Speculations on the Origin of Ideas in Traditional African Medicine:

An Urhobo Perspective*

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Abstract

The discourse on African Traditional Medicine has over the years been given little attention by scholars who dismissed it as either an area without serious empirical merit or as superstitions resulting from ignorance. African Traditional Medicine (TAM) represents an important aspect of the people's indigenous knowledge handed down from ancient times. It sustained the people's life in times of serious health challenges even before the advent of western education. This study therefore examines the beliefs as well as the mechanics of ritual performances and divination in TAM and its place in modern medicine. The study draws insights from the scholarly views of experts such as H. Beatie and Robin W.G. Horton and argues that traditional African beliefs, especially those relating to African medicine, are representations of accumulated experiences in matters of wellbeing and illness. It adopted the participant observation method as the theoretical framework to enable us obtain adequate information from the society and interpret it with regard to the metaphor of ancestor-spirit-anger on the people and the ritual efficacy in ameliorating problems. From this study, it appears the basic principle around the practices of TAM is the knowledge from experience that chronic illness can have its roots in the mind, in sustained emotional distress. Hence the need for this principle to be examined in the quest for solutions to the many intractable health challenges in contemporary Africa.

Introduction

Do the beliefs, ritual performances, taboos, incantation, divination, e.t.c., that are deployed in traditional African medicine, supposedly to prevent, diagnose and treat illness, have meanings relevant to health care as this is understood in modern medicine today? Are traditional African beliefs theories as some scholars claim or are they meaningless superstition (defined in Chambers Concise Dictionary as "an ignorant and irrational belief in a supernatural agency, omens, divination, etc,")? These were the sorts of questions that prompted this study. I must admit that I began with a bias. At the back of my mind was the thought that if these beliefs collectively constituted the framework for the medical practices that sustained human life in Africa for millennia, there must be more to them than irrational superstitions. That is to say, the beliefs must have in them, ideas that were relevant to health care in Africa. Therefore my starting point was an attempt at interpretation of these beliefs. I have come to this work from a

(* A statement indicating that this is a chapter in a book...)

background of traditional African upbringing at Owahwa, an Urhobo village in Ughelli South Local Government area of Delta State Nigeria, and subsequent professional experience as a trained pharmacist and biomedical scientist¹.

The idea that one may attempt interpretion of traditional African beliefs raises a theoretical problem: it implies that the belief is a coded statement with an underlying meaning which is not generally apparent, or not normally articulated by the believers. The problem is illustrated by the views of two eminent anthropologists with interest in traditional African thought: John H. Beatie holds that these beliefs are symbolic. His argument is that the African cultures that held those beliefs did so because there were no empirical explanations for the phenomena to which the beliefs related. On the other hand, Robin W. G. Horton takes an intellectualist view of traditional religious beliefs and rejects a symbolic understanding. Horton links religious beliefs with scientific theory and holds that religion and science "have a similar approach of methodologically unveiling the complex to achieve order and understanding of chaos"². Throughout this book I have held to the view, like Beatie above, that traditional African beliefs, particularly those relating to African medicine, are symbolic representations of accumulated experience in matters of well being and illness. To get to close to an understanding of the essential ideas embedded in those beliefs, I believe an attempt at interpretation is called for. While Horton's approach is helpful in pointing out fundamental methodological similarities between religion and science, his purely intellectual comparative analysis of traditional African beliefs is a dead end; it does not lead us to ask important questions such as how the environment, observation and experience contributed to the evolution of those beliefs or indeed the origin of the essential ideas that crystallized into such beliefs.

What fired my interest in the direction of interpretation was the way the traditional medicine practitioners I interacted with in the community of my upbringing deloyed the belief,

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¹I am a registered pharmacist in Nigeria and the United Kingdom; I hold the PhD degree in pharmacology, specializing in the area of inflammation, and author of the major textbook, *Principles of Pharmacology, A Tropical Approach,* first published in 1991 by Cambridge University Press, Cambridge (574 pages). I was born and brought up at Owahwa town, an Ughievwen/Urhobo community in Ughelli South Local Government area of Delta State, Nigeria. Owahwa is one of four sub-clans that make up Ughievwen clan kingdom, one of 23 kingdoms that constitute the Urhobo ethnic nationality of Delta State, Nigeria.

