols, 1879-1882, Paris: Leroux.
- 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.
- Brenner, L., 1999, 'Muslim divination and the history of religion [in] sub-Saharan Africa', MS.
- Brockelmann, C., 1937-1942, Geschichte der arabischen Literatur, Leiden: Brill, Supplementband I, 179.
- Burton, R.F., 1893a, *A mission to Gelele, King of Dahomey, 2 vols*, London: Tylston & Edwards, Memorial edition, first published in 186.
- Burton, R.F., 1893b, *The book of the Thousand nights and a night, in twelve volumes*, ed. L.C. Smithers. London: Nichol.
- Burton, R.F., 1987, *First footsteps in East Africa*, Mineola (N.Y.): Dover, reprint of 1894 Memorial Edition of the Works of Captain Sir Richard F. Burton etc., in a single volume, first published 1856, i, 40, n. 2.
- Carmody, F.J., 1956, Arabic astronomical and astrological sciences in Latin translation: A critical bibliography, Cambridge & Los Angeles.
- 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.
- Chittick, W.C., 1995, *Imaginal worlds: Ibn al-'Arabi and the problem of religious diversity*, Albany: State University of New York Press. .
- Corcos, D., 1964, 'The Jews of Morocco under the Marinides', *Jewish Quarterly Review* [Philadelphia], 54: 271-87, and 55: 53-81, 137-50, espec. (54:)273, 278f n. 18.
- Culin, S., 1890-91, 'East Indian Fortune-telling with dice', *Proceedings of the Numismatic and Anthropological Society of Philadelphia*, 1890-91: 65. .
- de Boer, T., 1921, De wijsbegeerte in den Islam, Haarlem: Boh.
- de Boer, T., 1967, The history of philosophy in Islam, trans. by E.R. Jones, first published 1903.
- de Flacourt, E., 1661, Histoire de l'isle de Madagascar, Paris: Gervais Clouzier, pp. 172, 195.
- Diop, C. A., 1974, *The African Origin of Civilization: Myth or Reality?* M. Cook, trans. Westport, Conn.: Lawrence Hill.
- Diop, C.A., 1955, Nations nègres et culture de l'antiquité nègre-égyptienne aux problèmes culturels de l'Afrique noire d'aujourd'hui, Paris: Presence Africaine, 2d ed., first published 1954.
- Diop, C.A., 1959, L'Unité culturelle de l'Afrique noire, Presence Africaine, Paris, 1959.
- dos Santos, J., 1901, 'Ethiopia oriental, and Eastern Ethiopia', in: Theal, G.M., ed., *Records of South Eastern Africa*, Cape Town: Government of the Cape Colony, vii, pp. 1-182 [reprint of the original edition of 1609], 183-383 [ English translation ].
- Ehret, C., 1996, 'Ancient Egyptian as an African language, Egypt as an African culture' in: Celenko, T., ed., Egypt in Africa, Indianapolis: Indiana University Press, pp. 25-27.
- Ettisch, E., 1987, *The Hebrew vowels and consonants: As symbols of ancient astronomic concepts*, Brookline Village (M.A.): Branden.
- Fahd, T., 1966, La divination arabe: Etudes religieuses sociologiques et folkloriques sur le milieu natif de l'Islam, Leiden: Brill, p. 197f. .

- 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.
- Fauvelle, F.-X., 1996, L'Afrique de Cheikh Anta Diop, Pris: Karthala.
- Ferrand, G., 1891-1902, Les musulmans à Madagascar et aux Iles Comores, 3 vols (1891, 1893, 1902), Paris: Ernest Leroux, p. i 76.
- Fisher, H.J., 1973, 'Conversion reconsidered: Some historical aspects of religious conversion in black Africa', *Africa*, 43: 27-40.
- Fortes, M., 1953, 'The structure of unilineal descent groups', American Anthropologist, 55: 17-41.
- Frobenius, L., 1954, Kulturgeschichte Afrikas, Zürich: Phaidon; first published Wien 1933.
- Ghāyat al-hakīm also known as Picatrix (Pingree 1980.
- Goldziher, I., 1902, 'Einige arabische Ausrufe und Formeln', Wiener Zeitschrift für die Kunde des Morgenlandes, Wien, 16: 131-146, esp. 139f.
- Goody, J., 1968, 'Introduction', in: Goody, J., ed., *Literacy in traditional societies*, Cambridge: Cambridge University Press, pp. 1-26.
- Gregson, R.E., 1973, 'Trade and politics in South-East Africa: The Moors, the Portuguese and the Kingdom of Mwene Mutapa', *African Social Research*, II, xvi: 413-446.
