RATIONAL MYTHS AND MYTHICAL RATIONALITIES IN RURAL ARTICULATIONS OF ILLNESS: A THEORETICAL OVERVIEW AND CASE STUDY OF MBULU-HANANG, CIRCA 1900 TO THE PRESENT

Yusufu Q. Lawi
Department of History, University of Dar es Salaam

1. Stating the case

That local narratives and oral discourses constitute important source materials for the reconstruction of histories of illness and healing in rural Africa is a widely accepted fact. What continues to attract much discussion in the humanities and social sciences, however, is the question of how such narratives relate to the reality they articulate, and whether knowledge implied in popular oral articulations generally has any efficacy to talk of. These concerns are by no means new. Yet their relevance persists, partly because of the need to continue the battle for theoretical clarity and partly because the varying positions in the debate have profound policy implications.

Especially in light of the latter concern, one reckons the tendency often explicit in discourses among the educated elite around the world, of holding local narratives and other forms of popular oral articulations in polar opposition with reality on the ground. Informed primarily by the early twentieth-century positivist paradigm, which came to be propagated in Africa through formal education and media, our learned society abundantly tends to look at local articulations of natural and social reality as baseless, unreliable, and mythical. They frequently view popular oral articulations (which often include mythical or mystic explanations) as a converse of science.

The result is the clear dichotomy that has long dominated articulated ideas among the learned, specifically on the nature of, and relationship between popular/oral and formal/written articulations. By extension, this dichotomisation embraces the idea that there exists an absolute and sharp divide between what counts as science and what falls short of this noble status. Quite often, the proponents of this divide equate popular oral articulations with 'myth' and formal/written communication with facts or 'science.' In fact the terms 'myth' and 'fact' or 'science' constitute the vocabulary by which the two types of communication are most frequently contrasted. In such contexts the former concept is understood in its negative sense of inadequacy or falsehood, and the latter in the optimistic sense of objectivity and truth. Not all the learned people subscribe to this

dichotomisation, and criticisms against it abound in the literature. However despite such criticisms, emanating most notably from general philosophy and social anthropology, the tendency to view myth and science as diametrically opposed phenomena has persisted. As suggested above, this implies continuity in the belief that formal/written and popular/oral discourse are absolutely incompatible.[1]

Some of the events in recent African past give an indication of what is wrong with this dichotomisation. Colonial and post-colonial history of the continent is replete with horrible mistakes committed by development experts in trying to change social and economic realities. Based on their profoundly negative attitudes towards local, as opposed to expert understanding of rural realities, and deeply believing in absolute dissonance between popular and formal knowledge, these experts regularly formulated and implemented policies without recourse to local knowledge. It often turned out that the situation would have been different if the expert elites had considered informed local knowledge of the realities. It is in light of this problem that we need to continue examining the extent to which science and myth as forms of knowledge can be said to differ fundamentally from one another.

There is perhaps no better context to explore for this purpose than the area of illness and healing experiences in rural Africa. How rural people describe and classify illness and healing types, and how they explain these phenomena, are some of the relevant questions worth pursuing in this connection. Based on the knowledge emerging from this inquiry, it should be possible to arrive at some understanding of how the concepts 'science' and 'myth' as often used by the educated elite represent or distort the way rural folk articulate their historical experiences.

This paper is a modest attempt to address this theme in the context of Tanzania's history in the twentieth century. It starts with a theoretical overview of the pertinent literature on the relationship between popular oral discourses and written or experts' view of social reality. The survey aims to arrive at a critique of the old but still dominant tendency to equate popular local articulations to myths and portray this latter phenomenon as a polar opposite of facts or science.

From the theoretical survey of the theme the paper moves on to present a case study of historical rural articulations of illness causation and types. The Mbulu-Hanang area in north-central Tanzania is picked for this purpose partly because of the author's general familiarity with the region and prior exposure to aspects of its cultural history. The two sections constituting this part of the paper seek to provide illustrations of how discourses on illness and healing are informed by both mystic and empirical ideas, and how mystic and empirical reasoning often constitute each other. The concluding section pulls together the various threads of the discussion to formulate a position on the relationship between science and myths as popularly understood.

2. Theoretical overview

Scholarly characterisations of the relationship between popular oral discourses and written or expert articulations of social reality have over the years come to constitute a complex myriad of differing, if often overlapping points of view. While it is difficult to provide a comprehensive overview of the entire discussion, one may justifiably refer to three of the broad principal tendencies. The oldest of these takes its inspiration from the nineteenth-century western evolutionism. It equates oral communication to primitivism or backwardness, and contrasts it with written record as an icon of modernity. Taken to its implicit conclusion, as does the archaeologist J. M. Levi by way of criticism, this dichotomization emphasizes a sharp distinction between popular and orally transmitted knowledge on the one hand and, on the other, the elite-based written, or formal record.[2]

This position assumes that popular oral articulations are intensely susceptible to distortions, and therefore relegates it the status of myth in the sense of subjective imagination or plain falsehood. To the latter, in contrast, it assigns the status of objective truth or proper history. It assumes that, in contrast to oral articulation, written record is by nature less susceptible to distortions or subjective manoeuvring. In brief, the evolutionist view equates oral articulations of lay people to myth, and considers them incapable of transmitting truths. Deep in it's reasoning is the assumption that only the written, elite-based discourses, have the potential for science, impartiality and truthfulness.

The evolutionist and dualist perspective is an old but continuing tendency among professional elites, including those in the medical fields. A relevant, if rather dated example, is Dr. Howard Haggard's contention that, as ways of understanding nature, science and myth belong to two different points in time: modern times and antiquity, respectively. If elements of myth exist in today's culture, therefore, [as they supposedly do in backward and 'oral' societies] they are merely remnants of a bygone era, soon to weather away.[3] Haggard's rendering of the relationship between myth and science can hardly be considered an old perspective. Many, if not most present-day professionals in the leading modernisation institutions in Africa would find his conclusions completely acceptable.

Scholars inclined to contrasting science with myth widely share certain assumptions about the nature of the two concepts. For instance, they frequently portray myth as "unfounded fantasy," or as "subjective or interested approach to reality," incapable of yielding truth; whereas science is taken to correspond to "objective or disinterested approach to realty."[4] In short, within this perspective the concepts science and myth respectively present the sense of things "having actually occurred" and things "taking place in the imagination."[5] In extreme cases, science is equated to knowledge and myth to non-knowledge or mere belief(s).[6]

It seems that the evolutionism-inspired dualist approach gets its force primarily from the assumption that objectivity and subjectivity constitute two contradictory and absolutely incompatible tendencies in the creation and

transmission of knowledge. But beyond the sporadic and popular elite discourses epistemologist have long established the weaknesses of this dichotomisation. An example of a modern contributor to this critique is the philosopher Ben Halpern, to whom reference has already been made. Halpen concluded that even the most optimistic view of science and the most pessimistic rendering of myth are "aware of 'subjective' aspects in science and of possible 'objective' references in the concepts myth and ideology."[7] He underlines the fact that science and myths are both produced in a process that involves the subject's calling to mind reality as object of knowledge, and that this calling to mind necessarily involves relating oneself subjectively to the object.

