

# Four-tablet divination as transregional medical technology in Southern Africa: mechanics, spread, origin and contemporary significance

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My oral presentation at the conference is based on a 50 page paper in Dutch, prepared for a volume entitled Medical technology to be edited by Sjaak van der Geest (University of Amsterdam). The paper is at the same time the skeleton of a book on divination in Southern Africa, to be published in English in 1993. The argument consists of two parts. In the first part I describe a system of divination with four tablets as I found it being used widely by diviners of various medico-religious disciplines or sub-systems (herbalists, sangomas, even leaders of independent churches) in the town of Francistown, North East Botswana, where I have carried out field-work since 1988. In the second part I try to situate this system in time and place within the Southern African region, among African divination systems in general, within the more than four hundred years of its recorded history, and within the history of the spread of classic Arabic divination systems such as have been recorded extensively both in the Sudanic belt (*khatt al-raml* or *darb al-raml*, *Ifa*, ‘Sixteen Cowries’ etc.) and in the Indian ocean region (Comoro Islands, Madagascar — *sikidy*— and Swahili coast. The bibliography alone of the original paper is over eight pages long and cannot be reproduced here. Those interested are advised to give me their address so that I can mail the English version to them as soon as it becomes available.

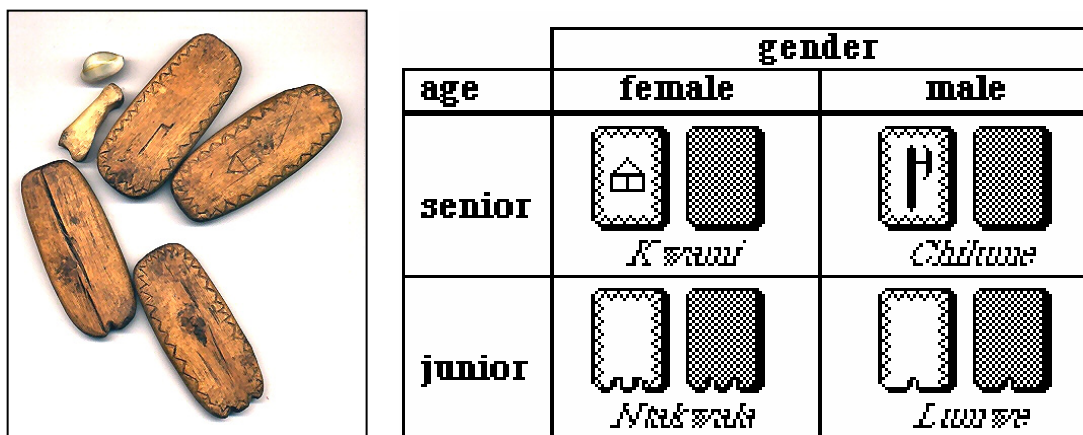
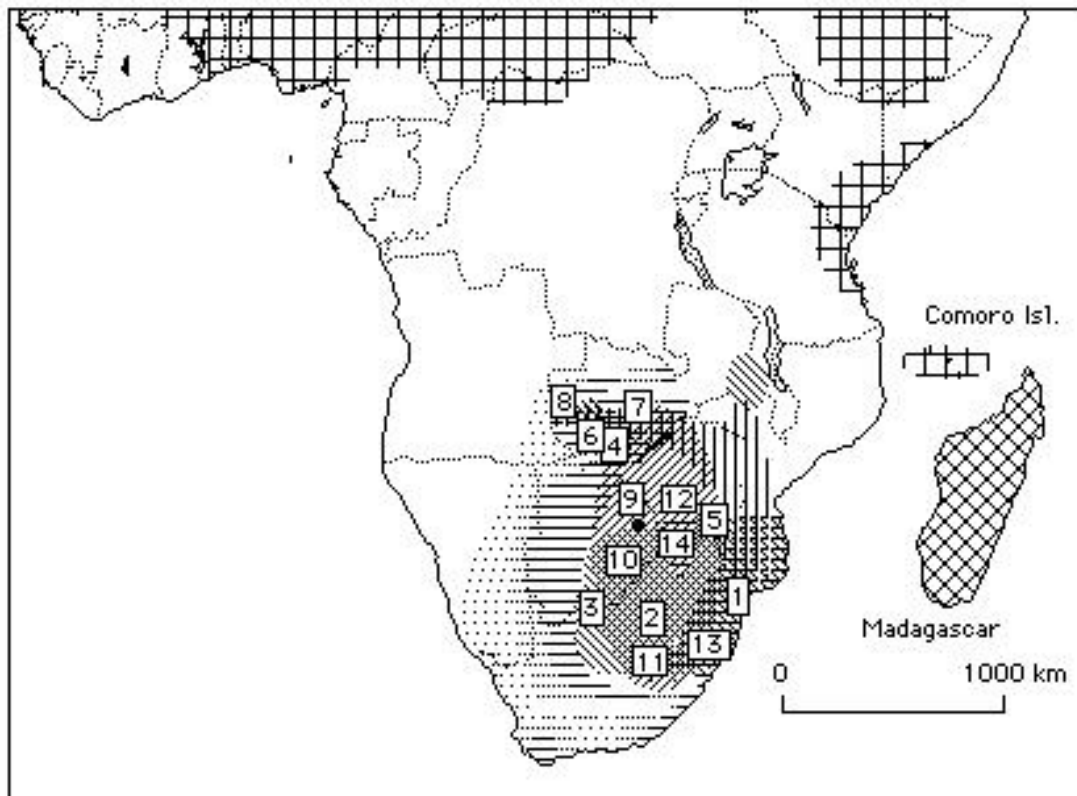


