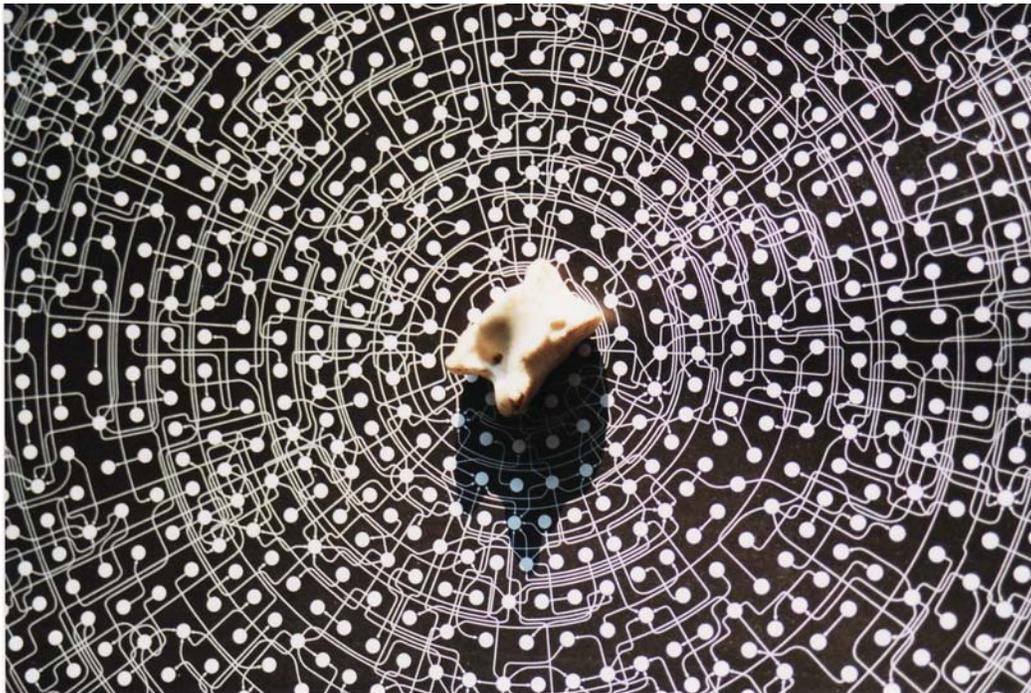# Traditional African divination systems as information technology

by André Croucamp

This article discusses a unique thinking skills technique based on traditional African divination systems. This technique has been used successfully in workshops by Open Minds Workshop in a number of challenging contexts.

Traditional African divination systems
as information technology
by André Croucamp

A wealth of knowledge resources from Africa has been overlooked. Colonial ideas have reduced many valuable practices like African divination systems to primitive superstition.

While belief systems differ all through Africa, the core techniques of divination remain basically the same. In fact, whether you are using European Tarot cards, the Chinese I-Ching, or 'Throwing the Bones' African style, the principle behind any divination tool is simple:

- choose a set of symbolic objects (often part of a long tradition of divination);

- create a random pattern between these symbolic objects (like the throw of the bones);

- interpret the pattern of the relationship between these objects creating meaning.

This suggests that divination is not primarily a system of belief or attitude, but is a technology. Some may insist that it is a 'ritual technology'.

The bad rap that early colonists gave divination was so successful that many historians, anthropologists and archaeologists to this day see divination as superstition. It is usually discussed under 'magic' or 'religious beliefs,' and is not often given the status of an innovative technology or powerful media.

What if we reconsidered 'throwing the bones' as a kind of information technology that accesses and organises information?

> "It is a sign of his creative outlook that he has understood fully the spirit behind the Sangoma's technique of bone throwing, brought it up to the minute and uses it to elicit deep-seated feelings of personnel in a wide variety of organisations. I have personally witnessed this and other techniques of his on two occasions and was astonished to see the far-reaching conclusions they led to which paved the way for some systemic changes in organisations including my own."
> - Prof. P. G. Raman,
> Head, Departments of Architectural Technology and Interior Design
> Cape Peninsula University of Technology

In pre-colonial times, the Sotho-Tswana people that the missionary Robert Moffat was working with drew the analogy between the missionary's book and the Ngaka's instruments of divination.

