

Cognitive Development, Socialization and Cognitive Mutations A Critique and Elaboration of Boyer's Naturalness of Religion A Case Study of the Sukuma of Tanzania

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ABSTRACT The Sukuma of Tanzania have no traditional religious organizations, only a wide-ranging variability in their religious practices within a loose paradigm which makes socialization to specific practices unlikely. Religious practices as social mutations may survive or disappear.

One mutant religious practice which failed to survive is described which shows the unlikelihood of a general developmental process from ideas present in the very young which could account for their basic religious ideas.

Researchers may see few ceremonies and expecting to find a religious organization, construct one on slender evidence, thus showing their preferences for a systems rather than an action approach in field work.

INTRODUCTION

Human behavioural patterns are so varied that it is not possible that a particular trait could be present in all religious practices. The comparison between wet and dry, rural and urban environments is enough to disallow that possibility, apart from the fact that definitions of religion are very varied.

From this conclusion the swing is to the opposite extreme that all cultural traits including religion ones are socially transmitted; that passive socialization accounts for every social practice and that this is largely picked up as we go along and change.

Then there is Boyer's hypothesis (Boyer, 1994) that there is a human developmental process from ideas present in the very young baby which accounts for basic religious ideas. It is perhaps unwise to describe changes in the thinking processes of humans as developmental in the Piagetian sense when some changes appear to be retrogressive. A child's cognitive development may reach an accept-

able level in late adolescence and then decline in cognitive ability as mental activity becomes routine and there is limited new experiential input.

Any theory of cognitive development based on the human biological unit has to include the reality rather than the possibility of mutation; the biologically inexplicable appearance of a new element. If a mutation is to succeed rather than disappear, it has to be passed on in a biologically successful way for which the personal feelings of the carriers cannot be accountable. It has no mind to organize its own survival. Selfish or not there has to be an element of luck in this survival; the rains have to come on time and the landslide has not happened.

Cognitive developments on the other hand may include mutations. Leaps of understanding connecting a series of provided or known facts in a new and original way are explicable even if they are unusual. Inspiration or a message from God or the spirits may be something different since they may have no known origin. These cognitive mutations which cause new religions to emerge are obvious in human history. Clearly any religion has to have an environment in which it is possible for it to grow beyond the mind of the originating person.

The cognitive mutation carried by this person has to appeal to others as it must have failed to do with many religious ideas which never developed beyond the minds of their originators; ideological neonatal deaths. The history of religions is full of potentially successful religious leaders whose ideas and practices did not go further than their own initiated cult. Any such example which turns into a mass movement cannot be seen as part of some overall and pervasive cognitive development

which has cross-cultural inevitability. Buddha, Christ and Mohammad in real terms have nothing in common, much less a shared idea.

A COGNITIVE MUTATION AND ITS DISAPPEARANCE

The seminal event which gave rise to a reconsideration of socialization and any developmental theory of cognition and its limitations as a total explanation for behaviour was my presence at an ancestor propitiation ceremony in Usukuma, Tanzania in 1953.

I was at that time a District Officer in the Tanganyika Administrative Service and had been in that area for the previous three years, and I returned after independence as an academic when I made four subsequent field trips to Usukuma. I was bilingual in Swahili and had a working knowledge of Sukuma. In some thirty five years association with the Sukuma I have published some 24 articles, one paperback and a book on the Sukuma. Thus I could be said to have had a reasonably adequate exposure to this particular culture.

The Sukuma are a pastoral agricultural people living on the cultivation steppe of north-western Tanzania to the south of Lake Victoria. They are the largest tribe in that country both in terms of numbers and the area they occupy. Only some 15 per cent have converted to Christianity and Islam and their traditional religious ideas have survived in popular use through constant adaptation and widespread variation.

At the time of this ceremony the prevailing religious idea was that ancestors acted upon their descendents either because they had been injured by some behaviour when they were alive, usually at least a generation back or that their descendents were behaving in ways that damaged the spiritual survival of these ancestors (Tanner, 1957, 1958a, b, 1959, 1969).

