

## **SHADOW AND SUBSTANCE: A MOPAN MAYA VIEW OF HUMAN EXISTENCE**

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### **ABSTRACT/RESUME**

Among the Mopan Maya the soul (Spirit or life force) is seen as a tangible entity, represented in the human shadow. The shadow is as vulnerable as the body to physical forces. As maturation increases, detachment, and loss of shadow from the body, is an ever present real fear for the Mopan Maya. In any discussion of how the Mopan perceive human development, growth, nutrition, reproduction, illness and death, the concept of the shadow-soul as life force plays as important a role as that of blood, food, witchcraft, and fear, topics on which there already exists a considerable literature.

Les Mopan Maya voient l'âme (l'esprit, ou la force vitale) comme une entité palpable, représentée dans l'ombre humaine. L'ombre est aussi vulnérable que le corps aux forces physiques. Les Mopan Maya craignent que le développement physique n'entraîne la perte et la séparation de l'ombre du corps. Dans toute discussion à propos de la manière dont les Mopan voient le développement humain, la croissance, la nutrition, la reproduction, la maladie et la mort, le concept de l'ombre-âme comme force vitale joue un rôle aussi important que celui que jouent le sang, l'alimentation, la sorcellerie et la peur, sujets sur lesquels il y a déjà beaucoup de documentation.

The inhabitant of the remote village of San Jose in the Toledo District of Southern Belize are for the most part Mopan Maya Amerindians.<sup>1</sup> They number about 120 families in all, of whom perhaps 20 families have Kekchi Amerindian origins. San Jose is 11 miles by road and a 2 hour walk from the nearest neighbouring village; transport is sparse and communication with the outside world difficult. There is a primary school; fundamentalist Protestant missionaries are active in the area; the Roman Catholic priest visits once a month and the primary health care team once every 2 months. During the 12 months that I carried out social anthropological fieldwork observations in the village, it became clear that while every member of the community is a member of one or other of the 5 Christian churches operating in the village and most will willingly seek the help of the medical staff, either at the British Army base six miles away, or in the market town of Punta Gorda, they nevertheless retain and maintain a strong belief in indigenous notions concerning bodily function and development as well as the relation between body and soul.

The Maya of Toledo are aware that these indigenous beliefs are regarded with some derision by the neighbouring population, mainly Garufian (Black Caribs) who inhabit the coastal area, and who provide the teachers for the primary school; the ruling elite, the Creoles, who dominate the administrative posts in the health services and elsewhere, and by the local government medical officers who are usually of immigrant origins, either East Indians or more recently Nicaraguan refugees. They are understandably reluctant to discuss topics involving these beliefs with such people. Their neighbours' knowledge of Maya customs and belief, especially with regard to practices associated with birth; the feeding of infants; prohibitions and prescriptions on foods in relation to various life events; the conditions for healthy existence; the causes and courses of illnesses; the central importance of blood in the diagnosis of disease and the definitions of the stages of death, is almost non-existent. A recent publication indicates that there is a similar gap in the anthropological literature. Kathryn Staiano, who worked in Punta Gorda, the market town on the coast, 31 miles from San Jose, between 1980 and 1983, writes that:

Proper diet is critical for the maintenance of health for at least four of the five major ethnic groups. The Maya while apparently *de-emphasizing the importance of diet*, are careful to avoid taking cold liquids when their bodies are in a certain state (Staiano, 1986:252).

Staiano's view reflects more the prejudices of the community in which she conducted her own fieldwork investigations, than accurate

anthropological observation. This is somewhat surprising in the light of the numerous references in the literature to the importance of food, in all its various aspects, in the Maya culture. The Maya of Toledo District in Southern Belize are Mopan Maya. Their language closely resembles that of the Yucatecan Maya and the two are mutually intelligible. While there are some cultural differences, the role played by food in the Mopan Maya community appears to be very similar to that described by other ethnographers working in the Yucatan (Redfield, 1941, 1950, 1955; Lewis, 1960; Foster, 1967). There are also many points of resemblance between the Mopan Maya way of life and that of the Highland Maya of Chiapas and Guatemala. Cancian (1956), Nash (1970), and Vogt (1970), have all described the central role of the Fiestas in those Maya communities where the system of social organization is characterized by the Cargo hierarchy.