> My books puzzled them,' Moffat reported; 'they asked if they were my 'Bola,' prognosticating dice.' John Mackenzie found a similar observation made by the Ndebele of Chief Mzilikazi. In an important sense, this comparison highlighted a useful analogy since both books and bones were 'read' by specialists in their respective technologies of the sacred. Both required skilled interpretation, based on shared hermeneutical principles, before they could disclose their meaning and significance.
> - Chidester (1996:195)
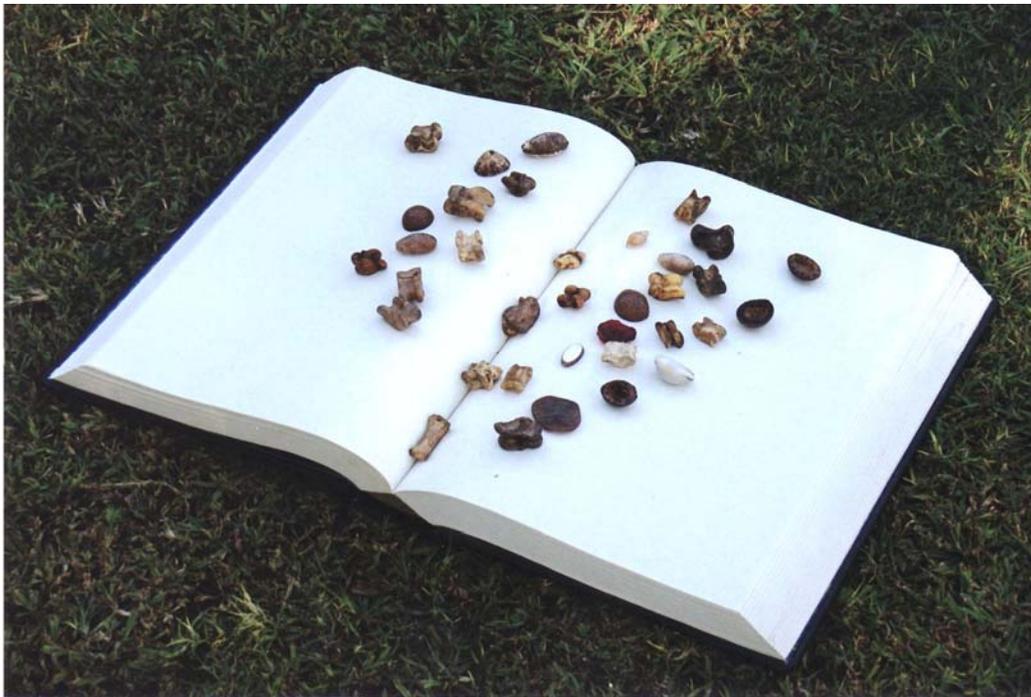
The value of this analogy was lost on Moffat. He resisted it, interpreting this Sotho-Tswana relativism as evidence of the 'profoundest darkness' – a Satanic strategy for undermining his message. Ironically, Moffat's own attempts at appropriating Sotho-Tswana religious vocabulary appears to have been interpreted by the Sotho-Tswana themselves as a kind of madness and a source of great humour (Chidester 1996:196).

I found this analogy particularly appealing however, as it is a comparison between two different types of technology or media – a book and a divination tool. This got me thinking about the implications of viewing African divination systems as technology.

"Andre's in-depth knowledge of African culture, and his innovative ability to distil transformative metaphors from these traditions, provides the ingredients for this interactive thought-experiment. The cultural milieu of these rituals is re-contextualised and *mythologised* into contemporary, and mainly corporate idioms. In this way participants are enticed to consider the possibility of unconventional relational variables between ingredients in a given thematic context. The outcomes are startling in every instance – not because participants construe any '*real magic*' in the 'bone-throwing' process, but because the style of free-association encouraged in the game reveals the vast potential of human creativity when it is enabled to connect a-typical facets of human life and experience. The game is highly revealing - not only in the expression of personality-types among the players, but in the expansion of their potential for interpretive insightfulness."
The Revd Dr Jeremy J Jacobs
Director: The Centre for Christian Spirituality

Contrary to popular conceptions of fortune telling, African divination is based on the belief that the universe is not predictable, that there is a fundamental unknowability, but enormous opportunity in the 'space of the possible' to participate in the process of creation.