² From Wikipedia on Robin W. G. Horton: http//en.wikipedia.or/wiki/Robin_W.G._Horton

which is widely held in Africa, that dead ancestors can cause serious illness in an offending descendant, that is, some one who has committed a serious immoral act of the type that is classed in Urhobo, as *emuerinvwin* (literally, a matter in which only the ancestors can adjudicate). From the way the people deployed this belief in practice, it dawned on me that they *knew*, almost certainly from experience, that in an *acculturated individual* (some one brought up to believe that the ancestors enforce moral law among their descendants), the cause of serious chronic illness lies in the consciousness of the ill person. The people understood that an acculturated individual who committed an emuerinvwin in secret would be emotionally distressed (*ewen kpo kpo*) and could become ill if the sin is not exposed for ritual treatment. In other words, this so-called ancestor spirit anger belief can be understood as a symbolic short hand reference to, or metaphor for, emotional distress arising from knowledge of a hidden sin. This became my working interpretation of the ancestor spirit anger belief.

My interpretation of ancestor spirit anger belief as metaphor, an *aide memoir* or *mnemonic*, for emotional turmoil which I contend, the people knew from experience to be capable of predisposing the sinner to illness, is thus based on field work and many years of contact with traditional medicine practitioners, in one Nigerian ethnic community, my clan, Ughievwen of the Urhobo nation of Delta State. But from a fair amount of reading of the literature on traditional medicine, I believe that the conclusions I reached from my study of this community, as to what constitutes the core theoretical assumptions about the cause of serious illness in African thought, are not exceptional, but may be exemplary of traditional medicine theoretical thinking in other parts of Sub-Saharan Africa.

I have no professional training in the social sciences where field work is a common method of investigation. My approach to field work was therefore rather informal and approximates to what has been described as *participant observation* of traditional medicine methods in this part of Nigeria.

"Participant observation is a research approach in which the researcher becomes a spy of sorts. With disguised identity and interest, the investigator infiltrates the setting of interest and becomes a full fledged participant in the group to be studied".

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³ Cialdini, R. B. (2007) *Influence* Harper. See also, Gillies, Eva (1976). E. E. Evans-Pritchard, *Witchcraft, Oracles and Magic among the Azande*. Clarendon, Oxford University Press, Oxford, p 243

For me this was not difficult to do because I am a fairly well known member of my clan (Ughievwen) where the field work took place; in some cases, I participated in the traditional events (e.g. funerals) because they concerned my own kinship lineage. My disguise was that I did not disclose my academic interest in the events in which I participated or the stories told to me at the time. In fact, the relevance to this study of what I experienced or heard over the years, did not become apparent until I recalled them many years later when I found that I could use the information in this study. I owe a profound gratitude to my kinsmen and women from whom I learnt a lot, thereby making it possible to write this book. In discussing different aspects of traditional African medicine I have had to make reference to secondary sources in fields of knowlwdge as widely different as anthropology, religion, philosophy of science, sociology, medicine, etc, in an attempt to relate my argument to existing knowledge. To those professionally trained in these fields and to whom my amateurish references must seem simplistic or ridiculous, I crave indulgence.