This constitutes the second tendency in scholarly discussion on the relationship between the concepts myth and science. The core element in this view is that there are significant similarities between popular oral discourses and elite-based written articulations, which the evolutionists have linked to myths and science, accordingly. J. M. Levy, whose criticism of the tendency to dichotomise the two forms of communication we have already referred to, alludes to similarly critical submissions made by prominent anthropologists of the 20th century.[8] Some of these revolve around epistemological themes such as the relationship between experiential and discursive knowledge, which are sometimes taken to represent science and myth, respectively. The critics of the dichotomising view have however emphasized that each of these concepts draws from, and informs the other.[9]

The critics of the tendency to contrast science and myth in absolute terms also often dwell on the overlaps in the origins, general characteristics and functions of mythical and scientific claims. The philosopher W. Donald Oliver, for example, argued long ago that myth is not merely "arbitrary and irresponsible product of imagination." It is rather "anchored in" and "explicative of" the world in which the beholder lives. Oliver firmly concludes that in this sense of relatedness to concrete reality and the tendency to explain that reality, myth "does not differ from a modern scientific theory."[10] It is also stressed that myth, not unlike what scientists conventionally claim regarding the essence of their trade, invariably originates from "some aspect or other of experience," even though it does not represent that experience directly.[11]

These characterisations are in agreement with some of the more recent articulations of the social character of science and its connection with culture, and hence its connectedness with cultural forms such as myths. In this connection, philosophers Sal Restivo and Julia Loughlin, for instance, have emphasized that:[12]

> ...the opposition between 'science' and 'non-science,' [...] and between 'local' and 'indigenous knowledge,' strengthened historically in the context of European elite's reference to societies outside Europe and the west in general.... [Otherwise] ..."science, like all other forms of knowledge, is a strategy of representing, classifying, categorising and

essentializing, which human beings use in making their way collectively through the world...

It is important to reckon that the two positions outlined above share one basic weakness of depicting the nature of, and relationship between science and myth in a didactic and static fashion. They assume that each of these phenomena emerges with, and retains its basic characteristics permanently. In so doing the advocates of these positions rule out the possibility of mystical and scientific forms of knowledge to undergo self-transformations across time, space and historical contexts. In the evolutionist perspective (which equates science and myths respectively with modernity and antiquarianism) change over time is assumed. Nevertheless, it is not reckoned that the nature of existence of myths and science, or, in our initial terminology, popular articulations and specialised elite discourses, is such that each is capable of becoming a better part of the other within the same historical epoch. This is the third, but rare position in the current discussion. It views forms of representation, such as oral narratives and specialised 'scientific' discourses, not only as connected in important ways, but also as dynamic and interactive, each materialising the potency to acquire and portray some of the fundamental characteristics of the other.

In line with this conception, the philosopher Peter Munz showed, in his dated but still relevant essay, how myths are generated through history articulation, and how history, in turn, often revolves around an established myth.[13] Munz defines myths as "stories of concrete events, said to have taken place at a certain time and to have involved certain people." He also submits that in the course of time myths tend to break down into more and more factual parts, each part eventually acquiring a proper place in time and space. At a point, the facts so created often acquire their own logic and rationale. The best example is histories of religions, which are based initially on the fundamental myths that define the religions in question, but eventually build empirical information around the myths, thereby transforming them into a piece of history.

Similarly, history, in the sense of *historia rerum gestarum,* or reconstructed pasts based on selected significant events/processes, is inexplicable from mythical frames around which it is characteristically built. History, like a myth, is not a mere statement of fact, but "a story of selected strands of events," essentially held together by a pre-existing set of mind. Such strands are invariably held together by a theme that often embodies a major myth.[14] In elaborating the point, Munz also adopts M. F. Cornford's example of how a myth can originate from history. According to Cornford, a myth often materialises when:[15]

> ...the facts of a story work loose and ... are shaped into a story moulded and remoulded by imagination, by passion and prejudice, by religious preconception or religious instinct...by love of a good story...

In both instances, it is clear that although myths and history are distinct forms of representation, they are dynamic and interdependent. To use Munz's formulation, history often transforms into significant myths, as myths are frequently "distended" to create history.

Much of what has been said here about history can also be said for science as activity. If we go by Restivo's and Loughlin's definition of science as "a strategy for producing defensible knowledge, grounded in shared experience rather than authority," we will appreciate the dynamic and changing nature of science and the resulting body of knowledge.[16] Even as experience-based search for defensible knowledge, science, like history may, and does revolve around pre-existing mythical frames. One of such myths is the established notion of absolute distinction between science and 'non-science,' the tendency that contradicts the formal definition of science adopted here. More importantly, scientific practices take place within an identifiable social and cultural context, and it can be stated in certainty that scientific truths are better understood if their specific contexts are taken into account. To illustrate this, one only needs to invoke the fact that in epochs not too far apart the western world in the name of science:[17]

> ...orientalized the Noble Savages of the Americas, Africa and the Pacific first as the enemy, brutal, warlike and dull. Now the same lens on the Noble Savages puts in view the exotic remnant of a romantic past and reveals them to be generous, peaceful, dignified and wise ecologists...

Following this perspective, and in agreement with Carolyn Merchant, the philosophers Restivo and Loughlin have shown how scientific practices and paradigms changed radically in the period from the 17th and 19th centuries, following the rise of radically new socio-economic and political contexts.[18] This is to emphasize that, like history, scientific practice and discourses are far from being "an absolute positivity opposed to an absolute negativity called 'non-science'"[19]

It remains to be emphasized that, given its dynamic nature, science often takes mythical forms in its representation of reality. One example will suffice to illustrate this point. It has to do with a phenomenon called neonatal circumcision, to-date a commonplace medical practice. The history of this practice within the medical establishment in the USA began in 1870, when one orthopaedic surgeon, Dr. Lewis Sayre, circumcised a five-year old boy upon a belief that paralysis of the legs, the problem that had brought the boy to the hospital, may have been caused by the observed critical and chronic inflammation of his penis. After the circumcision, the boy's condition quickly improved, and within a short time the malfunctioning of the legs disappeared completely. Thereafter, and for many years, Dr. Sayre and his colleagues performed this operation to many infants and young males as therapy for partial or full paralysis. A theory was developed in retrospect to explain how male genital disorders resulted in paralysis and how circumcision corrected the anomaly.[20] But at no point in time has the causal linkage between paralysis conditions and male genital inflammation been established. Today

circumcision is no longer considered a cure for paralysis, but it continues under other newly developed rationalities, all of them profoundly mythical. It is as an example of how science often operates on the basis of mythical assumptions.

Conversely, clearly mythical ideas oftentimes transform themselves into tangible realities, some of them becoming great scientific and technological innovations. A simple example of this trend is the transformation of the idea of sliding electronic doors from a mystic imagination in science fiction to the reality widely experienced today. Similar examples abound in the world of everyday science and technology. We may also recall, in this connection, how the so called 'Hamitic Myth' and the underlying racial prejudice, that dominated colonial rendering of African history, found its justification in rational scientific explanations, based, among other things, on Darwin's (scientific) theory of evolution.

The obvious conclusion is that myths and science are related to each other in more profound ways than acknowledged in the mainstream scientific literature. We have shown how the two are interdependent and mutually constitutive. Myths are not only capable of transforming themselves into what passes as scientific truth, but are also embodiments of scientifically demonstrable social realities. Similarly, phenomena or states of affairs conventionally known as scientific truths are not only cable of transforming themselves into typical myths in the course of time but also are themselves often based on mythical foundations.

Based on the conclusions drawn at the start of this section, it is suggested that these tendencies apply equally to the relationship between local oral articulations and specialised elite discourses. We emphasize that at any point in time and space the two are mutually constitutive. This is true in the sense that one cannot be defined fully without taking recourse to the other. In the same vein, it is conceivable that each of these is a dynamic process, capable of transforming itself by adopting some of the characteristics of the other.