People suffering from some misfortune went to a diviner who prescribed some ritual action which would mollify their ancestors and return their descendents to the status quo from which their own behaviour had diverted them. The diviner in this case was a 35 year

old thin non-literate man with uncut hair, wearing numerous bangles and amulets testifying to his close connections with the spirit world, who had been practising successfully for some years. The size of his traditional house and his reputation was such that the news of this proposed propitiation ceremony had been picked up by my chief and most valued informant Juma Ndamulo.

This diviner had prescribed a ceremony which he himself would conduct in his own compound for the afflicted family to reduce the active annoyance of their ancestors. All this process was standard Sukuma procedure which could have been found in many situations among a then population of over two million.

His prescription was for these family members to walk along a 25 foot shallow trench filled with stones which had been heated for some time by a wood fire burning on top. This ritual was markedly dissimilar to any that I had seen or even heard of nor did my subsequent enquiries provide any clues. The parallels to Hindu ritual behaviour are obvious but the small Indian trading community in the area had never carried out such a ceremony nor indeed would such ostentation fit in with their low religious profile. The diviner could not read, had not seen any pictures of such activity nor had he ever travelled outside the tribal area. Indeed his appearance, living conditions and way of life would suggest an extreme traditionalist, unaware of radical political, economic and social changes which were already substantially modifying the Sukuma way of life.

This analysis attempts to see this event as a cognitive mutation and therefore inexplicable in terms of Boyer's hypothesis of a lowest common denominator of cognition (Boyer, 1994) which would account for the naturalness of religion overall.

THE SUKUMA RELIGIOUS PARADIGM

The principles within which Sukuma religious practice would seem to work are very general and ill-defined and allow them to develop a wide range of what are in effect individual forms of religious rituals for which the

generally accepted meaning of socialization would not apply.

These principles are firstly that some aspects of the individual survive death in the medium-term rather than soon after death. Secondly that certain people are especially likely to be able to contact non-physical forces and to influence and manipulate them but that this is not an inherited power. Lastly that properly performed rituals can bring about physical changes.

These preconditions for what is known as Sukuma religion would appear to be almost human universals. Each part of Sukuma society provides a set of constraints that make it more or less likely that certain ideas will or will not survive, and for their development in a particular form. We do not know enough about Sukuma society to be able to postulate the relative probability of certain ritual traits developing or for how long existing ritual practices have existed if they have not just been individual forms.

THE VARIABILITY OF NON-LITERATE RELIGIONS

In the Sukuma social and ecological environment the sheer utility of unspecific religious ideas has led to their development on lines largely free of institutional influences. This would appear to be an example of Sperber's law of the epidemiology of representations (Sperber, 1985) by which certain magico-religious ideas, on being put into practice, catch the attention of small groups under locally dominant individuals within which group these representations flourish or fade.

The above ceremony seems to be an example of this and obviously required a great deal of preparation but had not attracted more than a dozen spectators apart from the participants. This type of ceremony was never repeated and ten years later this man had abandoned his diviner-physician career and was attempting to become a local political representative in the Tanganyika African National Union, the only political party in the country. Thus striking as the ceremony may have been to an outside observer, it failed to catch on

perhaps because it required a lot of scarce wood fuel and more likely because of a combination of what his neighbours considered to be an aggressive personality and the high cost unsuccessful ceremonies.

Sukuma religious ceremonies have a built-in instability not just because of the effects of external forces. There is no tribal religious schemata to which practitioners and petitioners can defer. Thus there is no such thing as a tribal religion with recognizable characteristics which would have produced something approaching a tribally recognized order of service.

Researchers into the religions of non-literate peoples are hypothesizing about the religious practices of large numbers of people on the basis of a very few ceremonies which they have been able to witness, in view of the short periods spent in fieldwork at a sufficiently integrated level to be involved in such public and private ceremonies. If the great anthropologists had seen more than a very few ceremonies then their books would have included more photographs if only because it would have given their studies a wider market (Evans-Pritchard, 1937, 1956).