Although the Cargo system is rapidly disintegrating, fiestas and ritual feasts are *still an* integral part of village life. It is interesting to note that during communal feasts celebrating Christian and national festivals such as Christmas, Easter and Independence Day, the villagers consume chicken, rice and beans, while for specifically Maya festivals they celebrate with the more traditional pig meat, with corn tortilla, tamales or *dugunu* (corn dumplings). At these more traditional feasts, a drink of ground cacao beans mixed with corn meal and ground black pepper is also obligatory while on other occasions, pop drinks are provided. Beer and rum are consumed at all times. In 1986 the custom of performing the Monkey Dance, a traditional Amerindian dance drama, was resumed after a lapse of seven years. It was performed on Easter Sunday and in contrast to the style of celebration in 1985, was accompanied by feasting on pig meat and corn products.

Food, in the Mopan Maya community of San Jose, is an important feature of the social patterns of exchange. Daughters and daughters in law exchange food with their mothers and mothers-in-law, and between themselves almost daily. In a village where nearly everyone is kin, these exchanges are important indicators of current allegiance and alliance.

In San Jose all foodstuffs are classified on a hot/cold dichotomy. This is common to the whole Central and South American area, but has usually been described as imported from the Iberian peninsula with the Conquistadores (Foster, 1960; Adams and Rubel, 1969). Colson argues that this is an indigenous practice (Colson and Armellada, 1983) and there is a wealth of data from the Amazonian region and the Andean highlands which indicate the widespread practice of food classification on this dimension as well as on other dimensions (Basso, 1973; Henley, 1983). Colson, working among the Carib speaking, indigenous peoples of South America, reports that there is a lack of wet/dry description amongst this group and uses this

evidence to strengthen her assertion that the hot/cold dichotomy is indigenous and not derived from the Conquest.

There is some evidence that in San Jose, the wet/dry opposition does play a part in the conceptual framework underpinning Mayan ideas of health existence, development, disease and death. There is as well, evidence that in San Jose, degrees of intensity of hot and cold are also described, not so much to foods, as to medicinal plants and herbs. Colson argues that the evidence for an indigenous humeral tradition lies in the consistency with which such a conceptual system can be demonstrated to underpin various aspects of human existence. This paper attempts to demonstrate just a consistency in Mopan Maya concepts of human existence.

Amongst the Mopan Maya there is a very strong belief in the relationship between the ingesting of "*correct* foods" and the maintenance of *health* and well being. From the day a baby is born, although not to my knowledge, before, the mother must be careful with her diet as well as what she gives the child. (Certain actions or behaviours are proscribed for women while they are carrying the fetus, eg. killing snakes, but not the consumption of particular foods.) A woman may not feed a child from the breast when pregnant for fear of harming the unborn child, although some women claimed that they stopped feeding because if they did not, their breasts would turn yellow. In fact the women in the village find weaning young children very difficult and many do breast feed throughout their pregnancy. Later this practice may be blamed for the illness of the new child.

The appropriate foods for a woman following birth, are chicken cooked in a broth with herbs, hard boiled eggs and corn tortillas. Pig is considered too "hot", and "cold" foods such as beans, rice, plantain, cassava, etc are strictly proscribed. "Hot" foods strengthen the blood it is argued and thus the mother's milk. The mother's blood is in a state of imbalance after giving birth and she is in great danger of becoming rapidly cold and must be protected from such dangers. A fire is lit under the bed (which has been especially built for the purpose of giving birth if the woman does not already possess one). The space around the bed is screened and the paling walls covered with cloth or hessian bags to prevent draughts.