Diagram 1. The material form of a divination set from Francistown.

Current praxeological approaches to divination in Africa (Devisch, Werbner) have stressed the unique features of divination sessions, turning the diviner into a hero of communication or culture, without emphasis on the institutionalized aspects of divination. My point is that although every divination session may be unique, the diviner does work in a highly structured and predictable situation, determined by the nature of the divination apparatus, which in this case consists of the combination of a material apparatus of four divination tablets, and an interpretative catalogue. The four tablets are each individually named and connotations of age and gender are projected onto them (see diagram 1).

Simple combinatorial logic determines the mathematical properties of this material apparatus: with four tablets which each can assume two different values (with the marked face either 'facing upwards' or 'facing downwards'),  $n^k=2^4=16$  different configurations can be formed when the tablets are freely thrown, and each of these configurations have an equal probability of occurrence (1/16 or 0.067). All these different configurations are recognized in the local system; each is named, and is associated with a number of parallel possible interpretations along such dimensions as (1) ancestors, (2) the body, (3) the client's social environment, (4) sorcery in that environment, (5) property, (6) generations immediately above or below the client, and (7) animal species representing totemic clans). Moreover each configuration has an overall general interpretation, a standard summary meaning, and a praise. Each session comprises from a few to thirty or forty throws. The diviner, but not the client, has a full (but unwritten, mental) knowledge of the interpretational catalogue or matrix, and from throw to throw proceeds to formulate possible interpretations in the form of relevant and revelatory stories cut to the measure of the client's situation, which is gradually defined by both verbal and non-verbal communication between diviner, client and tablets. The job of the diviner is to switch from one possible interpretation to a more appropriate one without this being disruptive to the client's faith in the session and in the revelatory power of the apparatus. I offer an extensive discussion of the various ways in which the tablets are endowed with an almost personal authority.

The various interpretations of each configuration along the seven dimensions specified above are far from systematically derived from the general interpretation; there are no simple transformational or deductive rules by which the various interpretations can be linked to each other or to a standard meaning. Nor does it seem possible to identify systematic transformational rules governing any particular dimension across all sixteen configurations; e.g. it is not clear on what the association is based between a particular named bodily complaint or syndrome and a particular configuration. In this respect the system as used in Francistown today is no too intimately linked to such cosmologies as govern aspects of life outside divination. The interpretational apparatus is highly abstract and conventionalized and its interpretations cannot be reconstructed from first principles. It is classificatory rather than relational. This ties in with the fact that there is no *microdramatics* (Werbner) to speak of: the four tablets are exclusively interpreted in their joint configuration which dictates under which of the sixteen entries in the mental catalogue one has to look, but the interpretation is not the result of each tablet contributing its own, specific, unique and constant meaning to the whole; neither does the interpretation depend on the relative position of the tablets after a throw. In this respect the Francistown system is very different from Junod's famous description of Tsonga astralagus divination, but in principle identical to the Pedi conventionalized system he described as found with one Tsonga diviner.