3. Historical narratives on illness and healing in Mbulu-Hanang

How do rural Africans classify and explain illness and healing? In light of the foregoing discussion, how can we characterise the knowledge implied in popular rural narratives and articulations on illness and healing? And how does this knowledge relate to the elite-founded notions of science and myth? In trying to address these questions we now attempt a presentation and analysis of local narratives collected from the Mbulu-Hanang' area in Northern-central Tanzania, covering the period roughly from the start of the twentieth century to the present. We proceed first by reconstructing the main frame of what might be considered the core structure of the Iraqw classification and explanation of illness and healing during the period from the early twentieth century. This reconstruction relies on recently collected oral material as well as on documented Iraqw cultural information. From here the discussion moves to the exploration of newly emerging

perspectives, thus illustrating the significant changes taking place in how illness and healing were perceived and explained in this particular cultural context.

What emerges from this illustrated example is a view that understands local knowledge as a dynamic phenomenon, which is continually created and re-shaped. In emphasizing this dynamism we allude to the position taken not too long ago by Steven Feierman and John Janzen. They emphasized that "Health and disease are rooted in society," and that "as society changes, these also change."[21] In their elaborations the two authors have emphasized that health and therapy cannot be separated from the changing forms of economic production and political control.[22] While borrowing a theoretical frame from Feierman and Janzen, this paper focuses not on the historical phenomena of disease and healing in Africa, as these authors do, but on the changing local perceptions and articulation of these realities.

The Iraqw people, whose culture is used as an illustrative example in this article, have been an agro-pastoral group with a linguistic affinity to the southern cushitic group. By the beginning of the twentieth century they had just started to expand to areas outside their recent dispersal area, the Iraqw'ar Da/aw enclave, which is located to the southeast of the present day town of Mbulu. Numbering well over 500,000, the Iraqw currently live mainly in Mbulu, Karatu, Hanang' and Babati administrative districts. For many decades they have been living side by side with several Nilotic and Bantu ethnic groups, but have nevertheless kept a cultural identity. The current research captured both the Iraqw pre-dispersal geographical space in eastern Mbulu and some of the Iraqw expansion areas bordering on Hanang', traditionally a Tatoga area but now also largely occupied by the Iraqw.

3.1 Illness as interruption in a predetermined course of life

An old Iraqw myth has it that a long time ago someone overheard a conversation between the sun-deity *looa* and the Land-based spirit *neetlang'w*, in which the two agreed on the manner in which the life of a just-born child would end.[23] This baby boy would grow into adulthood, but his life would eventually be terminated "by the horn of a rhino." And this is what came to be despite the community's effort to shield the boy from *any* encounters with rhinos. At an advanced youthful age, he fell and died on the horn of a rhino when excitedly inspecting the animal, after his peers had killed it![24] Based on this story, a theory took shape. It emphasized that one's manner and timing of death is agreed upon between *looa* and *neetlang'w* on the day of birth.[25]

One can easily see how this story embodies both mythical characteristics and elements of scientific validation. While the power to end human life is attributed to mystic forces, the relevant knowledge transmitted through this medium is founded on the scientific principle of verifiability- the fact that the boy actually came to die in exactly the same manner as agreed upon by the mystic forces. It exemplifies the essential characteristic of myths, namely the tendency to operate by constantly building rationality around them.

The myth also suggests a pattern in human life, as perceived by the Iraqw at least at the time when this myth was constructed.[26] It gives a clear indication that human life was perceived as having a specific beginning and a pre-determined ending. However in light of other elements in Iraqw cosmology at the start of the twentieth century the pattern was not a simple linear progression. Various forces were understood to frequently interrupt this ideal pattern. As one interviewee emphasized, "...a person is supposed to live without problems to the end of his life as determined on the day of his birth, but there is famine, there are wicked people [witches], there is *neetlang'w*, and there are spirits of departed relatives..."[27]

Local articulations on the role of these forces and the manner of their interruptions in people's lives vary considerably, especially across age groups and exposure to other cultures and religious ideologies. But there is clear consistence in articulations given by people who would have been profoundly influenced by the generations that lived in the final years of the nineteenth century and the first half of the twentieth century.[28] They tend to present famine, witchcraft, visitation by spirits of departed relatives, and actions of a feared, land-based spirit *neetlang'w*, as forces that frequently intervene in people's lives.

According to traditions collected during the last half of the twentieth century from various parts of the territory now occupied by the Iraqw, all these forces, save famine, interrupted people's lives through different types of illness. These illnesses could kill even where they were not a pre-establish cause of death for the person in question. Such interruptions are understood to occur due to the wickedness of people endowed with powers to harm or heal, disrespect of ancestors' authority, and the extreme sensitivity of *neetlang'w* to 'ritually polluting' human actions, such as mishandling of miscarriages and infant deaths.[29] A person's life may end as a result of one or several of these forces. *Looa*, the most superior and the sun-related spirit, may also inflict an illness due the breach of a critical moral principle. But a person can only die of such illness if this was a pre-determined cause of his or her death.[30] Other illnesses, such as those originating from the forces listed above, ought not to terminate people's lives. If they do it is because something within the realm of human capacity has gone wrong, and people have not done enough to correct the situation. This would, for instance, include: that there has been insufficient effort in controlling the witches; that individual families have not done enough to maintain harmony with departed members of their respective families; and that there has been neglect in dealing with the anger of *neetlang'w*, following the numerous, often unintended breaches of certain principles defining community ritual purity.[31]

Retrievable Iraqw traditions are not clear on what happens after life on earth. However old practices such as the naming of children after their departed grand parents, which are widely shared by other ethnic groups in Africa, suggest a belief in the reincarnation of the dead, and therefore a cyclical perception of life as a process. This perception only faintly manifests itself in the recently conducted

interviews, but seems to have been elaborately strong among the Iraqw in the final years of the nineteenth century and in the early 1900s. It then included the understanding that an ancestor in the form of a hyena (In Iraqw: *Baha* or *Hhawu*) collects deceased children and sacrificial meat usually placed outside at night and sends them to the land of the ancestors. A related belief had it that children named after this animal stood a better chance of surviving the danger of dieing in infancy. In this light, naming of children after their departed grand parents can be interpreted as symbolic of an effort to enlist ancestral power in defence of the newborn by evoking the concept of ancestor reincarnation

From the explanatory frame sketched above, one can infer that during a significant part of the twentieth century indigenous Iraqw perceptions placed human life in a cyclical pattern. This consisted of a beginning marked by birth, a rather precarious path leading to death, and the more mysterious existence after death and return to life earth. Thus, although a decision is made at birth as to how the life just begun would end, this only represents the ideal. In reality the precarious middle course is what actually determines the quality of life and its actual end. It should be emphasized that the various forces perceived to have the capacity to interrupt the plan of life as set at birth are all profoundly social in character. They largely emanate from cultural and moral principles reflecting social and power relations within the Iraqw community of the period in question.

To give an example, one reason why *neetlang'w* would deal a fatal attack on a community is that an unmarried woman had given birth in the home of her parents, and that the appropriate procedure to appease this earth-based and easily provoked spirit was not taken.[32] But behind this mystic rendering of the phenomenon in question there was a social reality prohibiting young women from having children in their parents' premises. In the patrilineal Iraqw system of the nineteenths and twentieth centuries it was inconceivable that a woman would raise a family within her paternal family's premises. This would invoke imagination about the contravention of a critical incest taboo. As children in a lineage are supposed to be fathered by males within that group, a woman's delivery in her father's home would imply that she has had intercourse with her father or one of her brothers, despite the knowledge that the child would ordinarily have been conceived in a relationship involving a man from a different lineage.[33] Yet, beneath this ideology there was the political-economic reality; the need to protect the male-controlled lineage resources against competition from males from other lineages. This suggests a necessity for girls to move out in marriage as soon as they became adults. These considerations frequently emerged simultaneously in the course of interviews, with informants usually starting with mythical explanations and eventually resorting to rational explanations.