Women in San Jose say that they only know that they are carrying a child when it begins to quicken, at about 4 to 5 months. Lack of menses is no indicator as many women conceive while breast feeding and without menstruating. Breast feeding is fraught with many difficulties, the newborn child's blood is "cold" the mother's milk is "hot" and "poisonous" and for the first three days the infant can only be fed water flavoured with garlic and oregano. The maintenance of humoral balance is essential at this time and will remain so throughout an individual's lifespan.

Blood is the mediator of heat and cold and properly speaking it is the blood which is "hot" or "cold" and not the individual. A person may feel hot but be diagnosed as having a "cold" blood illness or vice versa, i.e. feel cold but have a "hot" blood condition. While illnesses may involve the blood being either "hot" or "cold" there is no evidence to denote that either indicates greater or less severity. Diarrhoea is described as a "cold" blood condition and is also classified as "wet". Coldness is associated with wetness in other areas of Mopan Maya cosmology. Agricultural practices are still largely controlled by references to the lunar cycle (Osborn, 1982; Thompson, 1930; Gregory, 1972). The new moon is associated with a wet period during which many activities are proscribed. Women may not make pots at this time because the clay gathered will be too wet, the firing insufficiently hot, and the vessels produced during this period are thought to be brittle and easily broken. The older men of the village insist on waiting for the moon to pass through its phase before firing the plantation because during the period of the new moon, fires can never take sufficient hold to ensure successful clearance. The two to three weeks then remaining before the next new moon allows just enough time for seeding to be completed and the newly planted seeds to benefit from the first rains of the wet season.

Gordon Brotherston points out that in ancient Maya society and well into 19th Century Yucatan,

...the health of Maya society is not just a matter of internal politics but depends on the sky. The coursing of blood and breath corresponds to astronomical movement...the wholeness of blood (*tuliz kik*) corresponds to that of the moon (Brotherston, 1979).

Mopan Maya women believe that their menses should occur during the period of the new moon. Menstruation is a strictly taboo subject and may never be discussed. Comparison of dates with regard to menstrual cycles is thus impossible and individual women believe that if they menstruate outside the prescribed moon phase, that they are doing so uniquely. In fact, menstrual cycles are not all that frequent in the village. Women marry young, about 14 years. (Recently there has been an attempt on the part of all the churches to postpone marriage until 16 years and the first few girls started to attend high school in 1986). Most women conceive within the first year of marriage, and continuous child bearing every second or third year, with the concomitant extensive periods of lactation over the following 30 years of fertility, ensures that the women experiences menstruation only very frequently. The only women who do have regular cycles are either sterile, or in some cases widowed. They do not discuss their cycles with other women and it

took many months before they could bring themselves to discuss such matters with me. Women claim that they experience three menstrual cycles between each pregnancy but careful observation reveals that this is rarely the case. Amongst older women in the village, i.e. those who have completed child bearing, spacing between children appears to have been of longer duration, three to four years. Periods of ritual abstinence may have been more common in the past. Today, men do abstain from sexual intercourse in the week or two prior to seeding corn but not at other times. The norm of *some* regular menstrual cycles between conceptions may therefore relate to the immediate past.

If cold, wetness, weakness, blood, the moon, women and fertility are associated on one dimension, their oppositions, hotness, dryness, strength, flesh, the sun, men and growth can be demonstrated on another. The moon *u* is a female deity, the sun *Kin* is male, in the traditional Maya cosmology. Although the modern Mopan Maya are nominally Christian there is no doubt that the sun and the moon still play an important role in their daily lives and if not worshipped openly are still made prestatations albeit covertly. Hunters and men going off to fish, still offer prayers to Venus or the morning star before they set off.

