Zambezia (1980), VIII (ii).

STRANGER IN A STRANGE LAND*

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THE TITLE OF my lecture is taken from Robert Heinlein's award-winning novel (Heinlein, 1965). The principal character is a human being called Smith who, having been orphaned in a space-ship disaster, is raised from birth in a Martian society. Returning to earth for the first time in adult life, he finds himself in a culture which, whilst it is recognizably human, is bewilderingly alien and incomprehensible.

A White psychiatrist practising among Black patients in Africa finds himself in a somewhat similar predicament, but without Smith's capacity for total comprehension which he calls 'grokking'. Fortunately many major psychotic illnesses manifest substantially similar clinical features and respond to treatment in much the same way, but in areas such as neurotic illness and personality disorder in which cultural factors are important in causation, the situation is much more difficult (Buchan and Chikara, 1980). Some headway can be made by placing an increased reliance on the perception of the universal non-verbal cues of emotional state, and on the patient disentangling of the relevant mores. Many valuable studies in this kind of transcultural psychiatry have been undertaken by workers such as Ari Kiev (1972), Swift and Asuni (1975) and Carothers (1953), but one often longs for the flashing conceptual insight of a Jung or a Freud to illuminate the way ahead. In this respect, it seems likely that the concept of the 'bicameral mind' advanced by Julian Jaynes will prove to be an insight of considerable significance (Jaynes, 1979).

THE NATURE OF CONSCIOUSNESS

Jaynes, who lectures in psychology at Princeton University, has for a long time been preoccupied with the nature and development of consciousness. He believes that many of the conventional concepts of what consciousness is and does are grossly inadequate. He rejects such ideas that consciousness is a fundamental property of matter, like gravitational attraction, or that it arises when a nervous system arrives at a critical degree of complexity. He demonstrates that it is not necessary for the formation of concepts for thinking, for learning or even for reasoning. He regards as pivotal to the development of consciousness the formation of a metaphor. By metaphor he means he means the use of a term for one thing to describe another because of some similarity between them or in their relations to other things, e.g. the leg of a table.

Metaphor is therefore the means by which the finite lexicon of language can be expanded to an almost infinite extent.

There are particular kinds of metaphor. For example, a theory is the relationship of a model to the things that the model is supposed to represent. As an

*An inaugural lecture delivered before the University of Zimbabwe on 10 April 1980.

illustration one may consider Kekule's theory that the six carbon atoms in benzene are arranged in a ring-like structure. The ring is the model, the theory is the relationship between the model and the actual benzene molecule which it is supposed to represent. A theory can therefore be considered to be a metaphor between a model and data. Understanding in science is the feeling of similarity between complicated data and a familiar model; put another way, understanding is the finding of a familiarizing metaphor.

An analog is a special kind of model; unlike a scientific model, which is an explanatory hypothesis, an analog is generated at every point by the thing of which it is a model; for example, a map is an analog. A map, however, leaves out a great deal and its relationship to the land it represents is actually a metaphor.

By similar argument, the subjective conscious mind is an analog of the real world, but much of the detail of the real world is omitted and the relationship between the mind and the world is actually a metaphor. In the generation of this metaphor, consciousness has a number of functions which are set out in Table I:

Table I

THE FUNCTIONS OF CONSCIOUSNESS

1.	Spatialization:	The habit of arranging items in space in order to think about them, e.g. a 'time scale'.
2.	Excerption:	The abstraction of particular parts of experience from the collection of possible attentions.
3.	The Analog 'I':	This is a most important feature of our metaphor world. The analog 'I' can move about *in* imagination making decisions in terms of imagined outcomes.
4.	Narratization:	We tend to see our imaginary selves as the main figures in the stories of our lives.
5.	Conciliation (or assimilation):	New experiences tend to be fitted in some previously learned framework and reconciled with previous experience.