Numerous other examples exist to demonstrate the fact that existing social relations profoundly informed the nineteenth and twentieth century Iraqw understanding of the forces capable of interrupting the course of human life. The broader theoretical significance of these examples is that they illustrate how local

discourses applied both mythical and empirical reasoning. Hence, articulations on how human life proceeds and ends have tended to put upfront mystic beings or phenomena such as *neetlang'w*, witchcraft and ancestral action as forces capable of interrupting the potentially linear progression of life from a beginning to a definite end. But elaboration of the workings of these mystic forces invariably links them to demonstrable socio-political and economic realities.

3.2 On the broad categories of illnesses

Having taken an overview of the nineteenth and twentieth century Iraqw perception of the general course of human life, the moment is now opportune for the discussion of how this particular culture classified and explained illnesses. The main tools to our disposal for this task include, on the one hand, the once dominant Iraqw traditions and, on the other, discourses recorded recently in various communities within the Mbulu-Hanang area. It must however be noted that, although these sources provide undoubtedly useful indications, they pose problems of periodisation and chronology. It is difficult to know how and when the relevant traditions were constructed, and under what circumstances they became dominant. However, through in-depth interviewing it has been possible to map some of the most important traditions and practices that constituted the cultural core around which life within the community in question was generally guided during the period in question. In this way we are able to discern how illnesses were described and classified in this culture and to show how the ideas underlying these descriptions and classifications have changed in the recent decades.

One of the crucial sources of relevant information in this connection is a traditional practice locally known as *firoo*. W. D. Kamera has aptly defined this practice as "...critical petitions [or requests] addressed to *looa* when some disaster threatens or is already a fact..."[34] It consists of a discourse highlighting critical problems in the community in question, delivered in a manner that invokes shared concerns and collective will to have the society relieved of these problems. In a typical *firoo,* The leading petitioner humbly and systematically articulated the critical dilemmas in the respective community, and asked for the intervention of *looa*, the sun-deity, so that the society is freed from the dilemmas. These petitions usually preceded a more formalised and largely memorised litany-like prayer called *slufaay,* usually recited at important ritual gatherings.[35] In contrast to *slufaay*, *Firoo* takes the form of a free discourse by one speaker and occasional responses of approval from the audience.[36]

Despite constant transformations over the years, these ritual performances have maintained a remarkable measure of consistence in the structure, major themes, and style. *Firoo* particularly maintains a remarkable flexibility in different contexts and time periods, yet its basic structure and guiding themes have essentially remained unchanged at least over the last one hundred years. This continuity in the basic structure and central themes became evident in the course of in-depth interviews. It can be demonstrated by looking at relevant texts recorded at

significant time intervals, and from communities located significantly apart in space. We start with a set of citations shedding light on the broader classification of illnesses.

Between 1977 and 1978 the anthropologist Robert Thornton researched eastern Iraqwland and did one of the earliest recordings of the *firoo* discourse. Thornton's findings came to be published as part of a substantive book in 1980. The relevant section of *firoo recording* is worth quoting in brief:[37]

Ham dinkwari aga iwitaan	Right now we have
Hami yami i tiqiya'	assemble
Fala i tiq	At present the land is ill
Muu i tiiq	The hide (on which we
Gewodu ki ur	sleep) is ill
Hikwa i tiqiya'	People are ill
	There are many illnesses
	Livestock is suffering

Ten years later, an independent recording of a *firoo* text was done for W. D. Kamera in the Mbulu area. The section touching on the broad theme of illness categorisation reads as follows:[38]

Muu i tiiq	People are sick
Hikwa i tiqiya'	Cattle (livestock) are sick
Falta yamu sleme i tiq	The skin on which we sleep (land) is also sick

A little over 5 years afterwards, Ole Bjorn Rekdal collected a series of *firoo* discourse in the Haydom area, located in the periphery of the Iraqw territory to the extreme south-west of the original Iraqw settlement near the present day town of Mbulu. For purposes of comparison a relevant section is reproduce below from one of the recordings:[39]

Gewoo hama tlahh	Illnesses have now increased ...
Gewor slee ne are hewo	Human and livestock illnesses ..
...Gewor xuawasl ninaqo aykwi dat	... unknown illnesses are emerging
[...] Hhaper yamu hami loowa slahhahha' imi	[...] The land is terribly ill, folks...
Geewoórí hám gár isa búhh dooqa gán hhapér yaamin tíq	Perhaps the reason why [human and livestock] illnesses have intensified is that the land is ill.

In these excerpts, we see formalised cultural articulations consistently mapping three main categories of illnesses: illnesses of human beings, of livestock, and of the hide (land) on which we sleep. In-depth interviews with elders in various locations within the study area gave a firm indication that *firoo* has maintained this perspective at least over the last four generations.[40]

One reckons a connectedness between this broad classification of illnesses with cosmological conceptions that were broadly shared among the Iraqw in the late nineteenth and early twentieth century. My own earlier work has concluded that during the period in question the Iraqw widely shared an ecological perception that revolved around individual homesteads as ecological niches. A homestead, apparently understood as complex interactions among people and between people and livestock, was seen to relate constantly but variably to a range of forces contained in concentric ecological spheres around it.[41] The spheres include the *mundi,* which is the domestic space that immediately surrounds the shelter, and the *manga,* the ridge neighbourhood community to which the homestead in question belonged. Next in the sequence were the *aya* (representing the local political unit or the entire Iraqw geographical space), and the *darma* (strictly understood as wilderness, but generally includes the entire domain outside of the Iraqw cultural sphere).[42]

Recently recorded articulations clearly distinguish between the illnesses primarily affecting human beings and those that are seen mainly among livestock. In most cases human and livestock illnesses are known by their names and symptoms and, except in few and unusual cases, the names and characteristics defining each of the two categories do not coincide. Oral articulations also clearly recognise a third group of illnesses, coded as 'illnesses from wilderness.' These were initially understood to affect wildlife only, but in recent years a deep concern has been expressed about some of them crossing over to the domesticated space and affecting people or livestock. The most commonly mentioned among these is *bariya,* an illness characterised by presence of "a wound that produces pass, and which never heals."[43] According to some informants, this kind of illness was formerly known to affect only rhinos, but recently it has been seen among both domestic animals and people.[44] The crucial point in this discussion is that each of

the three categories of illness mentioned above is clearly located within one of the ecological spheres recognised by the Iraqw cosmology; and it can be inferred that their recognition primarily emanated from popular local ecological knowledge.