Reflected in all techniques of divination is the principle that the real information you need to solve problems lies hidden in the network of relationships between the various people, objects and dynamics that make up your life. This makes it a dynamic knowledge management tool that can aid our imagination in the process of thinking about complex dynamical systems. Because this information is not always obvious, but exists in the 'spaces between things', it requires some skill and some clever technology to access it.

> Any culture which admits the use of oracles and divination is committed to a distinction between appearances and reality. The oracle offers a way of reaching behind appearances to another source of knowledge.
> - Mary Douglas (quoted in Peek 1991:194)

This hidden information has been called many things – the spirit world, the unconscious, the laws of nature, and morphogenetic fields. It can emerge spontaneously into consciousness, giving rise to unexpected crises, fear and conflict. It can also emerge, as inspiration, intuition and creative insight.

**a fundamental unknowability,
but enormous opportunity
in the 'space of the possible'
to participate in the process of creation**

Through the random configuration of meaningful symbolic objects divination technologies initiate cognitive processes that:

- access information,

- break limiting thought patterns and,

- generate new ideas and associations that cannot be generated through the kind of thinking usually associated with *serious* problem solving.

Playing the Open Minds Workshop divination game

While exploring the idea of African divination systems as information technologies that can be used to access and organize the information of complex systems, we have designed a problem solving technique that combines critical and creative thinking and facilitates problem solvers to deal with information in complex systems.

The success of this technique led to an invitation to create a participative educational installation at the Urban Futures Exhibition in 2000.

It has been used in a variety of settings including scenario planning, innovation workshops, cultural diversity workshops, conflict management and workshops that explore possible futures. It was actively promoted in *Art from the African Continent* (Heinemann, 2006) and became the focus of the book's launch at the Johannesburg Art Gallery where teachers were facilitated through the technique.

"Teachers were totally engrossed assessing issues that affected them, understanding the underlying dynamics, evaluating current logistics and finding really workable solutions. André combined his own understanding of traditional African divination systems with his scientific knowledge of the way the human brain perceives the world. The product was a workshop that was as informative as it was spellbinding."
- Nessa Leibhammer (Art Historian, Johannesburg Art Gallery)

You can play the game yourself or facilitate others through it.

In order to play the game you will need to collect a wide assortment of objects. These should be things that can fit into the palm of your hand and that can be seen to have some symbolic value. Examples are things like keys, small plastic toys, semiprecious stones, bits of computer technology, condoms, old jewellery, a bathroom plug, beautiful dried seeds, etc.

Objects that have symbolic potential are preferred. Think about a key, a coin, a plastic monster, a syringe, a sim card, a toy car, etc.

Once you have a collection of these objects you can facilitate the divination game in the following steps:

Stage One: Asking the Question

Ask an open-ended question. In other words, do not ask a closed-ended question that is looking for a yes/no answer. Your question should be open-ended, seeking more detailed information than a yes/no answer.

Stage Two: Naming the Parts

Think of all the things that relate to your question. Do not try to solve the question yet. Just name and write down all the individual things that are important to consider when answering the question. Here are some examples from a list generated by a group who asked the question, 'How can we deal with the challenge of HIV/AIDS in South Africa?'

WOMEN – MEN – CHILDREN – MINISTER OF HEALTH – DRUGS
MONEY – ANTIRETROVIRALS – RESEARCH – SEX – RELIGION
PHARMACEUTICAL COMPANIES – RAPE – SEX WORKERS – LITERACY
MEDICINE – MEDIA – FAMILY VALUES – POLYGAMY – MONOGAMY
POLITICAL WILL – TRADITIONAL VALUES – POVERTY – ALCOHOL
CRIME – DOMESTIC VIOLENCE – TB – CONDOMS – PEP – STIGMA
CHURCH – PEER PRESSURE – CHILD GRANT - UNEMPLOYMENT
OTHER SEXUALLY TRANSMITTED INFECTIONS – CONFIDENTIALITY
PATRIARCHY – GENDER ROLES – TEENAGERS – ASPIRATION

Write your list of things on the left-hand side of a large piece of paper that everyone can see. Name as many things as you can. A list of 32 is ideal, but it can be longer. The more things you identify, the greater your chance will be of discovering information about your question and generating relevant insights you can use in a solution.