Men say they are stronger than women because they spend more time in the sun while working in the plantation. Like corn, men grow strong with sun but the women are like beans and must be protected from the strength of the full sun. Corn, as has been noted above, is classified as a hot food, beans as a cold. Before corn seed is planted ceremonies are held in the plantation during the night and prestatations made of food and copal incense. As only men attend these ceremonies I was unable to observe one but was told by a young man that now they sacrifice a bird, but in the past, human blood, that of a virgin, was necessary to ensure that the rains came at the right time to guarantee germination and a successful crop. This young man was teasing but nevertheless his joke was consistent within the conceptual framework which orders women, blood, rain, and fertility on one continuum and men, seed, sun and growth on another.

It is therefore consistent that the properties of hotness and coldness when applied to food do indicate to the Maya a measure of nutritional value. "Hot" foods are said to "make the blood strong", "cold" foods "fill the belly" but leave a person weak. There are then two principles operating and which must be taken into account when eating or drinking or taking medicinal *remedies; consideration of the inherent hot or cold properties* of the food or drink to be consumed, and the relevant condition of the individual's blood when eating is involved. Not only must the property of the essence of the combustible be considered but also the actual temperature. Drinking very

cold drinks after exercises when the blood is hot is dangerous although cold drinks are permitted on journeys while the body is resting. It is bad manners to serve tea or coffee too hot and Maya women carefully cool liquid refreshment before offering it to their guests.

Healthy or strength promoting foods, such as corn and peppers, pig, game, poultry, eggs, snails and fish are highly valued and described as "hot" foods. These foods are perceived as maintaining health and well-being but not necessarily preventing disease which may have many different etiologies. One green leaf vegetable is also classified as "hot". This leaf has medicinal properties as well as being good to eat. That is to say, it is also prescribed for various ailments, although in general, medicinal plants tend to be used both as an infusion for drinking and as poultices. "Hot" leaves may be boiled in water, "cold" plant leaves are merely steeped.

Knowledge of the properties of these plants and where they may be found is jealously guarded by the Mayan shamans or as they are known in Maya and will be referred to in future, *thepulya*. *The pulya* gains his specialist knowledge during long and expensive years of apprenticeship to an older *pulya*. All information is transferred *outside*, either in the plantation or in the forest. The *apprentice* not only pays the master with money, a rare occurrence in the village, but also with labour. During the time he remains an apprentice he is virtually the servant of the master. The *pulya* learn not only how to diagnose illness by "reading the blood", and how to cure by prescribing the correct herbal remedies which they supply to their patients but also to divine the source of curses which may be diagnosed as responsible for the illness. They are capable of deflecting such curses and indeed of inflicting them. The Mopan Maya say that such skills are really Kekchi skills and that some of them learnt these skills from the Kekchi, but that *they* are not as good as the Kekchi either in laying curses or in alleviating them. One young man in the village claimed that he had studied only the skills associated with herbal curing *and knew* nothing of *cursemaking*. He preferred to be called a *betic'a'qui*, literally a "do gooder," or curer.

The Maya *pulya* uses prayers and incantations as well as the performance of sacrificial ceremonies in his efforts to heal his patients. Blowing smoke (of chilli peppers) is also part of his repertoire, but not often employed, and hence not observed during fieldwork observations. In addition to "reading the blood" which he does by taking pulses, about which, more later, he also is adept at recalling the *pixan*, the life force or spirit, which, as in so many Amerindian communities, both in Central and South America, is so easily detached from the body, thus leaving the person who has lost his *pixan* in a state of extreme vulnerability.