Iraqw historical discourses also recognise a fourth and special category. This is variably described in the vernacular with words approximating the concept 'illness of the land' or 'Illness of the entire hide of the land'. The concept 'hide' is used here to symbolise the broader environment in which people and their livestock exist. The kinds of illnesses considered to belong to this category often are not clearly articulated. But an example given most often is *xumpa*, loosely translated in English as common colds. As articulated by some of the informants, 'illness of the land' is one that affects everything on land: people, animals, and even plants. As no medicinal cure for such illnesses was known, people often resorted to prayers or ritual healing. In both cases the ritual was aimed not at treating the illness, but simply making it "be in accord with the body."[45]

3.2 On sources and causes of illness

In addition to the principle of perceived ecological domains, Iraqw historical discourses also classify illnesses by origin or causal factors. Interviews and related documentary sources have revealed the Iraqw perception that illnesses either inflict people on their own accord or are sent by one of the mystic forces briefly mentioned in section 3.1 above. Those understood to inflict people or livestock on their own accord are also known as 'illness from *looa*' (*tiqtir looa*); and often coincide with what has been described above as 'illness of the land.' There is generally little consistence in the way such illnesses are described, but as mentioned above, most articulations tend to put in this category illnesses that are not markedly virulent, and tend to come and pass without any particular treatment. Interestingly, they also include new kinds of illnesses that, due to their character and popular opinion, cannot be classified using the existing explanatory frame. In the introduction to their edited volume on the social basis of health and healing in Africa, Steven Feierman and John Janzen referred to these illnesses as those that, having been found not to conform to the pre-existing explanatory structure, were classified as those that "just happened."[46] The reference to *looa* as a causative factor in this instance can be interpreted as a rational recourse to the most superior mystic figure, to which all things are attributable.

If 'illness from *looa* is defined by an apparent lack of causal linkage with any perceivable or tangible conditions, those of *neetlang'w* are invariably linked to an event considered provocative to this spirit. Such events include, among many others, occurrence of birth inside the home of the mother's parents, miscarriage or stillbirth (either human or livestock by a human or livestock mother), death of human or livestock infant, drawing of human blood by a metal object, and a lightning strike. Social and environmental norms that evidently dominated Iraqw culture in the late nineteenth and the first half of the twentieth century demanded that when such events occurred a quarantine be put in place and enforced, or else

neetlang'w would deal fatal blows against the entire community. If quarantine were put in place and appropriate rituals administered, only the individuals contravening the rules would be susceptible to *neetlang'w* attacks.[47]

As in the previous category, there are inconsistencies in the way illnesses related to these events are described or defined. Most of the articulations have however tended to include in this group illnesses that are markedly virulent and highly contiguous. They include what is locally named *guso da/aten* (literally red dysentery), illnesses described as associated with high fever followed by muscle stiffness, and ailments often resulting in permanent physical or mental deformity. Quite often, local articulations also include in this category subtle and prolonged conditions of ill health and fertility problems. Tradition-based articulations almost invariably interpret 'Illness from *neetlang'w'* as capable of killing, often rapidly and mysteriously. However, as hinted on above, they sometimes resulted in physical or mental deformity, or fertility problems. As one informant explained, "*neetlang'w* can break your back, make your legs swell, make a person mad, and cause miscarriages."[48] Yet others, as in the case of prolonged subtle conditions of ill health, were feared mostly for their long lasting effect rather than an instance death or visible deformity.[49]

The third group is that of 'Illness from human hand.' According to informants, these include illnesses believed to originate from witches and healers. As briefly explained above, witches were, and still are often perceived as individuals with mystic powers to harm others without necessarily coming in contact with them. They may use either physical objects like food or purely mystic procedures. It was also believed that healers or ritual experts, as opposed to witches, sometimes use their mystic powers to harm or even kill. However this happened only when the interests of the healer in question have been profoundly threatened, or when an a third party asks the ritual expert to punish his adversary with illness or other misfortunes. In *firoo* and *slufaay* prayers the two types of actors were deplored in the strongest possible terms.

Illnesses believed to originate from the spirits of the departed family members (*Gi'i*) constitute the fourth group.[50] These spirits were, and to some extent are still believed to be capable of inflicting a range of health problems on the living members of their respective families. The spirits most often suspected of such involvement are those of deceased fathers, mothers, distinguished healers or local leaders, and unmarried daughters. These would send illness to one or several living family members as punishment for their failure to treat rightly the departed member, either during the latter's lifetime or after their passing.

It must however be emphasized that the linkage alluded to above, between illness characteristics (symptoms) and causation, has a weak standing in the general Iraqw discourses of the nineteenth and twentieth centuries. It is clear that discursive categorisation and explanation of illness have more fundamentally been informed by events and phenomena associated with them in time and space, rather than by symptoms or specified characteristics. Thus, illnesses presenting similar symptoms

could be attributed to different causes and categories, depending on the context of their rise and the events particularly associated with their coming. This perception is abundantly evident in many of the recorded articulations. In many of the recorded *firoo* discourses, for instance, petitioners often lamented about the difficulty of pinpointing the true cause of an illness, especially where witchcraft and *Gi'i* are involved. In connection with witchcraft, for example, there was a widely shared understanding that *da/aluse* (witches) often use their ritual powers to confuse their victims and diviners so that they are unable to tell for sure the real cause of the illness. The following *firoo* discourse recorded in 1989 serves as an illustration of this:[51]

Qwaslaramo u babay ga a neetlang'w.	A diviner tells you that what troubles you is *neetlang'w*.
Koko ikahi garni ara ar i kahh.	Another one says he cannot identify the thing [that troubles you].
Kwaqa i kahi ga a Gi'i.	Yet another says *Gi'i* is the thing [that troubles you].
Laati muki slemero kuna ila giwis ne da/alusamo!!	Alas, the truth is that all these people had been blinded by the witch responsible for your problems.

One implication of this perspective is that, within this particular culture, social context rather than symptoms or any other characteristics, played the most basic role in shaping people's articulation of illness types and causality. This confirms the point made by Feierman and Janzen in reference to the general context of social history, that health and healing in Africa are shaped by broad social forces."[52] As mentioned in the previous section, Iraqw discourses on illness causality initially use mystic explanatory icons, which, however, frequently connect with perceived situations of damaged human relations. Thus, 'illness of *looa*' is considered to result from a perceived situation of critical moral problems emanating from individual or community actions. Likewise, those attributed to *neetlang'w,* or *gi'i,* or *da/aluse,* are linked up to exhibited human behaviour known to contravene critical moral and social norms.

Yet, this is not to say that people sharing the culture in question never referred to specific symptoms in their articulation of the nature of illness. Indeed, elders' articulations recorded during a recent fieldwork confirm that they shared some basic ideas about the distinctive characteristics of certain common illnesses. For instance, all the informants shared several basic ideas about the characteristics or symptoms of *unkumay*, a deadly, and one of the most feared late nineteenth-century

illnesses. From historical record this is identifiable as smallpox. Discourses on this illness invariably mentioned that this (presently extinct) illness was infectious and often virulent, endemic and fatal. They also specified that its basic symptoms included "high fever (*durai*)" followed by the appearance of numerous boils all over the body, leaving notable marks on the skin of survivors.[53] All commonly known illnesses were described in similar manner. The descriptions invariably clarified whether or not the illness could 'jump onto another person, whether or not it was virulent, and what its common symptoms were. Yet, none of these specific characteristics seem to feature in the way illnesses were classified and explained.

This reinforces the point made at the end of the last section; that during the period in question Iraqw discourses on illness and healing generally tended to combine mythical and empirically, or verifiable social realities. Relying on common sense, they describe specific types of illnesses by referring to particular characteristics such as location on the body or outstanding symptoms. But in classifying and explaining types of illnesses they used an explanatory structure that is founded on long established and relatively stable general view of the universe, or cosmology. It is obvious that the classification and explanation of social phenomena involve intense abstraction of reality, a process that is distinct from the more elementary activity of describing empirical specificities, and which requires a pre-existing theoretical structure. The ideas on mystic forces surrounding humanity provide such a structure. However, the day-to-day experience of illness has had to be described in more or less empirical terms. It seems that such descriptions could at best result in the naming of an illness, and hardly in classifying or explaining it.