The Development of Consciousness Jaynes's basic postulate is that since the development of social structure depends upon communication between individuals, human cultural development depends upon the evolution of language. Not only the social but also the psychological development of the individual is inextricably intertwined with the development of language. Thus Jaynes argues that in historical time, consciousness appears only when the evolution of language reaches the point of metaphor formation. A rough summary of his time-scale is set out in Table II:

Table II

HUMAN CULTURE AND THE EVOLUTION OF LANGUAGE

Years B.C.	*Culture*	*Language*
40 000–25 000	Cro-Magnon Man Tool-making and co-operative hunting	Intention calls
25 000–15 000	Drawing of animals, superior tools and horn instruments, pottery, ornaments, spearheads	Use of nouns for animals
10 000–8 000	Change from food-gathering to an agricultural economy by the domestication of animals and plants Beginning of permanent towns Origin of the bicameral mind	Use of names for people
3 000	Literate bicameral theocracies	Advent of written language
1 400–1 200	Collapse of the bicameral kingdoms Rise of Assyria and the dawn of consciousness	The formation of metaphor

The bicameral mind is one having two chambers, and Jaynes uses this term because he believes that the two hemispheres of the brain have different functions. Language functions are contained largely in the dominant hemisphere, usually the left, whilst the non-dominant hemisphere is the origin of hallucinatory voices. Put baldly in this manner the hypothesis appears quite absurd, but Jaynes is most persuasive in his urging of the archaeological evidence in support of his concept.

Between 10 000 and 3000 B.C. was the period of Holocene Thermal Maximum when the Earth's climate was a good deal warmer and wetter than it is now and agricultural communities spread over much of the Near East. By 5000 B.C., the colonization of the alluvial valleys of the Tigris, the Euphrates and the Nile was well under way. The great dynasties of Ur and Egypt were beginning and cities of several thousand inhabitants were not uncommon. The maintenance of the social structure, the management of the forces representing the warp and weft of this social fabric, became the function of the bicameral mind.

Turning to one of the earliest civilizations, that at Eynan near the sea of Galilee which dates back to 9000 B.C., one finds towns of about 50 houses with a population of at least 200 people. Jaynes suggests that the control of social order depended upon the voice of the god-king, which could be hallucinated in his absence. Moreover, since the king's voice could be hallucinated during his absence it could also be hallucinated after his death. Thus the dead king became a living god, a stage of evolution which obviously required that the king be named. This, then, is the origin of the bicameral mind.

At Eynan the king's tomb contained two skeletons, one male, one female,

sitting propped up on a stone pillow; the tomb was in a pit and the hearth of the house was then built over the top. The king's tomb became the god's house and his voice remained to guide and advise his people.

This became the paradigm for what was to happen throughout the Near East for several millennia. With the development of cities of many thousands came the building of huge monumental god-houses which dominated the other buildings and were visible for miles around as hallucinogenic aids to the populace. Ur had enormous ziggurats and Egypt its pyramids, whilst the Hittites in an interesting variation used a natural mountain shrine.

The pattern continued in its original form in Egypt for several millennia, but more often the king's tomb part of the designation withered away. This occurred as the successor to the king continued to hear the hallucinated voice of his predecessor and named himself as the dead king's priest or servant. In place of the tomb was simply a temple and in place of the corpse was a statue.

Maintenance of contact with the gods was of paramount importance. Not only did their instructions maintain the social order, but also they could be relied upon for help when the people faced some novel or crisis situation. Unable to project the possible consequences of various actions into future time, the people relied upon hallucinatory voices of the gods for instructions to avert disaster. For those who were unable to approach the god closely, a smaller and more portable effigy was useful.

The important characteristics of the bicameral kingdoms are summarized in Table III:

Table III

CHARACTERISTICS OF BICAMERAL KINGDOMS

1. The burial of important dead as if still living; food and attendants were often buried with them.
2. The construction of huge ziggurats and temples.
3. The proliferation of human effigies and figurines.

The Literate Bicameral Theocracies After the invention of writing, around 3000 B.C., the archaeological picture becomes much more detailed and two divergent trends can be discerned.