It was somewhat reassuring to discover, in the course of the research for this book, that the essential elements of the ancestor spirit anger belief, at least as I have interpreted it, are reflected in modern medical thinking: for example, research findings from psychoneuroimmunology or brain control of host immunity, an emerging specialty in modern medicine provide scientific evidence that *sustained* negative emotions of fear, anger, insecurity, grief, hate, e.t.c., can lower a person's immune activity and hence predispose such an individual to a variety of chronic debilitating illnesses. Thus from a scientific standpoint, ancestor spirit anger belief, it can be argued, is a rational construct. All things considered, I came to the conclusion that in traditional African medicine the basic principle around which all practices hover, is the knowledge from experience that serious illness can have its roots in the mind, in sustained emotional distress. It is this idea that is crystallized as ancestor spirit anger belief. In practice therefore, a return of the ill person to emotional equilibrium is a major therapeutic objective in African medicine. This means that the esoteric procedures such as incantations, employed in the treatment of serious illness in TAM are, in fact, rational processes to diffuse emotional tension, not meaningless superstitions.

But there is another dimension to the belief that I have discussed in the book. The belief has three elements which enabled it to predict, explain and prevent serious illness. These

elements are: (i) a prior immoral crime by the ill person, (ii) the power of conscience to trouble the mind of the acculturated sinner, and (iii) belief in ancestor spirits (the supernatural agents) whose anger is believed to trigger the illness. It makes sense to suggest, as the belief does, that an acculturated individual, who commits in secret, what he knows to be an immorality liable to anger the ancestors, would endure emotional distress due to attack of conscience. The questions that can be raised are: what is the purpose of the belief? Did it evolve solely for the purpose of making offending descendants ill? What survival benefit, in evolutionary terms, could the belief have conferred on traditional society? Are the ancestors a group of egoistic supernatural beings who would not brook a descendant's disavowal of their moral laws? Such questions linger until we reflect, as I do in this book, on the significance of proper moral conduct and of the breach of moral laws in prescience, preliterate societies that had no centralized law enforcement institutions.

In such small scale kinship groups where, presumably, the ideas encoded by the belief evolved, what was a most critical requirement for group survival was harmonious relationship between its members, so that they could act together to protect group interests. The people, from years of experience, knew that certain types of immorality were capable of causing disharmony, and therefore constituted a threat to the cohesive survival of the group. Incest, for example (the classic emuerinvwin in Urhobo thought), had the capacity to cause havoc in interpersonal relationships and to threaten the integrity of the group's gene pool. So, in the absence of law enforcement institutions as we know them today, to whom, but the incorruptible supernatural ancestors and the individuals' conscience, could the people entrust moral law and its enforcement, in order to ensure social cohesion? In other words, the ancestor spirit anger belief in small scale societies evolved primarily to preserve moral cohesion of the group. Serious illness was a sign that the sick person had committed an immorality that threatened group harmony and social cohesion; its treatment had therefore to be holistic to include relieving the sick person of his burden of guilt thereby restoring him and his kinship group to emotional equilibrium. At the same time the therapeutic procedures (divination, confessions and ritual sacrifices etc.) acknowledged the crucial role of the ancestors as enforcers of strict moral conduct among individuals in the group.

I have discussed this theory at length in the book for its importance on various grounds: firstly, it explains why recovery from serious illness was not, and should not be the only criteria for judging success in traditional African medicine. Consolidation of the moral integrity of the fragile small scale society was also an important objective. One should not invalidate TAM treatment procedures simply on the ground that a seriously ill person may die even after all rituals have been performed satisfactorily (see the section: *The treatment was successful but the patient died*, onpage ...). Secondly, concepts such as *curse*, *taboos* and *witchcraft*, which are regularly evoked in situations of serious illness in African medicine, all seem to exploit the active conscience of the acculturated individual. The fear that immorality would ignite supernatural anger, emotional distress and possibly serious illness, is a powerful deterrence against immoral conduct. These concepts were rooted in the need for strict adherence to good social behavior that guaranteed the cohesive survival of small scale kinship groups. These notions were not magic and they were not irrational superstitions but survival imperatives.

However, because the need for strict adherence to moral laws has ceased to be a major concern in the modern way of life, and because we are ignorant of the survival imperatives that gave rise to these beliefs, we Africans are hesitant, even ashamed, to defend these traditional concepts as genuine African rational ideas that evolved with a positive purpose. Much space is given to a discussion of these TAM beliefs in this book because they are examples of African cultural practices which the educated African elite are under pressure to condemn and throw away, without adequate inquiry as to their origins and inherent values.