	four-tablet divination (end 19th century)
	probable expansion of four-tablet system in the 20th century
	astragalus divination (end 19th century)
	four-tablet and astragalus systems combined (end 19th century)
	nutshell divination (end 19th century)
	Sikidy divination on Madagascar
	other divination systems in West, Central and East Africa and on the Comoro Isl. accepted to derive from Arabian geomancy
•	Francistown

Diagram 2. The geographical distribution of some divination systems in Africa

What is also interesting is that the interpretational catalogue does never explicitly refer to the ‘objective’ central issues in the social experience of the client: the state, politics, the work-place, formal organizations, powerlessness, humiliation, exploitation, do not feature here. If the client’s complaints yet focus on these issues,

they are taken care of in the interpretation by being declared ephemeral and unimportant: the interpretation stresses the link with the ancestors, whose protection, wrath or calling determine the client's success or misfortune in the modern world, but interpreted in the terms of a closed village microcosm. The issues of the wider world are confronted by denying them — a strategy which has parallels with the social message of the independent healing churches.

The conventionalized nature of the system, and its apparent lack of systematic connexion with local cosmologies, suggest that a synchronic and local analysis does not offer us sufficient insight in its nature and working. How then to situate this system in time and place? The extensive literature on divination in Southern Africa allows us to see the Francistown system as one particular form of a family of four-tablet divination systems which are now to be found all over Southern Africa, often in combination with the astralagus oracle (comprising a number of dice which derive from the feet or hoofs of animals and which, because of the larger number and the fact that they can fall on more than two — usually four — side, have totally different mathematical properties than the four-tablet system) and the nutshell oracle (whose mathematical properties are again different since with unmarked, unnamed and therefore unordered nutshells the number of possible configurations is not  $n^k$  but  $k-1$ ). The geographical distribution of these three forms of divination is tentatively represented in diagram 2.

Beside these divination systems others have occurred, including mental divination, water gazing and the divining basket.

The extensive literature allows us to trace the rapid expansion of four-tablet divination to become a major divination form all over Southern Africa. The converging evidence suggests that the system has spread from the Shona, changing the form of the tablets and the nomenclature of tablets and configurations in the process. Something of this process can be gleaned from an examination of the nomenclature of the four tablets in a number of Southern African situations (table 1):

group/ location	senior male	senior female	junior male	junior female	source
'Botswana'	<i>Lekwame, More Mogolo</i>	<i>Kgadietona</i>	<i>Silume, Faro</i>	<i>Kgatsane</i>	Staugård 1985
Francistown	<i>Chilume</i>	<i>Kwami</i>	<i>Lumwe</i>	<i>Ntakwala</i>	my field-work; Junod 1927: ii, 604; Garbutt 1909; Coertze 1931
Gananwa	<i>Lekhamen</i>	<i>Gwadima</i>	<i>Selume</i>	<i>Lumwe</i>	Nettleton 1984: i, 318 and sources cited there; Roberts 1915
Kwena	<i>Moremogolo, Jaro, Legwame, Serumi</i>	<i>Mmamotse, Pubagadi</i>	<i>Thwagadima</i>	<i>Thogwane, Pootana</i>	De Jager & Seboni 1964
Masemola	<i>More o Moxolo</i>	<i>Mmaksadi</i>	<i>Selumi</i>	<i>Selumi</i>	Eiselen 1932
Ndebele	<i>Kwami</i>	<i>Dagwala</i>	<i>Chirume</i>	<i>Lumwe</i>	Nettleton 1984: i, 318 and sources cited there
Ngwaketse	<i>More Mogolo</i>	<i>Kgadi-etona</i>	<i>Jaro</i>	<i>Kgatsene</i>	Campbell 1979
Pedi(Tsonga)	<i>Legoame</i>	<i>Thoagadime</i>	<i>Selume</i>	<i>Thogoane</i>	Junod 1927, ii: 603f
Shona	<i>(Chi-)Tokwadzima</i>	<i>Kwami</i>	<i>Chirume</i>	<i>Nhokwara</i>	Nettleton 1984: i, 318 and sources cited there; Hunt 1950, 1954, 1962; Gelfand 1956, 1964; Bourdillon 1976
Sotho	<i>Legwame</i>	<i>Thwagadima</i>	<i>Selumi</i>	<i>Thogwane</i>	Hammond-Tooke 1989: 114
Tati	<i>Moremogolo Thwagadima</i>	<i>Pubagadi, Tome, Caro</i>	<i>Kgosana,</i>	<i>Khatsana</i>	Willoughby z.j.
Tswapong	<i>Legwame</i>	<i>Thwagadima</i>	<i>Selome</i>	<i>Lengwe</i>	Werbner 1989b
Venda	<i>Hwami</i>	<i>Thwalima</i>	<i>Tshilume</i>	<i>Lumwe</i>	Nettleton 1984: i, 318 and sources cited there; Stayt 1931