In Sumer and Akkad all lands were owned by the gods and men were their slaves; there was a principal god and the king was described as 'the tenant farmer of the god'. The god was a statue, that is, the statue was not *of* a god but *was* the god; he had his own great house or ziggurat. The king served the god and heard him speak; this is quite clearly stated in contemporary texts. For example, the cylinder B of Gudea, dated about 2100 B.C., refers to 'the seven children of the brood of Bau that were begotten by the Lord Ningirsu to utter favourable decisions by the side of the lord Ningirsu'. The ordinary citizen did not hear the voice of the great god directly; each individual had a minor personal god or goddess who acted as an intermediary. With the development of writing (Kramer,

1969) the words of a god could be written down, and stone steles bearing such words were erected; for example a stele could be set up in a field to give instructions as to how it should be farmed. In this way writing became a new instrument of civil direction. The use of this instrument probably reached its zenith with Hammurabi of Babylon who in about 1800 B.C. pulled together most of the city states of Mesopotamia into a hegemony under the sway of his god Marduk.

In Egypt, on the other hand, the geographical isolation and the ethnological homogeneity of its people permitted the survival of the more archaic form of theocracy—the god king. In Egypt the king did not serve the god, he was god. Each reigning king became Horus, his deceased father Osiris (Casson, 1969). In other isolated parts of the world, bicameral theocracies also developed, but much later in time. For example, in central America there arose the Olmec civilization about 1000 B.C., followed by the Mayan about A.D. 300–900 (Leonard, 1969). In South America the Chavin, Mochica and Chimu civilizations successively evolved and declined to culminate in the rise of the Inca empire from about A.D. 1200. The Inca king was divine, a descendant of the sun. After his death his body was mummified and placed in his house which thereafter became a temple containing a life-size human effigy made of gold.

The Collapse of the Bicameral Theocracies The complexities of bicameral control increase with its success until the civil state reaches a size and degree of sophistication such that it can no longer be sustained and the bicameral society collapses.

Examples of this kind of cyclical growth and collapse are numerous; at the end of the third millennium, all authority in Egypt broke down and only after more than a century of chaos did the Middle Kingdom emerge; a similar breakdown occurred at Assur in about 1700 B.C. and was followed by nearly two centuries of chaos; Mayan civilization collapsed in about A.D. 550 but later revived and flourished for another 300 years, before collapsing again.

Apart from this inherent periodical instability, imposed by the increasing size and ramification of the social system, the limitations of the gods were greatly exacerbated by the advent of writing. Once the god's word was committed to a stone stele it lacked the ubiquitous and compelling authority of an auditory hallucination. Moreover, the instruction could not be varied and at times of crisis or social chaos the gods could no longer tell the people what to do. The consequences of this kind of loss of instruction were dramatically illustrated by the Spanish conquest of Peru (Innes, 1972). On 15 November 1532, Francisco Pizzaro, with only 187 men, demolished the Inca empire by capturing the god-king Atahualpa and massacring his retinue at Cajamarca. With the capture of their god, 35,000 Inca warriors were rendered helpless and the Spaniards plundered the gold of the empire unhindered. Having served his purpose, Atahualpa was executed.

In about 1180 B.C. there was a major eruption or series of eruptions of the volcano on the island of Thera in the Aegean Sea, about 60 miles north of Crete. The major part of the island was suddenly under 1,000 feet of water; the rest of it was covered with volcanic ash 150 feet deep. A huge tsunami wave, estimated to

be 700 feet high and travelling at 350 miles an hour, devastated the whole Aegean basin for miles inland; the events are recorded in legends of the great flood and of the lost city of Atlantis. Whole populations became refugees and there were huge waves of migration and invasion; the Dorian invasions of Greece destroyed the Mycenaean Civilization; the Levant was invaded by various tribes which included the Philistines; the Hittite empire collapsed.