My conclusion from these considerations is that in traditional African thought, serious illness is essentially a moral issue and a matter of conscience around which the different traditional African beliefs, concepts and practices have been woven.

Exploring theoretical thinking in TAM, as I have done in this book reveals an important fact that seems obvious but has not been sufficiently articulated before now, which is that, there is a distinction between two levels of illness management in this healing system; serious illness that requires divination to uncover possible underlying spiritual causes, and minor or easy to diagnoseailments that are, in the main, self-diagnosed and self-medicated with commonly available medicinal plants without resort to esoteric consultations. In the treatment of minor ailments where the cause of discomfort is self-evident, e.g., fever, aches and

pains, TAM plant remedies are used for their known efficacies, as aspirin or paracetamol would be used in the treatment of a headache in modern medicine. In my view, the management of serious illness in which esoteric beliefs and concepts are deployed is given undue prominence by modern medicine in its negative characterization of TAM. In fact the common sense use of plant remedies is the aspect of TAM that is most frequently practiced by indigenous people.

That being the case the subject of *fever*, a characteristic manifestation of inflammation, is extensively discussed in this book. Inflammation is now recognized as an underlying mechanism in the pathology of many diseases. Fever is an important disease symptom and must have been particularly significant in prescience, preliterate societies. Fever can be diagnosed without a thermometer, by differential diagnosis. The body temperature of some one who is ill and has fever, is higher than that of a normal person, and this can be ascertained by touch. Indigenous African people recognized fever as a sign of disease, and treated it effectively with herbal remedies. Fever was probably the only symptom of internal disease that pre-science, pre-technology humans could identify with certainty.

Fever is a characteristic symptom of malaria disease; what indigenous people in malaria endemic areas of Africa treated as fever, almost certainly, included malaria fever, a problem that must have affected such people frequently. That is why we can assume that traditional herbal remedies were effective against malaria-induced fever. As matters have turned out in recent years, scientific research has revealed two remarkable coincidences: (i) that inflammation is a critically important mechanism underlying the pathology of malaria and (ii) that many of the herbal remedies used by indigenous people to treat fever possess anti-inflammatory pharmacological properties.

This means that indigenous Africans, though ignorant of the mosquito and plasmodium parasite origin of the disease, were successful in treating its symptoms. I have put forward the hypothesis that such symptomatic treatment of malaria may be tantamount to cure of the disease in those people who are partially immune to malaria (I have defined partial immunity as consisting of naturally acquired immunity due to frequent contact with malaria parasites, and the various protective genetic adaptations which are known to have occurred in Africans living in malaria endemic areas). I have discussed this theory extensively; if it is proven to have merit, it would represent a major change in our understanding of how to treat malaria in the partially

immune African. It would also explain why malaria was exquisitely sensitive to plasmodicidal (schizonticidal) anti-malaria drugs (e.g., quinine and chloroquine) when these drugs were first introduced in Africa for the treatment of malaria.

Another outcome of this insight is this: we know that the *Plasmodium falciprum* parasite develops resistance eventually to a plasmodicidal drug, that is, a drug designed to kill it. It would seem that the parasite does so in self defence, so to speak, for survival against the threat of extinction. Our experience of malaria chemotherapy so far suggests that any drug of this type, any *plasmodicidal drug*, will sooner or later fall prey to *Plasmodium falciparum* resistance. Herbal treatment of malaria avoided such frontal attack on the plasmodium parasite and therefore did not provoke the latter into deploying its considerable arsenal of drug resistance mechanisms.