Stage Three: Choosing Symbolic Objects

Now look at the symbolic objects. Choose one object for each thing on your list. Next to each thing on your list (on the right-hand side of the list) write down the object you have chosen for that thing. These are now the symbolic objects of your divination tool or technology.

The participants should work together to choose one symbolic object for each of the variables on their list. This may involve some negotiation and should not be rushed. This stage allows participants to construct meaningful metaphors and identify emotionally with each of the variables that are represented.

Put all the objects in a basket, or some other container like an old plastic ice-cream container.

It is often useful for each group member to choose an object that represents him or herself and add it to the basket.

Stage Four: The Random Throw

Choose someone in the group to be the one who will throw the objects. This person should swirl the objects around in the container, mixing them up thoroughly and then throwing them.

IMPORTANT: Do not pour the objects onto the carpet in a pile. You will not be able to read this. Throw so that the objects are well spaced. They best way to do this is to throw up into the air at a 45° angle.

Let the object land where they will. Do not move anything after the throw.

Stage Five: The Interpretation

Let the group gather around and see if they can identify any patterns, relationships, or find some meaning in the way the objects have landed. A pattern could be seen in clumping or groups of objects, meaningful symmetry

or opposites, lines or progressions and hierarchies. People do not need much prompting. They intuitively know how to organise this information.

Use your list to remind you what each object means. Discuss the interpretation, or 'reading' together with your group.

Write down the insights.

Participants are usually surprised at how accurate the configuration represents the problem they are addressing. This is because the brain projects an interpretation onto the patterns that it sees.

Some people believe that the interpretation is guided by the ancestors or other spiritual influences, but others believe that the random arrangement of symbolic objects is simply a way of tricking your brain into breaking old patterns and allowing it to see new patterns and subtle dynamics.

Why would you need to trick your own brain?

Tricking your brain beyond the limits of consciousness

Did you know that the non-conscious processes of your brain and body are capable of dealing with 11 000 000 bits of information in a second and that consciousness is only capable of dealing with between 2.6 and 40 bits a second? Technologies like the divination game are designed to give consciousness access to some of its more complex non-conscious processes.

Human consciousness has limitations.

For example, we only can hold about 7 unrelated things simultaneously in our conscious awareness. For this reason we are very bad at dealing with complexity. (You can hold more if the things are linked together into a story.) We think we can sit around a boardroom table and grapple with complex systems that have dozens of variables interacting with and changing each other. We can't! We need to represent these variables and their relationships in some way before we can think about them. The symbolic objects of the divination game allow us to see all the variables simultaneously and the potential relationships between them.

Another limit that the divination game helps us overcome is our inability to think logically and make new creative associations at the same time. This is the result of the fact that our autonomic nervous system works like a seesaw, allowing the dominance of the sympathetic nervous system or the parasympathetic nervous system, but not both simultaneously.

Analysis, driven by the sympathetic nervous system, is high-focus, abstract thinking. This kind of thinking breaks the world into its constituent parts. It is the step in the divination game in which you identify all the variables that

make up a challenge. Each variable is a point of focus. Each symbolic object acts as a memory device, or mnemonic, for that focal point.

Associative thinking, on the other hand, driven by the parasympathetic nervous system, is low focus thinking that connects things, sometimes on the basis of tenuous similarities. In this way associative thinking gives rise to symbols, metaphors and analogies. It also helps us find novel connections and unusual relationships between things. This is the step in the game where you start adding symbolic objects to the variables.

In the reading itself both analytical and analogical thinking can be employed. Each object is a focal point but the focal points are in relationships with each other.

Think about the ways in which the divination game resonates with Edward de Bono's 'lateral thinking'. It is a deliberately initiated cognitive process that:
1. accesses information;
2. breaks limiting thought patterns; and
3. generates new ideas and associations that cannot be generated through usual everyday thinking.

Ways of knowing

All through history humans have developed external information technologies to record and communicate ideas, help their poor memories remember the past and assist them in problem solving. When we think of information technology, we tend to think of computers and the Internet, but there are, many kinds of information technology. Think for example of books, road signs and art. African divination systems are a kind of information technology.

Divination represents a 'way of knowing' (Fernandes 1991) that has been neglected by societies who rely on writing as their primary information technology.