3.3 On healing

Just as specification of a cause and type of illnesses combined mystic and empirical reasoning, so did the wisdom of designing appropriate remedies. This is clear in the articulations just recently recorded as well as in the narratives on past health-seeking practices. These sources indicate that the process of identifying a remedy for a given illness usually involved more than one agency, and that the kind of remedy prescribed depended on the perceived cause of the illness.[54] With regard to the agencies involved in designating an appropriate remedy, there seems to be differences between short and mild illnesses on the one hand and, on the other, more acute or prolonged ill health.

In the former case the patient herself, or her close relatives, normally tried several different alternatives. These could include food and herbal medicines. The successful remedy would in the future be repeated in handling similar cases.[55] Here we see the use of common sense based on empirical reasoning. In the case of acute or prolonged illness, expert assistance from local and distant healers was sought, and, based on the idea of superiority of alien medicine, more confidence was clearly put on the geographically and culturally distant healers.[56] In the period roughly from the late 1920s the role of hospital remedy increasingly became an

important, but highly contested one. We shall elaborate on this latter point in the next and final section of this paper.

The actual practices in healing illnesses attributed to different causes are worth exploring in some detail. Remedy for illnesses understood to have originated from the action of *looa* was, for example, generally sought from *looa* herself through individual entreaties or community prayers, particularly *firoo* and *slufaay* rituals. As shown above, during the later part of the nineteenth century and a major part of the last century, the Iraqw regularly performed these rituals at appropriate moments, with the general aim of asking *looa* to grant fertility, prosperity and tranquillity. A standard *firoo* performance ordinarily consisted of a section touching on illness and healing. The general character of this section can be gleaned from a text recorded in 1978 and published in 1980:[57]

Speaker	
Bara ya/ande`	If you (people) agree
Kar muruwi un firimaan	Then we pray for these things
[...]Tiqitiri ala an firimaan	We pray about illness
Ar slaqwa muu nawa hikwawo	[Ileness] on the bodies of people and of cattle.
Gimse bara ya/ande`yaa	
Gimse gewori bar ar looa, laqa[r]	So, if you agree
dakw hee, xa i sta`ur!	This illness, whether it sent by *looa* or human being, be it cooled!
All	
I tsa`ur! I tsa`ur!	Be it cooled! Be it cooled!
Speaker	
[.....]	[.....]
Looa sleme a firimaan	We pray to *looa*
Xa tiqtir hikwa ne muko xa	May the illness of cattle and people
ku/uwo`s ng'i watl kara ...	return to whence they came

While *firoo* usually addressed illness in this general manner, it also frequently focussed on particular illness or individual patient. This is best illustrated in a 1994 recording, part of which is reproduced below:[58]

Do'wí até ti dahaán aakó do'wí tiiq waay	The head of this house where we are gathered is ill.
[.....]	[.....]
Heewí tiqaaqín oryó	This person has been ill for a while, people.
Tiqtirós ti sleeme adoorós ga slaslayká	He is in the dark concerning the cause of this illness.
Ala hám kuú kuwa ga/eér in daáwár /áyiíke?	And do you think he is not taking medicine?
Daáwin gaa buaabu'ká	
... Hamán ooaan bar Looa yaa	
An ooaan xaa Looa maxuuwós ngu eer iímí	The truth is, medicine is not helping him.
Hám bar dákw hee yaa	We say, if the source of this illness is *looa*,
An ooaan yaa	We say let *looa* fulfil her intentions, folks.
Heedaáda xaa dakós ngwi ki/i raaqaay	Now, if the cause is 'human hand',
Xaa danda tlaa/árí qaasaare iímí	We say this:
	We pray that this person be harmed by his own hand.
	Let us put a rock on his back (impede his capacity to harm).

Two somewhat contradictory points arise from these excerpts. One is that community prayers were used as therapy for all kinds of illnesses. Indeed it was believed that people fully united in *firoo* had the requisite power to convince *looa* to cause healing to good people and disaster to evil ones. This belief was frequently expressed in the saying "*Muk dinkwa a qwasleri*" (People united in prayer are healers). The second point is that the community found itself helpless when faced by an illness sent by *looa*, as implied in the phrase " ... let *looa* fulfil her intentions." Clearly, there was uncertainty regarding the possibility of overcoming, through *firoo*, an illness sent by *looa*. On the one hand the helplessness felt when the community or individual experienced an illness thought to originate from *looa* is consistent with the idea of predetermination of the course of individual life by *looa* and *neetlang'w*, as elaborated in section 3.1 above. On the other hand, the hope that *looa* might remove an illness even where her own hand was involved is consistent with the frequently expressed understanding that a community thoroughly united in purpose has the power to win the favour of *looa*.[59]

Apparently, however, people applied these two perspectives in different contexts. Where a critical illness understood to have been sent by *looa* is involved the tendency has been to resort to the humble wish for the will of *looa* to be fulfilled. Where the problem at hand was an illness understood to belong to the

type that affected the entire 'hide of the land', the tendency has been to appeal to *looa* for the 'cooling' of the illness.[60]

Ritual petitions were also used in seeking relieve from illnesses perceived to originate from the spirits of departed family members. However in this case the head of the family or homestead, rather than a community united in prayer, performed the appropriate rites. The particular type and modality of the sacrifice was arrived at either by the family head through a prior ritual communication with the spirit of the departed relative (*gi`i*), or by a healer's prescription. In either case, communication with *gi`i* always involved a monologue petitioning the removal of an experienced illness, or relief from any other trouble.

Healing of illnesses that are perceived to emanate from *neetlang'w* and the 'human hand' generally required a different type of ritual therapy.[61] As noted already, this was usually prescribed by a healer (*qwaslaramo*). It involved either the healer's verbal utterances and spitting on the patient's body, or rubbing of fruits or leaves of certain plants on the body. Such objects had also to be 'manipulated' by the healer before the rite is performed. Details of how the actual rites were performed cannot be covered here, but it is important to note that when administering this 'medicine' the patient or his helper uttered words that addressed the perceived cause of the illness, commanding the particular force to 'cool' down. Typical utterances include such formulations as "*neetlang'w i tsauwi*"(*neetlang'w* be cooled), *da/ari i tsauwi`e* (witchcraft be cooled), "*kaharo i tsaur*" (objects manipulated by wicked healers [so as to harm] be cooled"), *ila da/aluse I giwiye`* (the eyes of witches be blinded). To wind up the rite, a different type of plant was customarily used to 'harmonise' the rite just performed with the patient's body. This was named *al-slaane`*, literally, 'liking each other.'

In dealing with illnesses believed to have come from *neetlang'w* and witches the Iraqw of the nineteenths and twentieth centuries also used herbal medicine. However, except for minor illnesses such as mild headaches and stomach aches, the herbs always had to be 'manipulated' by a competent healer. It was believed that the vitality of herbal medicine comes from the healing power possessed and passed on to it by the healer, and not from its substance as such. Apparently based on this perception, hospital doctors were in this area at first not considered to be real healers. An elderly informant representing a once strong but now declining view had this to say on the subject:[62]

> ...Is there a hospital doctor who is *qwaslaramo* (healer)? Those people (hospital doctors) are only good at *fundi`ima* (craft). They can remove bad things from inside the body, and they can fix broken bones. But can they cure a real illness? ...

The dynamics of interaction between the 'traditional' and 'modern' ideas of healing are discussed in the next section. But it should readily be noted that after the Iraqw had expanded beyond their original enclave in Iraqw'ar Da/aw, and

started to interact more intensely with other ethnic groups, they sought both herbal and ritual therapies from those neighbours. They also consulted alien ritual and herbal healers, especially among the Tatoga, Rangi, Isanzu and Sukuma.