Table 1. Nomenclature of the four basic tablets in Southern Africa

A cluster analysis on the pattern shown in table 1 yields (after many methodological steps which I cannot discuss in this summary) the dendrogram of diagram 3:

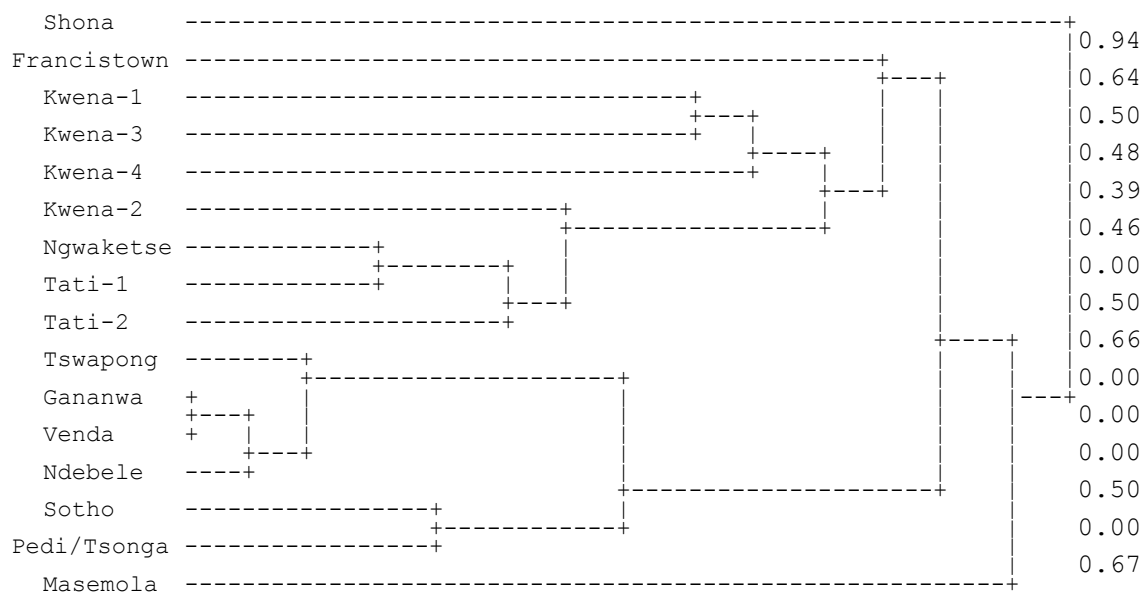


Diagram 3. Cluster analysis of the nomenclature of the four tablets in Southern Africa.

That the Shona system is more original than the others is suggested not only by diagram 3 (which shows a familiar pattern in line with the region's cultural affinities and cultural history), but also by the fact that only among the Shona does nomenclature and the associated symbolism in the iconography of the tablets systematically tie in with local cosmology. In the process of spread all sorts of inversions and transformations can be traced, male tablets ending up with iconographically female attributes and female names, the original Shona *Chilume* (maleness) through popular etymology transformed into the Tswana *Selome* (biter), etc. The fragmented nature of the interpretational catalogue in Francistown and elsewhere, and the absence of clear-cut transformational rules linking the various elements in the catalogue, also bear witness to a long history in the course of which the system has been cluttered with semantic and iconographic noise.