From this chaos and confusion arose the first great military empire, the Assyrian. The crux of Jaynes's argument is that at this point in time there was not only a new method of social control but also a new way of thinking to make it possible. In short, as bicameral thinking became totally inadequate to deal with disaster of this scale of magnitude and started to break down, man became conscious.

About 1200 B.C., Tukulti-Ninurta, tyrant of Assyria, had made a stone altar that was dramatically different from anything which preceded it; the king is shown kneeling and the god's throne is empty. This is in vivid contrast to Hammurabi receiving judgement from Marduk, when god and man stood face to face.

In the Assyrian cuneiform remains of this period there are indications that it was possible for the gods to desert the people; for example, the Babylonian gods forsook their cities, assuring victory for the Assyrian warriors. When the gods vanished, messengers were needed and these were usually depicted as half human and half bird. However, these messengers might bring signs of the god's anger; such messengers were termed demons and there were wind demons, plague demons, etc. As a consequence there developed all kinds of incantations and rituals to protect the people against the demons.

Desperate attempts were made to re-establish contact with the now silent gods. Since they had left their homes it was assumed that they had gone to live in the sky; in response to this the ziggurats now became celestial landing pads and obviously the higher they were the better. For example the ziggurat of New Babylon built by Nebuchadnezzar (the Tower of Babel) was some 300 feet high. Other methods of attempting to divine the speech of the gods proliferated throughout the Assyrian Empire. These are summarized in Table IV:

Table IV

TYPES OF ASSYRIAN DIVINATION

1.	Omens:	An expression of the tendency to expect B to follow A invariably if this has occurred once.
2.	Sortilege:	The casting of sticks, bones or stones.
3.	Augury:	The use of the movement of oil on water or the coiling of smoke to interpret divine intention. Extispicy is divining from the entrails of sacrificed animals. Astromancy (or astrology) is divining from the stars.
4.	Spontaneous divination:	Sudden insights into the intentions of the gods occur to seers and prophets.

Apart from the proliferation of astrologers and diviners in the Assyrian empire that is indicative of the breakdown of bicameral thinking, Jaynes finds other historical evidence for his hypothesis. For example, there are important changes in the use of Greek words relating to the states of mind between the Iliad and the Odyssey. In the Iliad, which refers to a period of history prior to the Dorian invasions, i.e. before about 1200 B.C., the gods intervene directly. For example, Athena speaks to Pandarus and persuades him to shoot an arrow at Menelaus which breaks the truce.

In the Odyssey, which is a series of epics relating to a later period of history, probably about the ninth century B.C., the gods assume a much more minor role. Seers and omens occur; semi-gods, giants, witches and demons appear, to herald the breakdown of the bicameral mind. In their search for ways to re-establish contacts with the gods, the Greeks consulted oracles. The oracle at Delphi endured the longest but by the first century A.D. it had ceased to exert any real influence. During their decline oracles tended to pass through a number of stages which are set out in Table V:

Table V

PHASES OF DECLINE IN ORACLES

Phase 1.	Locality Oracle:	Any supplicant can hear a bicameral voice.
Phase 2.	Prophet Oracle:	Only priests or priestesses can hear the oracle.
Phase 3.	Trained Prophet:	Special induction and long training required for priests and priestesses.
Phase 4.	Possessed Oracle:	From about the fifth century B.C. the priest needed to become possessed by the god and speak with his voice. Even more training and more elaborate induction needed.
Phase 5.	Interpreted Possessed Oracle:	Auxiliary priests or priestesses required to interpret the garbled message of the one possessed.
Phase 6.	Erratic oracle:	Functioning only rarely.

THE BICAMERAL MIND IN AFRICA

In a thoughtful and provocative essay written in 1963, the late John W. Campbell (Campbell, 1963) posed the question as to why there seemed to have been a Curtain of Darkness in Africa which prevented significant acculturation for sixty centuries; the Portuguese, for example, made little impact.