- Hamaker-Zondag, K., 1981, Oude Europese voorspelkunst, Amsterdam: Schors.
- Hébert, J.C., 1961, 'Analyse structurale des géomancies comoriennes, malgaches et africaines', *Journal de la Société des Africanistes*, 31, 2: 115-208.
- 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, Dutch tr. van Das groβe Orakelbuch, München: Ehrenwirth, 1983.
- Horton, R., 1975, 'On the rationality of conversion', Africa, 45: 219-235, 373-399.
- Huffman, T.N., 1983, 'Great Zimbabwe and the politics of space', in: M. Posnansky & D. Ibn Khaldoun, 1863-68, *Prolégomènes historiques*, traduits en français et commentés par [W.] M[acGuckin baron] de Slane, Paris: Imprimérie 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.
- 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., 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.
- Jaulin, R., 1991, Géomancie et islam, Paris: Christian Bourgeois.
- Jones, A.M., 1964, *Africa and Indonesia: The evidence of the xylophone and other musical and cultural factors,* Leiden: Brill, pp. 198f.
- Kassibo, B., 1992, 'La géomancie ouest-africaine: Formes endogènes et emprunts extérieurs', *Cahiers d'Etudes Africaines*, 32, 4, no. 128: 541-596.
- Kershaw, T., 1992, 'Afrocentrism and the Afrocentric Method.' *Western Journal of Black Studies*, xvi: 160-168. Kwabena Nketia, J.H. 1975, *The music of Africa*, London: Gollancz, pp. 7f. .
- le Scouézec, G., 1965, 'Géomancie', in: Le Scouézec, G., H. Larcher & R. Alleau, 1965, *Encyclopédie de la divination*, n.p.: Tchou, pp. 392-459.
- le Scouézec, G., H. Larcher & R. Alleau, 1965, Encyclopédie de la divination, n.p.: Tchou
- Lefkowitz, Mary R,. 1997, Not Out of Africa: How Afrocentrism Became an Excuse to Teach Myth as History, New York: New Republic Books, 1997.
- Maupoil, B., 1943a, 'Contribution à l'origine musulmane de la géomancie dans le Bas-Dahomey', *Journal de la Société des Africanistes*, 13.
- Maupoil, B., 1943b, La géomancie à l'ancienne Côte des Esclaves, Paris: Institut de l'Ethnologie.
- Monteil, C., 1931, 'La divination chez les Noirs de l'O.A.F. [Afrique Occidentale française]', Bulletin du Comité d'études historiques et scientifiques de l'Afrique Occidentale Française, xiv (1/2): 72-136, p. 89.
- Muller, H.C.A., 1944, ed., Voorlopers en navolgers van Marco Polo: Johannes de Plano Carpini, Willem van Rubroek, Ibn Battuta, Odoric van Pordenone, Leiden: Sijthoff.
- Pâques, V., 1964, L'Arbre cosmique dans la pensée populaire et dans la vie quotidienne du Nord-Ouest africain, Travaux et Mémoires de l'Institut d'Ethnologie de l'Université de Paris, no. 70.

- Sauvaget, J., ed., 1948, Relation de la Chine et de l'Inde: Ahbār aç-çīn wa l-hind: rédigée en 851, Paris: Les Belles Lettres.
- Segy, L., 1953, 'Circle-dot sign on African ivory carvings', Zaïre, 7, 1: 35-54.
- Shaked, S., 1964, A tentative bibligraphy of Geniza documents, Paris/ The Hague: Mouton.
- Skinner, S., 1980, Terrestrial astrology: Divination by geomancy, London: Routledge & Kegan Paul.
- Steinschneider, M., 1864, 'Über die Mondstationen (Naxatra), und das Buch Arcandam', Zeitschrift der Deutschen Morgenländischen Gesellschaft, xviii: 118-206, p. 177f. .
- Steinschneider, M., 1877, 'Die Skidy [ sic] oder geomantischen Figuren', Zeitschrift der deutschen Morgenländischen Gesellschaft (Leipzig), 31: 762-765.
- Steinschneider, M., 1893, *Die hebräischen Übersetzungen des Mittelalters*, Berlin, Preisschrift der Pariser Académie des Inscriptions, Paris: Académie des Inscriptions.
- Trachtenberg, J., 1939, Jewish magic and superstition: A study in folk religion, New York: Behrman's Jewish Book House
- Traoré, M.L., 1979, 'Vers une pensée originelle africaine: exposé géomantique, critiques de la négritude et du consciencisme', Thèse de 3e cycle, Paris-IV, unpublished
- Trautmann, R., 1939-1940, La divination à la Côte des Esclaves et à [check: à la ] Madagascar: Le Vôdoû Fa—le Sikidy, Mémoires de l'Institut Français d'Afrique Noire, no. 1, Paris: Larose.