It is also from the Shona that we have the oldest documentary evidence concerning the four-tablet system:

'As sortes de que todos usam, são uns pequenos pedaços de pau redondos, espalmados e furados pelo meio e mais pequenos que taboas de jogar: a estes paus ou sortes chamam os cafres chacatas, e todo o cafre traz estas chacatas consigo enfiadas em uma linha, para usar d'ellas quando lhe succede alguma cousa duvidosa'. (Dos Santos 1609)

'Quattuor ergo sudibus in medium allatis, et varia et illis superstitione motis, sortes ducunt'. (Godigno 1616), referring to the judicial divination which led to the execution at the orders of the Mutapa of the first Catholic missionary to the Shona, Silveira, in 1561.

Also an incomplete set of three divining tablets was found among the Khami ruins dating from the same period.

Among older writers on Zimbabwe (von Sicard, Tracey) there was already considerable consensus that the *hakata* (as the four-tablet system is called there)

derived from Arab traders on the Zimbabwe Plateau. These writers even associated the generic name with the Arab root  $\sqrt{hkk}$ , ‘truth’. The diviners prompting Silveira’s execution were quite probably Muslims, of whom there were at least 1500 traders and diplomats at the Plateau at the time (Beach). At the same time the words *hakata* and *makakata* are commonly used for the nutshell oracle (Tsonga, Shona, Lozi), and it is likely that the divination system described here emerged from the coupling of a local material apparatus (consisting of or leading to the four tablets) to an Arab-derived interpretational catalogue. This is all the more likely since scholarship has for decades accepted for a fact the classic Arabic origin the West African and Indian Ocean divination systems, which are also based on the interpretation, according to a conventionalized catalogue in writing or memorized in verse, of sixteen combinations arrived at not however by the throwing of tablets, bones or dice, but by the throwing of cowries or divining chains, or (even more common) by the systematic elimination of beans, grains of sand, etc. from an ordered series of four piles, in such a way that each pile can be scored as ‘even’ or ‘odd’ depending on whether at the end of the elimination one or two beans, grains etc. remain. All this goes back to the *Kitab al-faṣi fi uṣul ʿilm al-raml* (‘Book of the Discrimination of the Principles of the Sand Science’) of the Moroccan shaykh ʿAbd Allah Muḥammad al-Zanati (11th century A.D.), a best-seller whose copies have spread all over Africa and whose contents, far from being esoteric and secret knowledge, belongs to the central core of classical Arabic knowledge, and incidentally uses astrological knowledge almost identical to mainstream European astrology, all going back to Ptolemy and even Empedocles. Not only is the underlying interpretational catalogue of for instance the Malagasy *Sikidy* very similar to that of the four-tablet system, also may *Sikidy's* pattern of spread as revealed in modern scholarship suggest a model for the spread of the four-tablet system from a postulated origin on the Zimbabwe highlands:

‘According to Flacourt [a French traveller writing in 1661 – WvB], Matatane country in southeastern Madagascar (around the Matitanana river) where the Antemoro (or Antaimoro) 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.’ (Vérin & Narivelo Rajaonarimanana 1991)

All this is still circumstantial evidence, but the case becomes very convincing when, in table 2, we compare a few configurations from al-Zanati, *Sikidy* and the Shona four-tablet system.

After identifying ‘all even’ in the Arab- or Arab-derived systems with ‘all open’ in the four-tablet system, it turns out that the specific names of the configurations in all three systems are identical, and similar correspondences appear than elsewhere in the table beardless cheek = girl, scarce beard = boy; that they do not appear in the same column is a phenomenon of the same order as the displacements of nomenclature and attributes in the process of spread over the Southern African subcontinent, Chilume/Selome etc. There can be no doubt that in the four-tablet interpretational catalogue we deal with just another version of the al-Zanati heritage which has been acknowledged to have spread to other parts of Africa.