Thompson describes the ceremony performed by the *Pulya* to coax back a lost *pixan* which he witnesses during his stay in San Antonio, the parent village of San Jose in 1929 (Thompson, 1930). Exactly the same ceremony was witnessed on several occasions in San Jose in 1985 and 1986 by the author. "Soul loss" has been described numerous times in the literature on Central and South American indigenous groups (Rubel, O'Neil, and Collado - Ardon, 1984; Colson et al, 1983; Campbell, 1987; Henley, 1982; Rivière, 1987). Although the Mopan Maya use the term *pusuk'al*, literally, heart, when translating the word "soul" in the Christian religious context, it is clear from lengthy discussions with many different informants that the Maya *pixan* refers to the essence of the body, the life force. *Pixan* can also be translated as "ghost" or "evil" spirit. For the Maya the greatest hazard in life is the separation of this life force from the body corporal. It may become detached at any time and especially during sleep. Dreaming about another person indicates that that person's *pixan* is wandering free. When I described a dream in which my husband appeared to be with me in Belize, my audience was shocked, agitated and concerned, "maybe he is dead" I was told. The immensity of the distance between Edinburgh and San Jose indicated that his *pixan* must have been separated from his body for a very long time.

*The pixan* can also be frightened away from the body. Sudden shocks such as that caused by the accidental dropping of a infant by his 9 year old sister, can be held responsible for the loss of *pixan* and the bout of diarrhoea which the infant subsequently experienced. This frightening away of the life force which must then be found and coaxed back into the body if the individual is not to become vulnerable, weak and ultimately die, is widely known as "susto" and will be very familiar to anyone conversant with the extensive literature on folk illness in the Americas. (For a recent review see Rubel, O'Neil and Collado - Ardon, 1984.)

A *pixan* can not only be frightened out of the body but may be enticed or stolen and then held captive. This is what happens when witchcraft is involved. The person responsible for laying the curse may do so him or herself or may employ the services of a *pulya* who performs ceremonies involving animals sacrifice, the burning of incense and speaking incantations. The person cursed must also employ a *pulya*, if he or she is not versed in the necessary skills. The *pulyas* then become locked in a tug of war for the possession of the *patient's pixan*. Since the act of cursing must be made secretly it is sometimes suspected that the same *pulya* is involved in both the causing and the curing. In serious cases a second or third *pulya* may be consulted.



In their recent publication, *Susto, A Folk Illness*, Rubel et al (1984), refer to one of the names given to *susto* as *perdida de la sombra*, or loss of shadow (Rubel et al, '1984:6), but they fail to unpack the concept. To the Mopan Maya the shadow is indeed the *pixan*. Another term, *bo'oy* is also used to refer to the shadow, and *bo'oy likepixan* can also refer to "ghosts" or the wandering spirit or essence of a person. When the word *bo'oy* is used it appears to mean the physical embodiment of the *pixan*, again a familiar concept in the Amerindian literature (Riviere, 1987; Campbell, 1987). In translating "shadow" to outsiders, the Mopan Maya prefer to use the term *bo'oy*, but when referring to illness, or discussing the etiology of some malaise, they are more likely to use *pixan*.

In the same way as the body incorporates the blood, the shadow encloses the human spirit or essence. The shadow can be attacked; a man who fell ill in the village was sure that his shadow had been bitten by a snake while he was walking in the forest. He was unaware of this occurrence at the time but in trying to ascribe a cause for his condition was sure that a snake was responsible. The women say that they feel extremely vulnerable because they spend many hours by the river where the mischievous and sometimes evil water spirits are only too anxious to capture the shadows of the women as they wash and bathe in the streams that surround the village. A responsible mother does not take her young infant with her when she goes to the river as the newlyborn are very vulnerable. The *pixan* are only loosely attached to their bodies and until they are about 2 months old are thought to have only the most tenuous connection with their life force. The river spirits are the most malevolent and particular care must be taken in their vicinity. Women, more often than men, ascribe their illnesses to loss of shadow by the water, and it is consistent with the cosmology described, that such illness should be more often of the "cold blood" variety than those ascribed to men.

Not only has an infant a very loosely attached shadow *or pixan* but also an incomplete blood system! The most eminent local *pulya* explained to the author the problems involved in diagnosing young infants. Coincident with the development of the strength of the attachment of the *pixan* to the body of the growing child is the completion of the arterial system which, when the baby is born, is still unfinished. The blood can "run anywhere" making the task of "reading the blood" quite impossible. As there is no diagnosis possible, no remedies can be prescribed for an infant of less than 2 months and similarly, the source of curses cannot be divined.