In all these examples we see how mystic ideas predominated the perceptions and practices of healing. To overcome illnesses, the same mystic forces perceived as having caused them were appealed to. But the ideas underlying these customs and actions tended to reflect the concrete social and ecological context. I have argued elsewhere that the concepts of *looa* and *neetlang'w* tended to mirror crucial social and ecological relations in the Iraqw society of the late nineteenth century.[63] The concept *looa*, for instance, can be seen to reflect the moral authority culturally assigned to mothers, and to relate to the physical sun and its role in regulating the daily rhythm of human activity. Those concerning *neetlang'*w, on the other hand, seem to mirror the familiar social behaviour and power of fathers over their respective families, including their authority over the distribution of the family's economic resources. In the recently collected narratives the perceived character of *neetlang'w* is presented through the metaphor of dramatic natural occurrences such as thunderstorms and emergence of highly virulent illnesses.

One can therefore suggest that the idea that these mystic beings can harm or heal emanates from the social and ecological significance attached to them culturally. This, in turn, underlines the dialectical linkage between human material experience on the one hand and cultural notions and mythical explanations of illness and healing on the other.

To illustrate this point further, two additional examples can be given. The first is that the plant parts used primarily as ritual objects have certain tangible characteristics, which relate to the protective and healing functions assigned to them. Perhaps the best example of this is *hhamandi,* a creeping plant with a distinctive smell and bitter taste. Tender fruits or buds from this plant were frequently used as protection or therapy for illnesses emanating from witchcraft. When administering them for protection against witchcraft the patient or his helper had to utter words such as "witchcraft be prevented [from harming me], May I turn bitter, like *hhamandi* ..." Perhaps metaphors used in this ritual situations have deeper meanings, but it is the considered opinion of this author that in the present case the selection of a bitter plant is not purely coincidental. I would attribute the observed linkage, between the key characteristics of the ritual object to its intended function, to the ingenuity of the intellectuals who invented and continually modified the rite. This is to say that much as mystic explanations are essentially inadvertent social innovations, they are at the same time invariably intertwined with elements of rational thought.

The second pertinent example has to do with a set of practices seemingly founded on purely rational ideas on illness and healing. Homes infected by smallpox, a disease that evidently hit hard on the Iraqw society in the late nineteenth century, were strictly isolated until such a time when the illness subsided. Strict quarantines were also imposed on homesteads infected with

plague, which was also recurrent in Iraqw'ar Da/aw during the period from the late nineteenth century to the early twentieth century. In the case of smallpox, the wounds of the infected people were treated with cattle urine, and small amounts of pass from infected people were sometimes deliberately injected into the skins of healthy ones. This latter practice was consistent with another contemporary custom of sending younger men to places outside the local cultural and ecological sphere to "let their bodies become accustomed to the types of diseases prevalent there." Those who contracted illness and recovered in the course of this process were considered free from the danger of further infection by the same disease, and the community would henceforth depend on them for essential ritual-related errands to the area in question.

These and many related practices may be interpreted as illustrating the strength of empirical reasoning in the Iraqw understanding of illness and healing during the period under examination. However a sounder interpretation must also take into account the fact that the coming and departure of the diseases just mentioned were explained in outstandingly mythical terms. For instance, plague was seen to relate to the power of *neetlang'w*, and, in addition to the imposition of quarantine, people invariably resorted to ritual healing. Mystic ideas were even more prominent in the way people perceived and handled smallpox. Narratives on this disease consistently emphasize that "...*unkumay* often entered a house at night about bedtime," and "as it entered, door sticks (*pindo*) made a cracking noise and rafters trembled!" The head of the house had to utter a memorised salutation:

> Pass over, big one! Pass over!
> May your passing be cool.
> Carry not a pray in your hand (do not kill)!
> Leave marks, but spare life.[64]
> (Free translation from Iraqw)

In view of all these examples, the point on the mutual constitution of empirical thought and mystic ideas, or science and mythology, cannot be overemphasized. Exactly how these two tendencies interact is not easy to know. However it seems that people tend to explain new experience based on two elements: the pre-existing cultural and ideological structure and new rational ideas emanating from individual experience and imagination. We shall endeavour to expand on this point in the next section.

3.4 Newly emerging perspectives

So far the discussion has focused on ideas that dominated Iraqw discourses on illness and healing during most of the time under examination. Although this paradigm has never been static, its basic characteristics can be assumed to have been more powerful and socially binding at the end of the nineteenth century than they have been in the recent decades. Indeed, as we listen to local articulations on

illness and healing, we note new elements that obviously relate to ideas stemming from recently emerging political, economic and foundations. From the start of the twentieth century, the communities now residing in Mbulu-Hanang' have gradually moved from a predominantly egalitarian political order to a markedly hierarchical and authoritarian one, and from a strictly subsistence-driven economy to an increasingly exchange-oriented economy.[65] These changes evidently have had notable impacts on local conceptions of illness and healing. It is the task of this section to illustrate these changes and discuss their theoretical implications.

An overview of the recently collected local discourses on illness and healing reveals that some of them take markedly different perspectives compared to the more traditional ones illustrated above. One first notices significant shifts in the general cosmological perspective. Although informants still mention *looa, neetlang'w gi'i, da/aluse* and *qwasleri* as the principle forces responsible for illness and healing, they present differing ideas about the nature and function of each of these. For example, in contrast to the older, family-based Iraqw concept of *looa*, some articulations now present the supremacy of this life-creating deity in terms of a worldly social hierarchy. For instance, *looa* is increasingly addressed with the salutation *"ako looa"* (Lord *Looa*), rather than the older expression *ayir'e looa* (*looa*, my mother). Meanwhile, a new concept of neetlang'w as 'evil' or 'dark' force has emerged. Contrary to the older Iraqw conception of complementarity between *looa* and *neetlang'w*, the emerging perspective portrays the two as contradictory and absolutely antagonistic.

Needless to say, the emerging ideas are directly linked to the growing Christian understanding of the world and to the cultural representations of this religion. These include the metaphors adopted from medieval Europe in the course of the history of Christianity. An additional element in the social context for the rise of a comic image representing a male-headed social hierarchy is undoubtedly the authoritarian rule experienced under both the colonial and post-colonial rule.[66] One of the results of these dynamics has been a gradual weathering of the moral authority associated with mothers and *looa*. It follows, logically, that the way people view and explain illness and healing in connection with cosmological perceptions would have changed considerably, at least for some.

No wonder, therefore, that some of the recently recorded articulations of illness causation mention *looa* to mean the transcendental, omnipotent and masculine-gendered Christian God, assigning to him unlimited capability to cause or heal any illness at will. In the older Iraqw perception *looa* could heal or harm, but this applied only to one category of illness: 'illness from the hand of *looa*.' Other categories of illness required ritual interventions, and only one type of these rites (the *firoo* rite) involved petitions for help from *looa*. In line with the conventional Christian cosmology, there has also been a tendency to lump together all the mystic forces apart from *looa* under the referent 'forces of darkness.' They are considered capable of causing illness, but could be dispelled and their victims healed through prayer. The fast-expanding Pentecostal faith (as opposed to that

prevalent in established Christian denominations such as Lutheranism, Catholicism, Anglicanism, and so on.) presents a further contrast between the traditional and contemporary perspectives. Whereas in the earlier Iraqw conception the healing power of prayer was understood to come from the united will of the whole prayer community (*afor mu'k diinkwa*), within the growing Pentecostal influence it is the one charismatic prayer leader that really eliminates an illness in the name of Jesus. The contrast between the earlier egalitarianism and the recently growing individualism as dominant social values underlying the concepts of illness and healing is worth noting.