The technology of writing – the fixing of black letters or characters in a long line onto a white page – encourages certain beliefs about the information represented by writing. Some of these beliefs are:

- a belief in absolute black and white truth or authority;
- a belief in linear cause and effect sequences of events that flow like a sentence; and
- a belief in the timelessness of written documents.

(You might be able to think of others.)

Because divinatory technologies, like 'throwing the bones', involve the use of changing spatial relationships between objects, they encourage beliefs about:

- multiple points of view and interpretations;
- complex changing relationships in non-linear, complex, dynamical systems;
- impermanence.

Exploring structural causality

The brain, body, society and their relationships with the environment can only be understood as an 'ecology' of interconnected, mutually influencing entities.

This mutual influence over time, facilitating change and new organisations of parts is different to the role played by the parts that make up a construct like a house. While bricks make walls, and walls make a house, the structure is static, non-dynamic. The successive levels that make up a house do so in a linear, step by step kind of way.

Living bodies and societies on the other hand are non-linear systems in which its forms are maintained through a constant process of change. Each part is a constantly changing expression of the whole system.

Conceptualising this interconnectedness can be an infuriatingly complex task. It eventually becomes impossible to see any one thing as existing in isolation. The only 'one thing' is everything.

If you had to try and map all the influences and individual variables you were connected to you would eventually end up mapping the whole universe. There is no 'bubble' that separates you from the rest of the universe. There is no edge where you can be considered to stop and the world begins. All things are interconnected.

> …the actual context in which events take place must extend
> indefinitely. In other words, everything that happens in our universe
> is in fact caused by everything else. Indeed the whole universe
> could be thought of as unfolding or expressing itself in its individual
> occurrences.
> - Peat (1987:58)

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Picture yourself in the middle of a vast network of relationships with people, processes and phenomena. The most important links we have with our networks exist in our own memories (not necessarily all conscious). Our past experiences are linked together in our memories creating a picture of how we believe the world works. This picture shapes our feelings, thoughts and actions, communicating information about us to our social networks.

One way to think about divination is to imagine divining tools, like the diviner's bones, as a search engine on the Internet. In this case the Internet is not some computer-generated network of images, sounds and text, but the whole of life. Imagine life as a vast network of relationships between electrical charges, chemicals, cells, organisms, plants, animals, people, objects, environments, weather patterns, our solar system, etc. Every part is connected to every other part.

As we move into the information age we are learning more about the limits of our own systems of symbolic representation. Developers of Internet search engines and artificial intelligence are beginning to confront these limits and are questioning what useful representations of real information written language offers. Mathematicians have already admitted that mathematics cannot map the world in a one to one relationship of symbol to reality.

> Gradually mathematicians granted that the axioms and theorems of mathematics were not necessary truths about the physical world...the attempt to establish a universally acceptable, logically sound body of mathematics has failed. Mathematics is a human activity and is subject to all the foibles and frailties of humans. Any formal, logical account is a pseudo-mathematics, a fiction, even a legend, despite the element of reason.
> Morris Kline (1980)

We tend to think that reality looks a lot like the symbolic system, or language, we use to represent it. But our systems of symbolic representation say more about themselves, and our own limited perceptions than they say about reality. Words are particularly limiting when used literally. They are less limiting when used metaphorically. Information Age pioneers are slowly innovating ways of representing the world that are more like divination than writing. Instead of processing linear sequences of code they are looking to parallel distributed processing of complex information networks. Instead of linear causality they are speaking of structural causality. These shifts are all perspectives embraced by African divination systems. After years of being dismissed as superstition, divination may now offer us clues to more creative ways of organizing information about our universe and ourselves.

> Ritual is a non-narrative form which literate man translated into a romantic narrative and which electronic man translates back into ritual.
> - Marshall McLuhan

People and civilizations used to be thought to 'develop,' to 'progress.'
Nowadays many observers are uncertain about these terms; maybe
all stages of the game are equally good; maybe there is no such thing
as 'progress' in any neutral sense ... As your mental focus sharpens,
you become adept at new thought techniques. You grow accustomed
to forming and manipulating abstractions, to picking out and probing
interesting details, and this becomes your habitual cognitive
approach. In consequence you reach logically valid conclusions and
make interesting discoveries. But simultaneously you have grown
unaccustomed to experiencing the world in low-focus terms: the
terms under which visions lurk around every corner and the world is
full of strange, deep, unexpected connections.
- David Gelertner (1994:112)

Random access to information in a non-linear system

Through the use of randomness, divination accesses and organises hidden
information that cannot be accessed through ordinary thinking.