Surely the answer must lie at least in the supposition that until comparatively recent times, African kingdoms were bicameral in character. There are both

archaeological evidence and oral tradition to suggest that sacred kingship was a feature of the Rozvi kingdom and almost certainly of the Monomotapa which preceded it (Tindall, 1968). During the period of Rozvi ascendancy many small, stone-built towns flourished. The collapse of the culture at Zimbabwe may well have been the collapse of a bicameral kingdom comparable with that of the Maya in Central America.

Lacking the impetus of the Great Flood, the evolution of consciousness in Africa has been much slower than in Mesopotamia, comparable with that in Central and South America. However, there does seem to be a point in African history where there is a dramatic change. This point is the rise of the Zulu empire at the beginning of the last century (Krige, 1936). There is a rapid change from a comparatively peaceful pastoral life to military conquest which surely bears comparison with the rise of Assyria; the comparison between Tshaka Zulu and Ashurbanipal is inescapable, and I would like to venture the hypothesis that this period of history was the beginning of the collapse of the bicameral mind and the emergence of consciousness in Southern Africa.

The invading Matabele defeated the Rozvi at the battle of Tabazakamambo in 1834 and there followed a period of considerable social chaos and confusion. This was complicated by the arrival of the White man some twenty years later and the introduction of writing which, as we have seen, is an important factor in the decay of bicameral thinking.

Moreover, there is important recent historical evidence of a bicameral system in decline. In Shona religion the Great Spirit Mwari is the spiritual owner of the earth and the creator of mankind. His priesthood is composed of men and women, believed to be emanations of the Spirit, who act as his mouthpiece. In recent historical times their oracular voices could be heard in a cave at Njelele in the Matopos, which seems to have been very similar to a 'prophet oracle'.

In addition to, and separate from, the priesthood of Mwari there are *barudzi* (tribal spirits) which are linked with each tribe through the Chief. Such spirits may speak through the mouth of an appointed *tswikiro* (medium); for the ordinary family the *mudzimu* (ancestral spirit) is of paramount importance. The *mudzimu* is interested in every aspect of daily life and may offer advice or admonition, perhaps in the form of a dream or through a possessed medium. Significantly, the *mudzimu* acts as an intermediary with more important *barudzi* and hence with the Great Spirit itself. Mental illness is frequently attributed to an unquiet *mudzimu* which requires appropriate ritual propitiation (Kuper, 1955). Thus the dead are treated as living and may receive offerings of meat, meal or beer in propitiation.

Medicine men and diviners are both referred to by the title *nganga*. Their powers are limited by the spirits and their work is largely concerned with individuals or families. For ordinary diagnosis they use a set of *hakata* (bones)—a practice strongly redolent of Assyrian sortilege.

SOME THOUGHTS FOR THE FUTURE

For any stranger to find his way in this strange land of the mind he will need

signposts or he will become irretrievably lost. Such conceptual signposts are to be found in unlikely places, such as archaeology, history, philosophy, anthropology, sociology, comparative religion or linguistics. Whilst painstaking and detailed studies are obviously the proper concern of a Department of Psychiatry (the more so in Zimbabwe since rapid social change may significantly alter clinical presentation), it is clear that highly flexible, imaginative and boldly innovative thinking will also be essential in order to cross the inter-disciplinary boundaries. Such boundaries are as artificial in the constraints which they impose upon the exploration of the human mind as those imposed by political boundaries on the exploration of a geographical region. It is hoped that the Department will attract, accommodate and encourage such free-thinkers, even at the expense of a modicum of iconoclasm.

Finally the signposts which I have described also point the way to the future and since the word inaugural is derived from the same Latin root as augury (*augurare*: to take omens), it is presumably permissible in an inaugural address to speculate about the future.

Whilst consciousness may be a recent evolutionary acquisition, bicameral thinking is still very much an atavistic presence in the contemporary mind. One sees in our society considerable striving for the certainties which were formerly provided by the voices of the gods. Astromancy is still very much with us—Adolf Hitler believed in it implicitly—and other cults have come to the fore with extravagant promises for the amelioration of human misery. Various types of meditation, sensitivity training groups, encounter groups, psychoanalysis, scientology, materialism, etc., have all promised answers to the world's uncertainties but are in effect projections of bicameral thinking. On occasion we have even created contemporary gods such as Superman, Wonderwoman, or resurrected old ones such as Isis.