In the total of four years walking about Usukuma I attended about ten ceremonies which I photographed and talked to if not interviewed hundreds of which some were recorded on tape from which I wrote about a Sukuma religious system. Missionaries also tended to see the Sukuma traditional religion as a system whereas perhaps the local clergy saw it as a more dispersed background of ideas and practices of Sukuma.

I came from employment in an organization which was clearly a system, the colonial government and I had been educated in several parts of an education system. In addition I banked in a system, was a member of the Roman Catholic Church apart from systematically collected the medicinal plants in Usukuma to a total of some 2000 specimens lodged in the National Herbarium at Kew, London. The books I read about Africa had titles like *The Religion of the Nuer* which detailed a system for a society which was far more elemental than the Sukuma. I was immersed in systems and

so were the missionaries with whom I discussed the religion of the Sukuma on numerous occasions so it was scarcely unsurprising that I found the Sukuma to have a religious system. In the sense implied, it did not exist.

SOME PAST CONCLUSIONS FROM THE PRACTICE OF RELIGION

While it is easy enough to postulate evolutionary constraints and enabling situations for religious practices, the time span is much too short for them to be considered as evidence for religious practices being sufficiently systematic for aiding or penalizing survival. The cases cited refer in the main to small and what might be called exotic populations. The Amish marry their first cousins by preference and that community has half of the known cases of Cartilage-hair hypoplasia (McKusick et al., 1965), but this is a very small sized group.

There can be little doubt that treating religious practices in terms of epidemiology would show that certain religious practices if they continued to be practised systematically and continuously would inhibit the survival of the society practising them. The sacrificing of the first-born in Carthage (Weyl, 1968), the extreme celibacy of the Shakers (Andrews, 1963) or the castration of the Russian Skopsy (Kushner, 1967) are cases in point. Such cases are obvious but with more common practices, the "shall not" aspects of most of the great religions, such an approach is more debatable.

We do not know in most cases the correlation between the injunction and the practice; theft and adultery are cases in point; theft distributes property between unrelated people and adultery distributes genes. The charity shown by Christians to those to whom they were not related in the Alexandrian plague of 334 AD. (Eusebius, 1890) may have enabled some more to survive, while it probably caused the killing off just as many of those who were practising the tenets of their faith.

The fixed inheritance system of Moslems which encouraged them in a high proportion of cases to marry double first cousins (Tanner, 1964), must have had disadvantageous genetic consequences but at the same time re-

straining population growth for which agricultural land and pasturage was not enough.

A religion has to be considered overall rather than in a narrow range of circumstances. Even taking Hinduism with a possible coherent form going back three thousand years, this is no time at all in genetic terms and Islam at 600 years even less so.

The assumption that there are cognitive restraints on human perceptions which account for the universal presence of religious ideas must be a plausible long-shot. The data in support of this is very recent, selective and experimental. Whether the same conclusions could have been drawn from similar data a hundred years ago must be speculation as indeed must be its universalist assumptions; there is very little cross-cultural data.

What is certain is that the overwhelming pattern of religious behaviour once it becomes institutionalized with the aid of literacy is repetitive and that it requires very little psycho-biological capacity to carry out these performances satisfactorily. Those who have Down's Syndrome can carry out the Moslem statutory prayers quite adequately and the same would apply to Christian services in which the passive presence of the brain damaged child is equally acceptable.

An obvious example of this would be the daily evening Mass at Lourdes in which many of those present are not conscious at all of what is going on. Many participants describe this event as possibly the most impressive spiritual event of their lives.

But it is certain that the human mind can only retain a certain amount of material, religious or otherwise and that much of what is retained about the structure and aims of their religion must be considered very trivial indeed. Conversion to Islam because a tourist received the hospitality of a peasant family in Turkey, a particular religious tune, candlelight at a ceremony and so on. There are possibly no themes that could possibly be discerned here except perhaps triviality introducing prolonged repetitiveness.