The coincidence of the development of the blood system with that of *the* life spirit and its *attachment* to the body is not surprising and might have been predicted from the literature on Maya shamanism. Barbara Tedioc

(1982) describes in some detail the method of diagnosis she encountered in her work in the Quiche Maya area. A similar method of reading the pulses is employed in San Jose and has been described by James Boster (Tedlock, 1982). He worked in San Pedro Columbia, a Kekchi village some 20 miles from San Jose. Boster reports that in San Pedro, 4 pulses are read, at the ankles and at the wrists, whereas in San Jose 5 pulses are consulted, the ankles, the wrists and the forehead. The *pulya* interprets what the blood says at the pulse points about the body, in terms of sets of oppositions, fast/slow, regular/irregular, strong/weak, moving from left to right/or vice versa, moving up to down/down to up, or as is the case with many women's illnesses, coagulated in one place.

While evidence for a conceptual scheme which envisages the coincidence of the development of the blood system with that of the life force was a gratifying discovery, even more convincing is the linguistic data. In an unpublished D.Phil thesis based on field work among the Lacandon Maya, Didier Boremanse gives as a translation of the Lacandon term *pixan*, "pulse, veins, blood vessels, heart, double, soul". This term, Boremanse says "has primary and secondary meanings:

1) the *pixan* within the human body is the pulse, the heartbeat, the circulation of the blood through the veins; by extension it also means blood vessels, veins, heart, lungs, chest.

2) outside the body the *pixan* is the soul, that is the heart which has the faculty of leaving the body and of becoming its double" (Boremanse 1978:359).

Lacandon Maya, Yucatecan Maya and Mopan Maya are all mutually intelligible and clearly the same language although vocabulary and pronunciation differ from group to group. The Mopan Maya do have a specific vocabulary for heart, lungs, veins, and chest, but like the Lacandon, they identify the life force or essence with the blood system (i.e. within the body the human being's life essence is located in the blood system, hence the need to "read the blood"). Outside the body it is located in the shadow. The further evidence of the development of the life force or essence, *pixan*, as being coincidental with the maturation of the blood system in the infant presents a strong case for such an identification.

The existence of a life force or individual essence in each human being, which is invisible but incorporated in the blood or shadow of the individual is consistent with the belief that everything in the natural world has just such an invisible essence or soul. Trees, plants, mountains, animals, all have an unseen, but nevertheless very real, life force. Rivière says that throughout the tropical rain forests of lowland South America, there is a common belief that,

the world is constituted of two parts, one visible the other invisible...It is mistaken to see this duality as involving two separate worlds, for the seen and the unseen are really two aspects of one intermingled world and are counterparts to each other. The unseen reality is often as important as or even more important than what is revealed to the eye...

The unseen world, or rather the invisible aspect of the world, is often referred to as the supernatural, but this word is best avoided because it implies that what is unseen is above or outside the ordinary operations of cause and effect. To the contrary, *the unseen is the very essence of the causal chain* [Author's emphasis] (P. Rivière, 1987:473).

For the Mopan Maya of San Jose, the relationship between nutrition and well being is clearly predicated on the compatibility of essences and the transference of power, or influence of one essence upon another, e.g. the transference of the power of the essence of corn to the essence of an individual when that essence is located in the blood. This transferability of properties of essences especially via the blood system was demonstrated in the following incident.

A young man from the village was taken to Belize City after contracting gangrene subsequent to being bitten by a snake. He required a number of skin grafting operations but before these could be undertaken he needed to have on hand a supply of blood in case he needed a transfusion. Three visiting friends were approached and each agreed to donate a pint of blood. They were on their way to perform this service when one of them suddenly recalled that his wife was pregnant. He expressed concern both for the intended recipient of his blood and for his wife. He was not sure whether by donating blood he would weaken his wife and the developing foetus, or if his own blood would not be too weak, as a result of his wife's pregnancy, to offer without harm to another man (Author's fieldwork notes, 1986).