divination system		specific configuration					
		I	II	III	IV	V	VI
Arabic according to Abu °Abd Allah al-Zanati; ● = even, ● = uneven	formal notation	(2 1 1 1) ● ●●●● ●	(1 2 1 1) ● ●●●● ●	(1 1 2 1) ● ●●●● ●	(1 1 1 2) ● ●●●● ●	(1 1 1 1) ●●●●	(2 2 2 2) ●●●● ●●●●
	name	otbat al-dakhal	naqi al-khadd	al-kusadji	otbat al-kharidja	tariq	al-djama°a
	litteral meaning	entrance threshold	man with beardless cheek	scarce beard	exit threshold	path	assembly
	constellation	al-Quas (Sagittarius / Archer)	al-°Aqrab (Scorpius/ Scorpion)	al-Mizan Balance)	al-Djuzahir (Serpens Cauda/ Serpent's Tail)	al-Saratan (Cancer) breast	al-Sunbala (Ear, = Spica = alpha Virginis)
	bodily aspect		thigh	liver, vagina	?		breast
Sikidy	formal notation	(2 1 1 1) ● ●●●● ●	(1 2 1 1) ● ●●●● ●	(1 1 2 1) ● ●●●● ●	(1 1 1 2) ● ●●●● ●	(1 1 1 1) ●●●●	(2 2 2 2) ●●●● ●●●●
	name	Alakaosy	Alakarabo	Alikasajy	Karija	Taraiky	Asombola
	meaning	child; evil thoughts;	robbers, thugs; misfortune;	medicine; mourning	slave; cool speech	emaciated; path;	abundance;
	(De Flacourt)	(dragon's head)	(girl)	(boy)	(dragon's tail)	(path)	(people)
four-tablet-system; ○= open ●= closed; order: KCNL <sup>4</sup>	formal notation	○●●●	●○●●	●●○●	●●●○	●●●●	○●●○
	gender/ age	senior woman	senior man	junior woman	junior man	all closed	all open
	Shona name	Kwami	Tokwadzima	Nhokwara	Chirume, Mashungara <sup>5</sup>	Rutsva, Masununguro, <sup>2</sup> Materi[r]o, <sup>6</sup> Zunga/ Zungamana <sup>8</sup>	Musasu Manu, <sup>3</sup> Zaru, <sup>7</sup> Rutsva, <sup>9</sup>
	Francis-town name	Kwami	Chilume	Ntakwala	Lumwe	Mashangula	Mbunga

- 1 'That which is long and thin'/'a patch of burnt grass'
- 2 'That which opens'.
- 3 'Shelter, sanctuary, liberation'.
- 4 KCNL= Kwami-Chilume-Ntakwale-Lumwe, the usual order when naming the tablets in Francistown. This order is arbitrary and only serves to make the dots unequivocal.
- 5 'You are burdened'.
- 6 'Fee for consultation'.
- 7 'Open!'
- 8 'Foursome'.
- 9 'That which is long and thin'/'A patch of burnt grass'.

Diagram 2. The three systems compared

However, this identification of the Arab interpretation catalogue should not make us close our eyes to its subsequent Africanisation, taking on a symbolism of snake and crocodile, sorcery, and lifting women (the two female tablets) to a prominence which is very un-Arabic.

Finally how could this system spread over the entire subcontinent and gain precedence over almost all other rival forms of divination there, so that today the four tablets are a conventional sign of office among non-cosmopolitan practitioners in Zimbabwe, Botswana, Zambia and increasingly South-Africa? Trends are identifiable of commodification of the four tablet sets, of them being more accessible to those (especially women and younger people) who were denied the use of the older, more elaborate and more guarded types of divination apparatuses, so that the newcomers could create new positions of medico-religious power for themselves, including in the professional organizations in which non-cosmopolitan medicine is increasingly organised. Moreover, the very impersonal, abstract and conventionalised nature of the interpretational catalogue, with its absence of personalized microdramatics, makes it extremely appropriate under modern conditions of capitalism, urbanization, and commodification. While the system in its interpretations on the one hand invokes a historic microcosmic world-view filled with ancestors and witches, on the other hand the submission to blind stochastic processes is in line with the powerlessness of the modern South African client vis-à-vis power relations in the society at large.