- Trimingham, J.S., 1962, A History of Islam in West Africa, London.
- Trimingham, J.S., 1964, Islam in East Africa. Oxford: Clarendon Press.
- Trimingham, J.S., 1965, Islam in the Sudan, London.
- Trimingham, J.S., 1968, The Influence of Islam upon Africa. New York: Frederick O. Praeger.
- Trimingham, J.S., 1976, Islam in Ethiopia, London: Cass.
- van Binsbergen, W.M.J., 1981, *Religious change in Zambia: Exploratory studies*, London/Boston: Kegan Paul International.
- van Binsbergen, W.M.J., 1991, 'Becoming a sangoma: Religious anthropological field-work in Francistown, Botswana', Journal of Religion in Africa, 21, 4: 309-344.
- van Binsbergen, W.M.J., 1994, 'Divinatie met vier tabletten: Medische technologie in Zuidelijk Afrika', in: van der Geest, J.D.M., ten Have, P., Nijhoff, G., en Verbeek-Heida, P., 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.
- van Binsbergen, W.M.J., 1996a, 'Black Athena and Africa's contribution to global cultural history', Quest Philosophical Discussions: An International African Journal of Philosophy, 1996, 9, 2 / 10, 1: 100-137.
- van Binsbergen, W.M.J., 1996b, 'The astrological origin of Islamic geomancy', paper read at The Society for the Study of Islamic Philosophy and Science/ Society of Ancient Greek Philosophy 15th Annual Conference: 'Global and Multicultural Dimensions of Ancient and Medieval Philosophy and Social Thought: Africana, Christian, Greek, Islamic, Jewish, Indigenous and Asian Traditions', Binghamton University, New York, Department of Philosophy/ Center for Medieval and Renaissance studies.
- van Binsbergen, W.M.J., 1996c, 'Time, space and history in African divination and board-games', in: Tiemersma, D., & Oosterling, H.A.F., eds., *Time and temporality in intercultural perspective: Studies presented to Heinz Kimmerle*, Amsterdam: Rodopi, pp. 105-125.
- van Binsbergen, W.M.J., 1996d, 'Transregional and historical connections of four-tablet divination in Southern Africa', *Journal of Religion in Africa*, 26, 1: 2-29.
- van Binsbergen, W.M.J., 1997a, 'Rethinking Africa's contribution to global cultural history: Lessons from a comparative historical analysis of mankala board-games and geomantic divination', in: Binsbergen, Black Athena: Ten Years After, *o.c.*, pp. 221-254.
- van Binsbergen, W.M.J., 1997b, 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.
- van Binsbergen, W.M.J., 2003, Intercultural encounters: African, anthropological and historical lessons towards a philosophy of interculturality, H amburg/München: LIT.
- van Binsbergen, W.M.J., forthcoming (a), Global Bee Flight: Sub-Saharan Africa, Ancient Egypt and the World: Beyond the Black Athena thesis.
- van Binsbergen, W.M.J., forthcoming (b), *Religion and social organisation in north-western Tunisia, Volume I: Kinship, spatiality, and segmentation, Volume II: Cults of the land, and Islam.*
- van Sertima, Ivan, & L. Williams, eds. 1989, Great African Thinkers, Vol.1, Cheikh Anta Diop, New Brunswick, N.J.: Transaction, 1989.

- Verharen, C., 1995, 'Afrocentrism and Acentrism: A Marriage of Science and Philosophy', *Journal of Black Studies*, xxvi: 62-76.
- Vérin, P., & Narivelo Rajaonarimanana, 1991, 'Divination in Madagascar: The Antemoro case and the diffusion of divination', in: Peek, P.M., ed., 1991, African divination systems: Ways of knowing, Bloomington: Indiana University Press, pp. 53-68.
- von Sicard, H., 1959, 'The Hakata names', NADA (Southern Rhodesia Native Affairs Department Annual), 36: 26-29.
- Werbner, R.P., 1989, 'Making the hidden seen: Tswapong wisdom divination', in: Werbner, R.P., 1989, *Ritual passage sacred journey: The process and organization of religious movement*, Washington/Manchester: Smithsonian Institution Press/Manchester University Press, ch. 1, pp. 19-60.
- Winters, C.A., 1994, 'Afrocentrism: A Valid Frame of Reference', Journal of Black Studies, xxv: 170-190.