This transferability of essence or soul power between individuals and expressed as the strength or weakness of blood is often described in the literature and is basic to the understanding of such practices as the *couvade* (Rivière, 1974). With food, it is the essence of the plant or the animal eaten,

which is transferred to the blood or the essence of the person consuming the food. Thus corn with its essential strength confers strength and is classified as "hot", while beans which are essentially weak may weaken the individual and are classified as "cold".

The dead too need sustenance as do the deities. These deities which are often referred to in the Maya literature might, following Rivière (1987), be more appropriately referred to as essences. The description of the ceremonies which are held in the plantation on the night before seeding the corn might then be characterized as making prestations to the essence of the corn so as to ensure a good crop. That is to say, by strengthening the life force or soul of the corn seed by feeding it and making incantations and waving incense over it, the power and strength of the seed will be transferred to the plants that grow from the seed.

The *pixan* of a recently dead person is said to be very restless with no body to which to return. For 8 days it wanders around the village. This is considered to be an extremely dangerous time for close relatives and favourite friends. The *pixan* is lonely, has not yet made friends among other *pixan* and looks to see whose *pixan* among friends and kin it can entice away. The house where the person has died is vacated. (In the past it was abandoned.) All close relatives and friends stay in close proximity to one another. Favourite grandchildren may be especially vulnerable. If a baby dies, other babies must be guarded with care. One infant dying soon after another is said to have been taken by the first for companionship. On the eighth evening after the person has died, a feast is prepared, consisting of all the person's favourite foods and these are set out on a table around which ashes are laid. The house is again vacated. It is hoped that the dead person's *pixan* will eat heartily and that by this time it will have acquired companions and no longer be so lonely and therefore so threatening to those still alive. The ashes are carefully examined the next morning for evidence of such companionship, i.e. footprints, and if all is deemed well, the family returns to the house. The *pixan* now well feasted, and with friends, will, it is hoped, lie more peacefully.

Great care must be taken that *the pixan* has indeed left the body before it is buried. Bodies are carefully examined every hour or so before a burial time is finally decided. The *pixan* of a child, as has already been remarked, is very easily detached from the body and children are buried very soon after death, sometimes within a couple of hours. But when an elderly woman died, it took some time, more than 24 hours before it was decided that she was ready for burial. The decision as to when to bury was taken after repeatedly feeling the body and noting the loss of body fluids. Repeatedly, the judgement "too wet" was made until such time that the body was declared "dry"

## Summary

The Mopan Maya of San Jose appear to believe that the unseen essence of any one thing, be it stone, hill, tree, plant, stars, sun, moon, rain, river, animal or human, can affect another essence or life force. Since eating and drinking involves frequent contact with the essences of other substances it is essential that the nature of the substances be understood and classified in terms of their influence or action on the human essence. The classification of what constitutes food in the first place, pig but not jaguar, gibnut but not opossum, armadillo but not snake, warrants a careful analysis in terms of compatibility of essences and deserves a paper of it's own. I have tried to demonstrate how nutritional values are embedded in wider ranging Maya cosmology which associates the sun with heat and strength, corn and men; and women with the moon, rain, coldness and weakness. Plants and animals all have essences and the power or influences of these essences on the essence of the individual must be taken into consideration in determining the nutritional value derived from the food which these plants or animals have provided. If the nutritional value passed from one substance to another, is seen as the influence or action of one essence upon another and the essence of human beings is located in the blood, it makes sense to speak of the blood being made stronger or weaker, hot or cold. If the development of the life force, essence or soul is seen as maturing at the same rate as the blood system and other organs, it is easy to understand the vulnerability of young infants.