Random access is actually a really effective way of making unusual
connections between the bits of information that are in your non-conscious,
your memory, your body, your family, your society, your environment, or the
global economy – especially when the degree of complexity makes it
impossible to optimize the generation of creative ideas in any rational or
systematic way.

> No matter how many connections we take into account in our
> scientific description of a phenomenon, we will always be forced to
> leave others out.
> - Frijof Capra (1996:41)

Conceptual clarity of the big picture is not possible. The big picture often
functions as a vague, non-verbal, awareness of process. Detail means focus -
and the big picture is lost. A number of different focal points, however, like
symbolic objects, held together simultaneously, interacting and changing each
other, can give you a glimpse of the big picture and open up the possibility for
imagining novel solutions.

> The random configuration of symbolic objects in divination offers the
> diviner and the community 'a 'superabundance' of possibilities of
> interpretation as they reason together about the plausible patterns of
> meaning before them.
> - James W. Fernandez (in his Afterword to Philip M. Peek's *African
> Divination Systems - Ways of Knowing*; Indiana University Press,
> 1991:219)

This random access:

- provides an efficient coverage of 'the space of the possible' unhindered by predictable habits and formulas;

- links ideas that are seemingly unrelated, arranging old variables in new and innovative ways;

- increases the potential for breakthroughs and out-of-the-blue inspiration by allowing entirely new phenomena to arise out of the relationships between the old;

- focuses on creative process rather than on the continued reproduction of preconceived product;

- values alternative perceptions and opens the user to a constant process of redefining things;

- encourages cultural diversity as a way of increasing the possible responses to challenges;

- facilitates people to be less protective, defensive and possessive over beliefs and assumptions.

This random access functions better than a formula or pattern for investigation or organising information. If you are trying to organise complex information according to a formula, the result will reflect the formula you started out with. When your technique is random, you actually move beyond your assumptions and prejudices and allow yourself to experience something new, insightful and innovative.

A good analogy for this is the Monte Carlo Method, a technique mathematicians employ to calculate very large amounts of numbers. Imagine adding 100 million numbers together. A reliable estimate can be achieved by randomly choosing only 5 000 numbers, adding them together and then multiplying them by 20 000. The moment these numbers are chosen using any pattern whatsoever, the technique fails. It only works if the numbers are chosen randomly.

In the same way, if we try to cover mental space using a particular pattern, we will inform that space accordingly and only get access to material that simply reflects the pattern we have chosen. Randomness gives us access beyond expected pattern.

Randomness could be seen as creation's in-built mechanism for restructuring pattern, and facilitating change. During conception for example, when the egg cell and sperm combine their genetic material, there is always a small degree of random change – ensuring diversity.

> The drama of divination serves to move the participants out of their normal modes of thinking, shaking them up in order to change their minds because their current understanding of the situation is inadequate.
> - Peek (1991:205)

In many divination systems the random dynamic is represented as a trickster character, a mischievous maverick, whose role it is to muddle perceptions. This in itself has a reordering effect and opens up an opportunity to see what has been missed. Randomness is not an obstacle or a nuisance, but creation's in-built mechanism for restructuring pattern. In his *The Trickster in West Africa*, Robert D. Pelton (1980:275) characterises the trickster's relationship to divining in the following way:

> If the trickster in West Africa provides a way of dealing with discontinuity and change so that human movement through time may become not merely repetition, but an enlargement of sacred frontiers, he does so by linking the acts of re-vision and re-membering in divination, in myth, in dance, in sacrifice. As he teaches West Africans, again and again, how to see, he instructs them, over and over how to piece together their experience and to discover in that new whole the same open-ended order that they have always known as the source of transcendent ordinariness.

An experience of randomness can always be advantageous if some broad objectives, or creative constraints, are clear. If there is no clear goal, randomness can simply lead to dissolution and decay.

Creative constraint and the meaning of the arrangement

It must be stressed however that preconceived social roles and relationships are already represented in the objects of a traditional divination system. So the variables for making new patterns are already there. New relationships can emerge between them, or old relationships can take on new significance.

The symbolic objects an African diviner uses represent different parts ('elements' or 'variables') of the information network that the diviner and his or her client belong to. Held together, these objects represent the total experience and potential patterns of relationships in that network.