This is a theory that can be tested in properly controlled preclinical experiments and clinical trials. Be that as it may be, the view strongly advocated in this book is that all aspects of the African experience of malaria disease, including the extensive indigenous knowledge of antifever plant remedies, should be mobilized in the war against malaria. Unfortunately, this has not been done in a serious concerted manner. Now, some of the prescriptions handed down by expert committees such as the World Health Organisation (WHO) and foreign donors are not always appropriate, but may in fact run counter to the grain of biological equilibrium that existed between man and parasite in malaria endemic areas of Africa before modern chemotherapy. What we observe is that malaria has become a far more dangerous disease since the new interventions.

I stress this point to emphasize a wider issue: that the educated African elite has tended to ignore traditional African medicine, as an important institution and a potential source of ideas for health care in Africa, just as they have ignored other African traditional institutions, almost certainly because these institutions were denigrated, in the process of colonial western education, as having nothing of merit. Through out this book, I make an issue of the role of the educated elite in the continued denigration of the African past, and to a large extent, the role of the elite in Africa's woes, because since independence from colonial rule, it is the educated elite, not traditional African institutions, who have presided over the continent's drive towards so-called development and the result is there for all to see. Traditional African medicine is one of the

oldest forms of healing known to man, probably going further back in antiquity than even the Indian and Chinese medicine traditions. In its various forms, TAM represents an important African heritage, embodying, in my view, a most important body of indigenous knowledge passed down to us from ancient times. The view canvassed in this book is that this knowledge evolved to cope with the well being of man in the African physical and cultural environment. The knowledge took millennia of African experience to accumulate and is ecologically relevant in matters concerning health in Africa. It is therefore imperative that the beliefs and symbols that go with TAM practices should be examined for meanings that may be helpful in the search for solutions to many intractable health problems in Africa.

Another reason why we must revisit TAM is that although the people of Africa have become increasingly exposed to other cultures through education and religious conversions, traditional beliefs have survived among the people, who now live in confusion in a world where those beliefs seem inadequate as bases for solutions to their health problems: consequently, Africans struggle to cope with modern medicine and with TAM beliefs, which often appear to be in conflict with each other. So Africans compromise: they patronize both traditions by visits to the diviner and the specialist hospital consultant, often simultaneously, with potentially dangerous consequences. It is my hope that this book will enable the modern medicine practitioner to take into account the nature of the medical history that his traditional African patient brings to the modern clinic.

But the question can also be reasonably asked: why bother to study and write a book on traditional medicine in Africa now? After all, any new insights into human health in Africa that one may uncover from such an inquiry are already being addressed by science-driven advances in modern medicine. In any case, the most probable outcome of such an enquiry would be speculative conclusions and claims that, though interesting, cannot possibly be backed by ascertainable factual evidence. Shouldn't all efforts be focused now therefore on how to improve modern medical facilities for the benefit of the African people? From that standpoint, a serious commitment to the study of African medicine would seem an unnecessary distraction, or worse, an obstruction to modern medical progress in Africa. Why look back when it is obvious that progress lies in front?

This book presents a somewhat different view. My first objection to the above argument is that it starts from the premise that TAM is a rudimentary form of modern medicine, whose essences will in time be subsumed by the latter. As this book shows, this view is simplistic or a fallacy. Simply from an ecological standpoint, ancient ideas on health and illness that took millennia to evolve from the peoples' experience in Africa, the crux of which have been distilled into beliefs and esoteric practices, demand a close examination, for what they may be worth, for relevance to our current health needs.

But skepticism in some quarters is understandable: How does one evaluate TAM's significance as a healing method? Apart from the fantastic claims, anecdotes and myths surrounding African medicine, how do we know that TAM beliefs are rooted in ancient African rational thought? Unlike its Asian counterparts, for example, Ayurveda and traditional Chinese medicine (TCM) whose underlying philosophies were set down long ago in ancient manuscripts, TAM is an oral tradition. There is no generally accepted coherent basic principle, theory or philosophy on which its practices are grounded; only the beliefs and esoteric practices, some of which do not appear, on the face of it, to make rational medical sense. The pioneers of modern medicine in Africa, when first coming in contact with TAM, described the letter's practices as superstitions born out of ignorance. The educated African elite, especially those trained in medicine have largely internalized this view unquestionably, perhaps too hastily.