Certain traits must have been present in the human species which have enabled certain developments to occur. The ability to recognize faces would seem to encourage small group-

ings for which religions would give support. The ability to read as the outcome of previous cognitive abilities which is considered to be extremely important by all the great religions could be seen as a positive disadvantage by encouraging biologically disadvantageous relationships to occur. Historically Jewish parents have preferred scholars as husbands for their daughters regardless of their physical fitness; this is quite contrary to any Darwinian principle of the survival of the fittest.

Indeed the practitioners of religion have in general avoided much of this capacity to read; it is not a general religious practice in terms of frequency and the proportionate time used. Does the Roman Catholic priest read or say Mass; certainly he reads the service once but after thousands of performances, he only reads the small changing parts. The readers of the lessons are a minute proportion of the Christian worshipping community. The pastor who reads his sermon is criticized.

Much of this cannot apply to non-literate religious behaviour because it has not been systematized. The participants at every Sukuma religious ceremony do not have a code of religious behaviour, much less a repetitive one. In the modern idiom everyone appears to be doing their own thing and there is no one suggesting that this is the start and pay attention everyone. It does not matter much if you cannot see or hear but there is some vague dispersed benefit from being there if the ceremony does not relate to your particular difficulties.

A long list of propitiation ceremonies which had specific names which had been collected by informants had very little in common except that they were considered to be ceremonies and had vernacular titles. Indeed I made them into part of a system by calling them propitiation ceremonies and giving them a marked off section in my notes. I might just as well have had a pack of cards of varying sizes with various marks on them.

THE INADEQUACY OF OVERALL SOCIALIZATION THEORY

The idea of "exhaustive cultural transmission" (Boyer, 1994: 265) must be a problem in

the context of Sukuma culture. Without centralized and centralizing institutions, an unwritten language and an environmentally dispersed pattern of living, it is difficult to suggest that their culture could have been transmitted vertically over generations or horizontally between communities. Here we have a tribe in which their individual horizons are likely to have been the edge of their community (gunguli), the watershed of his land and in more recent years the local shops.

Each dimension of the Sukuma social environment will have been subject to different transmitted themes; the Nilo-Hamitic Masai to the east, the rainfall and permanent water of Lake Victoria to the north, vast savanna forests to the west and the dry environment of the Nyamwezi and Gogo tribes to the south. Customs, language and values have consequently been very varied.

In such a cultural and environmental mish-mash, human cognitive variability takes on a greater significance than perhaps it would do in a literate society with well established institutions restricting human ingenuity and inventiveness. The peasant can perhaps be explained in terms of socialization but the poet and prophet cannot be accounted for so easily.

Any prolonged contact with a non-literate people will demonstrate that there are some who are extraordinarily perceptive and others who are sufficiently unintelligent to make any conversation something of a strain. Thus any socialization pattern within a community will be interpreted and perhaps developed by a variety of intelligences of which a very few will have flashes of cognitive behaviour which could be called mutations.

Moreover socialization is a blanket term which is recognizable for its simplicity. If the Sukuma have been socialized to do things in a particular way, then it has been a very inefficient process. The overwhelming explanation which they give for a very wide variety of rituals, is that they have always done it this way which is manifestly incorrect. The initiation rites to the same coven of the Buchwezi secret society which was observed in 1953 and 1963 bore no relation to each other except for a few head-dresses. Unless I had known that they

were the same coven, my notes would have shown that they were two distinct ceremonies which merely shared a name.

Further probing usually produced no further explanations or idiosyncratic comments for which no supporting data was provided. The conditions of small community life made it unlikely that anyone would cast doubt on such publically proffered ideas. Since they fitted loosely into a vague paradigm of traditionalized ideas, they were equally unlikely to be critically assessed.

The diviner and healer Kabadi of Nyegezi liked to talk to the researcher in private quite regularly for the reward of tea and biscuits, even though he had to walk some distance to my house. Provided his ideas came within what I took to be the reasonable dimensions of the Sukuma paradigm, he could and did say what he liked. Some aspects would be confirmed by conversations with other healer-diviners and some would be entirely original; cognitive mutations. Since he was not a particularly successful practitioner without much personal charisma, it would seem likely that what may have been cognitive mutations died with him except for their presence in my notes.