A simple set of divining objects might consist of the male and female halves of the stone of a desert fruit (the basic 'Hakati' of the Ba-Ronga). These are further divided into negative or passive readings (if the shell of the stone falls with open-end facing up, or on its left side) and positive or active readings (if the shell falls open-end down, or on its right side). The direction they are pointing in is also significant. Other opposites, like good and evil, may also be represented.

> Sotho and Venda divination depends on the fall of four specially carved dice which form the basis of the system (...) In the simplest system, in which only four dice are used, there are sixteen possible

combinations in which the dice can fall: each combination has its own praise name. Sotho divining sets tend to be more complex in that other forms of dice are added, such as knuckle bones, roots etc.
- Hammond-Tooke (1974:357)

Another example is the Venda divining bowl —Ndilo:

[It] is carved of wood, with a wide, flat rim on which are cut, in relief, figures representing the various totem groups found among them, as well as figures representing persons and objects in tribal life. (...) The bowl is filled with water and fruit kernels or seeds are floated: the position where they come to rest against the side allows the diviner to interpret.
- Hammond-Tooke (1974:357)

In 'Bula' divinatory bones, there can be as many as 64 objects. In this case the number of male objects (male goat's astragalus bones) are increased to represent five age groups, and the female objects (female goat's astragalus bones) are increased to represent different reproductive stages. Sheep's bones represent chiefs, the enemy, and members of the chief's family. The chief's wife is represented by the astragalus of the female mhala antelope. Bones from other wild animals are also divided according to gender representing, amongst others, fighting men, women of certain immoral character, wizards, medicine man, villagers, (...) associated with animals that act as metaphors for their social roles or character. Other genderless bones represent wealth ('those who can choose their food'), white people, parasitic sycophants, death, the ancestor gods, and 'everything that is violent.' Junod also came across pieces of tortoise shell that represented misfortune or prosperity, depending on the way they fell, and seashells corresponding to male attributes and female attributes. Unusual stones representing the vegetable world, especially medicinal plants were also among the divining objects (Junod 1962:544, 536).

Entering into a relationship with each object

While the principle of divination is simple, in traditional systems the nature of each symbolic object and the potential relationship it has with other objects is complex and may take years to learn. The meaning of some of the objects is determined through tradition, but a diviner may add new objects from his or her own experience to the set.

Our divination game is of course a short cut and doesn't come with the potent content of a long tradition.

Ina traditional set of objects, as in our game, each object represents some aspect of life, society or individual psychology. The bone of a reedbuck, which wanders during the night, might stand for malevolent wizards who do the same. The bone of a hyena, which eats the remains of the lion's feast, may represent the person who parasitically follows the chief, etc. (Junod 1962:570). For these objects to 'speak' clearly a diviner has to enter into a relationship with each one.

These relationships may take years to develop. When empowering an object that represents an old lady, for example, a diviner will carry and handle the object while thinking about old ladies. Everything the diviner knows about old ladies will be 'downloaded', through his or her imagination, into the object. The object will become a symbol of everything the diviner knows about old ladies. Whenever this object is seen or touched it will remind the diviner of his or her knowledge.

Simply put, by using the divining objects, the diviner does not have to remember and recall the intricacies of all probable social dynamics. Instead these are remembered for him, by his divinatory tools. They are what we might call a mnemonic or an example of external symbolic storage.

How colonists gave divination a bad rap

I mentioned earlier how the missionary Robert Moffat saw Sotho-Tswana beliefs as evidence of the 'profoundest darkness' – a Satanic strategy for undermining his message.

The bad rap that early colonists gave divination was so successful that many historians, anthropologists and archaeologists to this day see divination as superstition. It is usually discussed under 'magic' or 'religious beliefs,' and is not often given the status of an innovative technology or powerful media.

Early colonial views ranged from describing southern Africans as entirely without religion, to denouncing diviners as 'pillars of Satan's kingdom.' The 'religion' of the colonialists was often contrasted with the 'superstition' of southern Africans. The traveller Henry Lichtenstein insisted that he found no religion amongst the Xhosa or the 'Beetjuana.' Only a 'superstitious faith which they have in the sacredly kept magic of their priests' (Chidester 1996:179). While impressed with the practice of divination, he interpreted their reluctance to sell divining dice as an ignorance of the value of trade goods (Chidester 1996:180).