This book provides evidence that the tag of mindless superstition placed on African medicine was unjustified. Early European attitude to TAM arose in an environment of prevailing prejudices against African institutions as a whole at a time when some European thinkers even concluded that Africans had no language! Under such circumstances the likelihood that these so-called superstitious beliefswere *short hand expressions* for complex ideas and knowledge gained through experience; the likelihood that traditional African beliefs might represent an understanding of the fundamental nature of illness could not be contemplated. It is up to us Africans now, as part of efforts to confront our past, to search the beliefs for an underlying principle, which is what this book attempts to do.

It was somewhat unfortunate that modern medicine, with its powerful science base and sometimes dramatic treatment successes, arrived in Africa at the time it did. The arrival of modern medicine discouraged the educated African elite from making serious enquiry into TAM.

Under these circumstances, a proper evaluation of TAM beliefs, myths and esoteric practices, which stood condemned as mindless superstitions in the view of colonial pioneers of modern medicine (and with which the educated elite had acquiesced), could not be undertaken. In the last one hundred years during which we have struggled to apply modern medicine models in Africa, the conditions of life that gave rise to TAM beliefs have receded into oblivion. In the prevailing environment dominated by Judeo-Christian, Islamic and science and technology ideologies, TAM beliefs have become irrevocably cast in the concrete of superstition in the minds of the elite. What I am trying to say is that the further away we have 'advanced' from the type of traditional African society in which TAM beliefs evolved, the harder it has been for the educated African elite to see these beliefs other than as superstitions with no relevance to today's health needs in Africa. This is unfortunate.

My contention throughout this book is that we in Africa must do our utmost to understand and apply the advances being made in modern medicine and other sciences to improve the health of the African people. But we must, in addition, take advantage of the new tools provided by these advances to explore the significance of ancient ideas on health in Africa. It is a known fact that certain diseases are more prevalent in some parts of the world than in others (malaria in Africa is a good example). An interesting European example is cystic fibrosis, a genetic disease that evolved as protective adaptation to cholera disease that devastastated Europe in ancient times. Individuals who inherit two copies of the cystic fibrosis gene (one from each parent), suffer from cystic fibrosis disease, characterized by transmembrance chloride transport disfucnction; whereas those who inherit one copy from one parent are protected from cholera disease. The equivalent in Africa is the sickle cell gene that evolved as protective adaptation against malaria.

The prevailing theory is that disease diversity among human populations has an ecological basis: The different genetic and biochemical adaptations that people *had* to make in order to survive disease in their different ecological niches have resulted in differences in prevalence and severity of various diseases among human populations. For example, as hypertension, diabetes and glaucoma occur at greater frequencies and severity in people of African descent than other populations, there must be an ecological basis for this difference. Furthermore, traditional management of diseases that are unique to particular peoples has come

from the experience and culture of the people in their respective environments. That is why I am saying that the beliefs and esoteric concepts pertaining to illness and its management in Africa must be presumed to be rational and, ecologically and culturally relevant, and ought to be explored, using all available tools, for their potential health benefit to the African people and ultimately for all mankind, not dismissed off hand as irrational superstitions.

In 1976 the World Health Organisation (WHO)⁴ recognizing the potential contribution that traditional medicine can make to health care, convened a regional committee⁵ of medical scientists, bureaucrats and politicians with the aim of (i) defining traditional medicine and (ii) providing a framework for its exploitation as an additional method in health care delivery in Africa. The committee came up with two definitions of traditional medicine:

(i) "the sum total of all the knowledge and practices, whether explicable or not, used in diagnosis, prevention and elimination of physical, mental or social imbalance and relying exclusively on practical experience and observation handed down from generation to generation, whether verbally or in writing".