In a non-literate society it seems that there may well be many of these cognitive mutations which have a greater chance of catching on for at least a short time, than would be the case in literate societies which require literate acceptability as well as propagation through the mass media, the educational system and the intellectual hierarchy. It would seem therefore that the patterns of cultural transmission may have been at a deep psycho-social level than through the more obvious transmission of specific social and material artifacts.

RELIGIOUS ARTIFACTS AND SUKUMA SOCIALIZATION

In societies which are literate and institutionalized, religious socialization may not provide rich opportunities for cognitive mutations. In the absence of a known and accepted range of religious symbols and no institutionalized religious rituals, the material artifacts in the Sukuma religion must in the first instance be lin-

guistic and to a lesser extent symbolic objects. It may be a partial explanation for the reluctance of the Sukuma to convert to Roman Catholicism that it has a material rather than a linguistic symbolic system.

Historically the Sukuma were a pastoral people and as such their religious heritage will not have included material artifacts which were difficult to move. Their traditional ceremonies are replete with words and movement. The leaders may have some personal ritual ornaments showing their past connections with the spirits and wear a leopard skin or the skin of an animal which may have been dedicated to their ancestors over their normal clothes and perhaps a skin headdress. Their rituals are rather obviously without much religious impediment which may come with prolonged sedentary living.

Ancestral artifacts (*shitongerejo*) are not of great importance in these rituals and seem to be no more than bits and pieces that have survived from a previous generation and no further back in time than that due to decay and termites. They do not seem to have even retained the brass bangles which must have been worn well into this century. The small spirit houses form no more than a back-ground to ritual and fulfil their function of propitiating some spirit by just being erected.

Language is the vehicle for ritual and with its tonal forms and complex vocabulary and syntax it allows for endless elaborations and the production of new ideas. Their seeming preference for glossolalia may be the scenario for the production of new ideas rather than an orchestrated background for ritual since understanding is not the objective of ritual.

THE SEEKING FOR SYSTEM IN NON- LITERATE RELIGIONS

It is not just a theological and scientific pattern of thought which makes the anthropologist seek for a religious system in the societies which they study, but the overall dominance of systems theory. Any published study has chapters with subject headings and few approach their research on the assumption and indeed the conclusion that there is no system of belief and

social practice. Just the lowest social denominators for behaviour on which individuals and groups are virtually culturally free to invent and develop what practices they like. Perhaps Colin Turnbull came near to this approach in his study of the Ik in which he concluded that they had almost no social system at all; staring at the mountain seemed to be their only ritual activity and beyond that they could not go because of the uncertainty of their lives.

A system approach is safer and simpler and the sense of achievement is most gratifying as the data fills up under the subject headings. To a very real extent it is independent of the adequacy of the fieldwork and the inadequacy of the researcher. Some distinguished researchers come close to this when they say that the economic, social, religious and political practices cannot be separated but they do not go farther than this to search for the lowest common denominators through which these people function, independent of these categories.

The action theory approach is fraught with difficulties. The relationship with more specific informants creates personal and methodological problems. Cultures which are not those of the investigators are filled with everyday behaviours which have to be explained and adjusted to. Variations in behaviour from personality and intelligence differences are perhaps too difficult to accommodate in cross-cultural encounters of short duration.

We expect regularity (Boyer, 1994:41) and we therefore go to considerable lengths to find it and if we do not find it, we create it. This expectation inevitably prevents the possibility of discovering or indeed admitting the extent of ritual variability in non-literate cultures and within this variability comes individual initiatives which could be cognitive mutations. The Sukuma ceremonies witnessed in over a decade of enquiry were so varied in their form that each of which could have been described as a cognitive mutation rather than as ceremonies forming part of a semi-permanent religious system recognized as such by the Sukuma themselves.

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