Emergent consciousness develops in several dimensions. Obviously there is development of a political consciousness, but in addition there is the emergence of a consciousness of God as a righteous and ethical God. Without this consciousness Christianity could not have taken root and flourished in this part of Africa in recent historical times, as indeed it did not at the time of Portuguese influence. Here in Zimbabwe we have a unique opportunity to learn from our comparatively recent bicameral past.

The Dorian invasions and the consequent social chaos in Greece were followed by the Golden Age of classical Athens which began with Thales about 600 B.C. and which still exerts an influence today. We have the resources for a comparable outcome in Zimbabwe; as yet we lack the will. The President recently made the point that independence is not an event but a process. He likened this process to the maturing of a personality which is continuous and ongoing; one does not arrive at maturity, then sit back to enjoy it (Banana, 1980).

If I may pursue this analogy, maturity in a personality is not a gradually continuous process, but occurs in steps as various crises in development are reached and crucial decisions taken. In my opinion Zimbabwe has now arrived at a crisis point in development. This crisis point closely resembles that of an immature personality in psychotherapy who has just come to understand how his

early upbringing has shaped his development and contributed to his present problems. Such a personality has a choice; he may continue to blame his parents for his difficulties, using them as an alibi to avoid responsibility, or he may accept the challenge of taking charge of his own development and thus progress to full maturity.

We, the new Zimbabweans, have a similar choice; we may continue to blame our historical antecedents for our troubles, replacing reconciliation by confrontation, reconstruction by recrimination, rehabilitation by revenge, or we can refuse to allow the past to shape the future and take charge of our own destiny.

In the new awareness of God, which is a product of our nascent consciousness, we may yet be able to reverse the process of alienation which in Western Civilization has separated the rational self from the emotional and spiritual selves in man. We may yet go forward together to a new, stronger and more vital culture, the beginning of our Golden Age.

References

BANANA, C.S. 1980 'Let Us Unite and Rebuild Zimbabwe' (Salisbury, Univ. of Zimbabwe Chapel, Inaugural Service, 6 July).

BUCHAN, T. and CHIKARA, F.B. 1980 'Psychiatric outpatient services in Matabeleland, Zimbabwe', *South African Medical Journal*, LVII, 1095–8.

CAMPBELL, J.W. 1963 'Sociological barrier', *Analog*, LXXI, 95–6.

CAROTHERS, J.C. 1953 *The African Mind in Health and Disease* (Geneva, World Health Organization, Monograph 17).

CASSON, L. 1969 *Ancient Egypt* (Amsterdam, Time–Life International).

HEINLEIN, R. 1965 *Stranger in a Strange Land* (London, New English Library).

INNES, H. 1972 *The Conquistadors* (London, Book Club Associates).

JAYNES, J. 1979 *The Origin of Consciousness in the Breakdown of the Bicameral Mind* (London, Penguin).

KIEV, A. 1972 *Transcultural Psychiatry* (Harmondsworth, Penguin).

KRAMER, S.N. 1969 *Cradle of Civilization* (Amsterdam, Time–Life International).

KRIGE, E.J. 1936 *The Social System of the Zulus* (Pietermaritzburg, Shuter and Shooter).

KUPER, H. 1955 'The Shona', in D. Forde (ed.), *The Shona and Ndebele of Southern Rhodesia: Ethnographic Survey of Africa, Part IV* (London, International African Institute).

LEONARD, J.N. 1969 *Ancient America* (Amsterdam, Time–Life International).

SWIFT, C.R. and ASUNI, T. 1975 *Mental Health and Disease in Africa* (Edinburgh, Churchill Livingstone).

TINDALL, P.E.N. 1968 *History of Central Africa* (London, Longman).