The other definition took note of the fact that traditional medicine was an 'amalgamation of dynamic medical know-how and ancestral experience'; hence the following definition that has particular relevance to TAM:

"the sum total of practices, measures, ingredients and procedures of all kinds, (ii) whether material or not, which from time immemorial had enabled the African to guard against disease, to alleviate his suffering and to cure himself"

These two definitions of traditional medicine recognize the importance of the culturederived esoteric evocations (ancestor spirit anger beliefs, divination, incantation, sacrifices, witchcraft beliefs and taboos) deployed in TAM, and of the practical knowledge of the African

⁴ World Health Organisation (1976) *African Traditional Medicine*, Regional Office for Africa, Brazzaville, Afro Technical Report Series Number 1

⁵ It is noteworthy that the WHO committee consisting of representatives from Zaire, Tanzania, Mali, Cameroon, Uganda, Madagascar, Nigeria and two observers from Congo Brazzaville, included university-based medical scientists and international civil servants, but no African traditional healer. This is an important illustration of the point already made that due to centuries of European indoctrination we in Africa tend to think of indigenous knowledge systems as worthless, preferring always to adopt Euro-American models uncritically. In this instance WHO through its selected educated representatives tried to define TAM without input from its authentic practitioners, and to superimpose a biomedical model of African medicine on the existing traditional model.

pharmacopoeia of plant remedies used by traditional healers in the treatment of disease. The WHO paper was subsequently adopted as working document by the Organisation for African Unity (OAU).

It is remarkable that only *one* of the committee's twelve recommendations on what actions African countries must take to increase the contribution of TAM to health care in Africa, stressed the need for a further consideration of the theoretical thinking that underpin the use of plant materials in the system; that recommendation was, "that scientific research be undertaken on the metaphysical aspects of traditional medicine". Unfortunately, very little effort in that direction has been made in African countries. The result, not surprisingly, is that traditional medicine research in Africa in the last four decades has been synonymous with herbal medicine research to discover drugs in traditional African plant remedies. The "metaphysical aspects" of African medicine, that is, the beliefs and esoteric practices, have been largely ignored or ridiculed as superstitions.

The book is in three parts: **Part 1**, consisting of five chapters, is my attempt at interpretation of beliefs (i.e., *ancestor spirit anger*, *taboos*, *the curse*, *witchcraft* and *divination* and *incantation* practices) that are deployed in prevention, diagnosis and treatment of *serious illness* (i.e., chronic life-threatening illness of unknown cause) in TAM. When these beliefs and practices are examined in situations of serious illness as I have done in this book we find that these esoteric ideas underpin what appears to be indigenous African people's intuitive understanding of a critical association between serious illness and immorality, by which I mean, anti-social behavior that has the potential to undermine harmony in interpersonal relationships and therefore survival of the community as a cohesive unit.

Much has been written by anthropologists, notably Professor Robin Horton of the University of Port Harcourt, Nigeria, on traditional African beliefs in the last four decades. Horton's main conclusion from these discussions is that on the whole such beliefs are rational in the context of African culture and, in some respects, are like theories in western science. Horton's work was an important point of departure for the theoretical aspects of the work described in this section of the book. What I would consider to be my contribution to the debate is to point out that a shortcoming in previous writings on traditional African beliefs was to discuss these beliefs from a comparative western science perspective and then conclude

sympathetically, almost paternalistically that the beliefs are rational in the context of African culture. In contrast, the view canvassed in this book is that traditional African beliefs, especially those relating to illness deserve analysis in their own right as theoretical constructs derived from ecological, evolutionary and environmental perspectives based on experience, not merely in abstract comparison with arcane western scientific theories. Also most previous writings generally failed to take into account the fact that in traditional African thought there are no specializations such that one belief is about religion, another about medicine or philosophy, or sculpture, art, music etc. Virtually every African traditional belief or concept has, at its core, a religious configuration. In my view, failure to take this into account is what led these great scholars (including Horton and Evans-Pritchard of Witchcraft, Oracles and Magic fame) to the conclusion that in traditional African cultures, there is no awareness of alternatives to established beliefs; whereas in western cultures such awareness is highly developed. Traditional cultures are thus branded as 'closed predicaments' which has often been interpreted in some quarters to mean that Africans are incapable of thinking outside their beliefs. The fact is, all religious doctrines are closed predicaments, being accepted in faith; adherents of the faith do not usually seek alternatives to the doctrine. This is as true in Africa as in the West.