The fact that this unseen essence of life force can be located outside the body, embodied in the shadow, explains how the individual can still be vulnerable to attack even when the essence is well nourished and strong. The freedom of this invisible soul to wander during sleep, to be enticed or frightened away from the body and to be held captive, gives rise to a multiplicity of causal explanations of lack of well-being, disease and death. The concept of an invisible essence, incorporated in the blood system when within the body, and manifest as the shadow outside the body, is as central to the understanding of causality in Mopan Maya cosmology as atomic structures are in modern science.

## NOTES

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## REFERENCES

- Adams, R.N. and A.J. Rubel  
 1967 *Sickness and Social Relations*, in R. Wauchope (General Editor): *Handbook of Middle American Indians* 6. Austin: University of Texas Press.
- Basso, Ellen B.  
 1973 *The Kalapalo Indians of Central Brazil*. New York: Holt, Rinehart and Winston, Inc.
- Boremansé, Didier  
 1978 *The Social Organization of the Lacandon Indians of Mexico*. D. Phil. Thesis: University of Oxford.
- Brotherston, Gordon  
 1979 Continuity in Maya Writing: New Readings of Two Passages in the Book of the Chilam Balam of Chumayel, in N. Hammond and G. R. Willey (Editors): *Maya Archeology and Ethnohistory*. Austin: University of Texas Press.
- Campbell, Alan  
 1987 Unpublished manuscript. Dept. of Social Anthropology, Edinburgh University.
- Cancian, Frank  
 1965 *Economics and Prestige in a Maya Community*. The Religious Cargo System in Zinacantan. Stanford, California: Stanford University Press.
- Colson, Audrey Butt and Cesareo de Armellada  
 1983 An American Derivation for Latin American Creole Illnesses and their Treatment. *Social Science and Medicine* 17(17):1229-1248.
- Foster, G. M.  
 1960 *Culture and Conquest: America's Spanish Heritage*. Viking Fund Publications in Anthropology No. 27. New York: Wennergren Foundation for Anthropology Research.

1967 *Tzintzuntzan: Mexican Peasants in a Changing World*. Boston: Little, Brown and Co.

Gregory, James

1972 *Pioneers on a Cultural Frontier: The Mopan Maya of British Honduras*. Ph.D. Dissertation. University of Pittsburgh.

Henley, Paul

1982 *The Panare: Tradition and Change on the Amazonian Frontier*. New Haven: Yale University Press.

Lewis, Oscar

1960 *Tepoztlán. Village in Mexico*. New York: Holt Rinehart and Winston Inc.

Nash, June

1970 *In the Eyes of the Ancestors: Belief and Behaviour in a Mayan Community*. New Haven: Yale University Press.

Osborn, Ann

1982 *Social Anthropological Aspects of Development in Southern Belize*. Punta Gorda, Belize: Toledo Research and Development Project.

Redfield, Robert

1941 *The Folk Culture of the Yucatan*. Chicago: University of Chicago Press.

1950 *A Village that Chose Progress: Chan Kom Revisited*. Chicago: University of Chicago Press.

1955 *The Little Community*. Chicago: University of Chicago Press.

Rivière, Peter

1987 Indians of the Tropical Rain Forest, in Mircea Eliade (Editor): *The Encyclopedia of Religion* 13:472-481. New York: MacMillan.

Rubel, A.J., C.W. O'Neil, and R. Collado-Ardon

1984 *Susto, A Folk Illness*. Berkeley, Los Angeles: University of California Press.

Staiano, Kathryn. V.

1986 *Interpreting Signs of Illness: A Case Study in Medical Semiotics*. Berlin, Amsterdam, New York: Mouton de Gruyter.

Tedlock, Barbara

1982 *Time and the Highland Maya*. Albuquerque: University of New Mexico Press.

Thompson, J. Eric

1930 *Ethnology of the Mayas of Southern and Central British Honduras*. Field Museum of Natural History Publication 274. Anthropological Series 17(2), Chicago.

Vogt, E.V.

1970 *The Zinacantecos of Mexico: A Modern Maya Way of Life*. New York: Holt Rinehart and Winston.