The naturalist William Burchell found no religion amongst the Sotho-Tswana people. Like many others in his time, he distinguished superstition from religion - religion being characterised, for him, by a belief in 'a supreme and beneficent Deity, or of a great and first Creator.' 'According to Burchell, this lack of religion resulted not merely from ignorance of revealed truth but from a basic mental incapacity in which they could exercise only the 'weakest mind'' (Chidester 1996:180).

For Robert Moffat, the evangelical mission of Christianity was warfare against 'the strongholds of Satan.' He claimed to witness 'the entire absence of theological ideas, or religion' amongst the Bechuanas. Moffat compared these diviners with diviners from other regions: the Angakoks of Greenland, the Pawpaws of North America, and the Greegrees of West Africa, and called them all 'pillars of Satan's kingdom' (Chidester 1996:191-192).

While the missionary Van der Kemp was denying that Ngqika had a religion, the Xhosa chief was comparing him to a diviner. Ngqika even purchased Van der Kemp's services, paying him the customary diviner's fee in cattle, for performing a rainmaking ritual (Chidester 1996:83-84).

The missionary Callaway saw Zulu religion as a 'gradual deterioration of the religious opinions of the people.' He claimed that all that could be observed in the present was 'the feeble representative of some old system' which had 'a much higher position intellectually and morally than they now hold.' Diviners, he argued, were 'probably the descendants of some old priesthood, and retaining all the evil influence and cruel tyranny of priestcraft over the minds of the people.' Beginning with a belief in a Father in Heaven, priests had tricked people into confusing this father God with the first man (uNkulunkulu), and ancestor worship emerged (Chidester 1996:158-59).

Bleek on the other hand, as an evolutionist, saw ancestor worship 'as a point of origin for a process of evolution' (Chidester 1996:158). Even this more benevolent attitude, still could not see diviners in their own terms, but had to place them on a lower run in a trajectory of progress. None of these views tried to interpret divination in its own terms.

The detailed study of (the entomologist turned amateur ethnographer) Henri Junod into Thonga divination recognises the skill of the diviner: "They have reached a high degree of proficiency in this domain" (1962:536) - but laments as what his bias sees as an obstacle to rationalism. He concludes in the following patronising and racist way:

> From all the foregoing information it may be easily gathered that the art of bone throwing is by no means child's play, nor mere quackery by which astute-soothsayers deceive their credulous fellows. It is a true art which the diviners practice in all sincerity, themselves believing that they receive objective revelations through its means (...) Of course diviners are shrewd! Their interpretation does not proceed from mathematic evidence, but from their extraordinary powers of imagination. Tortoise in the negative position may at the same time mean, black earth, death, defilement, a well-swept village, the burnt bush, according to the requirements of the case; but this is fair play and everyone approves of their ingenuity; it is not a conscious attempt to deceive.

While it is true that the skill of divination has little to do with rationality, it is an extraordinarily effective way of accessing new associations between existing bits of information. The skill of divination is all about making associations.

Divination and synchronicity

The kind of creative thinking that our divination game facilitates has been referred to as 'synchronicity'. Synchronicity is that profound sense of wonder we have when random events seem to create meaningful patterns. Creative

breakthroughs can be made when a person opens themselves to these symbolic and metaphoric associations. Some people believe that synchronicity is the way that information networks bigger than us communicate themselves to us.

> Synchronicity arises out of the underlying patterns of the universe rather than through a causality of pushes and pulls.
> - Peat (1987)

Is synchronicity the ability to perceive pattern clearly or rather the ability to create a pattern that will generate insight?

Collect your own symbolic objects

If you started collecting symbolic objects that represented all the parts in your network, you could develop your own set of divining 'bones'. You don't have to give one meaning to each object. You could leave them open-ended and give new meanings to them each time you use the technique.

At regular intervals you could ask open-ended questions, identify variables, allocate objects to these variables, throw these objects onto the ground and explore the patterns between them. This would give your non-conscious the opportunity to give you insights into your relationships.

Ideally the symbolic objects would 'remember' all the parts for you, so you would not have to try and hold the complexity of it all in your consciousness at once. Seeing the 'big picture' in this way helps to reveal things that thinking, speaking and writing never could.

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