Part 2 consists of ten chapters. Here I make the point that although TAM practice is characterized by informality and improvisation (and this is due to the absence of a generally accepted overarching theory) it is nevertheless possible to identify features which justify the use of the term traditional African medicine to describe the various forms of healing practice in different parts of Africa. I describe methods of induction into TAM practice and the conceptual distinction between minor ailments and serious illness. I discuss the idea of specialists and explain why there are no organ or disease specialists as we have them in modern medicine. In this section I draw attention to pharmacology as a theory of selective poisoning for therapeutic purposes to buttress my argument that it is in this respect that the differences between drugs in modern medicine and plant remedies in TAM are most profoundly manifest. Whereas dose regulation is imperative in modern medicine because the drug is a poison, such regulation need not apply in TAM where the plants used as remedies here are derived from a pharmacopoeia from which poisonous plants have been excluded. I tell the story of Calabar bean in chapter 10 as an example of how a dangerous traditional Ibibio/Efik poison used by the people for witchcraft detection yielded a revolutionary drug called physostigmine.

In Part 3 consisting of five chapters,I discuss the other important aspect of traditional medicine, namely, the use of herbal remedies in the treatment of *minor aliments* – fevers, aches and pains, external bleeding, stomach upset, etc, that are self-diagnosed and self-medicated without resort to the esoteric methods discussed earlier in the management of serious life-threatening illness. Treatment of minor ailments with commonly known plant remedies, without the doctor's prescription as it were, is the most widely practiced form of traditional medicine in Africa. So, how did indigenous people acquire the knowledge of such remedies?

Writing this part of the book revealed intriguing insights which led me to make some challenging speculations: After a brief survey of the fact that people in different ecological niches of the world had historically developed a knowledge of the plants that took care of the diseases that troubled them most frequently, I came to the conclusion that it was **fever**, the most recognized symptom of illness by humans, that drove the autochtonous evolution of the extensive knowledge of anti-fever plant remedies in African societies. Fever is the quintessential manifestation of the biological phenomenon known as inflammation, which is now known to be an important mechanism in the pathology of many diseases, including malaria.

Current scientific investigations show that inflammation mechanisms are central to both the action of traditional anti-fever plant remedies and the pathology of malaria disease: preliminary basic research by Nigerian scientists over the past 40 years or so, show that many plants commonly used to treat fever possess anti-inflammatory properties. Thus fortuitously, it would seem, indigenous African communities evolved a pharmacopoeia of plants that possess anti-inflammatory properties, which they used regularly to treat fever, including fever caused by malaria, a disease that is currently considered to be basically an inflammatory disease. This convergence of traditional African intuition and scientific evidence is remarkable and is one reason why it is strongly advocated that the accumulated African experience of matters relating to health in the African environment must not be ignored in the current war against malaria.

Finally, I will like to state that if readers of this book should find, for example, that in specific instances, their personal experience of African medicine practice in their own locality does not agree with some of my generalizations, I will not be at all surprised, given the unorganized nature of TAM and the diversity of detailed experience from its practices. If the book provokes a constructive debate along these lines it shall have achieved a major objective. I

also appeal to the reader to approach the book with an open mind. Those of different faiths may find my many references to African traditional religious beliefs uncomfortable. Religion and medicine have been intricately intertwined in every traditional medical culture through out human history. Africans are not different from other peoples in this respect. In particular, African theoretical thinking tends to be holistic: there is no separation into specialties such that one set of theoretical thinking is about medicine and distinct from religion, philosophy or science. All are nature and are interrelated.