Perhaps the best example of the gradual movement away from the old Iraqw cosmology is the newly developing conception of witchcraft. As noted earlier, the older Iraqw perspective assigned enormous power to witches as far as illness causation is concerned. Witches could cause illness and death even without physical contact with their victims. Contemporary articulations continue to recognise the role of witchcraft, but tend to question its mystic capability to cause illness. The following excerpt from a *firoo* discourse recorded in 1994 clearly illustrates this tendency:[67]

Diirí án hamá duquumaaká, muruutaaká yee *Anuúwí diiríwá sihhmiít xweeraawo sleema guaaká* *Kár laakiíni gár dabaawók naa guú/ bir káhh* *Kiíng ma daamaaramaar* *Kiíng diitsakwa miwa too gás*	I won't be ashamed and hide this from you. Even I, the one standing here, will not sleep well tonight. But I tell the witch: "If I didn't eat anything from your hands, do not expect that something will happen to me. Better stop labouring for nothing."

As one can see, the orator confirms sustained belief in the power of witchcraft. At the same time, there is enormous emphasis on the necessity of physical contact for witchcraft to work. This clearly indicates a shift from the earlier emphasis on pure mysticism to a more empirically founded explanation of illness. Yet, this gradual shift is not to be understood as a unidirectional movement from non-scientific to purely scientific thought. In light of the discussion above, a better prediction would be that the unfolding social contexts and new experiences will result in the rise of new mystic perspectives and new ways of blending mysticism and empirical knowledge in explaining phenomena such as illness and healing.

One of the most significant changes in the general social context for health and healing in the Mbulu-Hanang' area has been the rise of modern health facilities, Haydom and Mbulu hospitals being the most important. As can be

expected, these facilities have come to be considered as an additional avenue for health seeking. But the interface between this new option and the older therapeutic institutions has been an uneasy one. As a simple illustration of this, the rise of the Haydom Lutheran Hospital in the 1950s was met with apparently deep and popular concern among local people. The presence of a huge hospital within a domesticated environment, to which all kinds of illness cases were brought, and where deaths and miscarriages were more common than elsewhere, was viewed locally as a 'concentration of dangerous pollutions.'[68] According to the then much stronger Iraqw cosmology, this concentration of pollutions posed a major threat to the entire community, as it could result in the proliferation of illness and other misfortunes inflicted by the *neetlang'w*, having been angered by the pollutions.

There is ambivalence on how this conflict was resolved. However according to informants in the area, at least two complementary actions were involved. One of these was repeated performance of *firoo*, asking *looa* to make the hospital and its polluted environment 'coexist' harmoniously with the land and the people.[69] The second action, apparently, was a decision made (in a long meeting) by influential ritual leaders and local elders, that henceforth certain regulations regarding ritual pollution would not apply to the hospital premises, and that what happened within the hospital premises be considered the work of *looa*.[70]

Despite these measures, and although in the subsequent decades Haydom and other hospitals in the district became popular among the local people, a certain degree of uneasiness with modern medicine has persisted. I have already mentioned occasional expression of doubts about the capability of modern medical practitioners to heal profound illness. Related to this is the continued uncertainty about what modern medicine can do. Many of the recorded *firoo* discourses assign an ambivalent status to '*dawa*', the hospital-dispensed medicine. It may or may not work on specific illnesses, depending on the disposition of other forces. In this respect, a view that is still widely shared is that hospital medicines can only work if *looa* wishes. Hence, until now the *firoo* petitions made shortly before a patient is taken to hospital typically consist of the phrase: "*Lo` ne ilmodu dawa ti al sla`iye` raqay*"[71] (We pray that the tablet [dispensed in the hospital] be in harmony with her/him).

More importantly, there are strong indications that the hospital-based health care in general is still widely perceived in terms of the old Iraqw ideas about illness causality and healing. As far as haling is concerned, the expanding hospital establishment has for example been perceived as a new type of a 'healer,' rising in competition with the traditional healing system. This is explicit in the recently recorded discourses on illness and healing,[72] as well as in *firoo* phrases. The latter case is well illustrated by the following *firoo* text, recorded in 1994:

Ax ya/amare`yee.	Please let us all agree.
Oory`oo gewori xase` i sta`ur raqay.	Folks, (please agree that) this illness be cooled.
Xa Haydomuqa ng'ur ba/ane` oory`ook.	May we prevail over Haydom (hospital), folks.

Elsewhere in *firoo* discourses orators wished and prayed that human births, recently seen to happen increasingly in hospitals, come back to the "inside of the home". Hospital births are considered inappropriate for a variety of reasons, not least because they are considered risky and inhibitive to rituals usually performed as a newborn arrives in a home.

One implication of these discourses is that the local community, especially its male elders, are fast loosing control over healing. If this be the case, the expressed concern therefore relate to the need for the male elders to defend the status quo. There is also an economic concern. Whereas the cost for traditional healing is generally perceived to be within the means available to the local people, how to cover hospital expenses has evidently been a source of deep anxiety in families forced to send a member to hospital for treatment. According to recorded articulations, the worry is compounded by the declining livestock economy, traditionally the main source of cash. Despite these explanatory anecdotes, however, the fact remains that for a while the hospital has been viewed as an intruder into the local healing system.

Interestingly, the hospital as an institution has also been viewed as a potential or real cause of illnesses. Just as a healer was traditionally understood to have the power both to heal and occasionally to harm, so have the hospitals been viewed by some people. This has been explicit especially in the Haydom area, where a modern hospital runs under the umbrella of the Lutheran Church and enjoys heavy financial and human resource injections from Norway. Since its establishment, an idea has circulated among the local people that the hospital functions as a device to attract money by making people sick and therefore go to hospital for treatment.[73]

The idea apparently arose partly due to the fact that Haydom Lutheran Hospital has always charged fees, albeit minimal, in a the context of the late colonial and early post-colonial history of Tanzania, where public healthcare was generally provided free of charge. But it also clearly relates to the traditional Iraqw perception discussed above, whereby a healer is understood to sometimes succumb to evil intentions and sets out to harm people. Accordingly, a sustained idea has it that the whole move to establish this particular hospital was motivated by a desire to make business out of people's illness.[74] This thinking alone represents a vague possibility that those who run the hospital may inflict illness on local people so as to get patients and, subsequently, money. In more recent years, a circulating rumour has alleged that specific individuals among the staff at Haydom Lutheran Hospital have been involved in actively seeking help from traditional healers so as

to attract more patients to the hospital.[75] This is a new dimension to the phenomenon, suggesting a more intense merging of traditional and modern perspectives.

Not unlike elsewhere in the African continent, narratives of illness and healing in Mbulu-Hanang' have generally tended to emphasize the decline of traditional norms as an explanation for the increase in illnesses types and frequency. But quite often, also, local people in Mbulu-Hanang' have interpreted modernity as it relates to health and healing in positive terms. A notable tendency in this interpretation has been to view certain aspects of modernisation as perfection of good traditional practices. A good example of this perspective relates to a traditional practice known locally as *meta*. This involves isolation of people or homes befallen by a misfortune considered to cause ritual uncleanness, so that the spirit *neetlang'w* can be prevented from getting angry and striking at the local community.[76] Many informants pointed at the irony reflected in the tendency for many modern Iraqw to disregard the rules of *meta* in the name of modernity, at a time when they can clearly see how modern hygienic practices in hospitals and local restaurants abide by those very regulations. An elderly respondent interviewed in 2003 clearly conveyed this feeling of absurdity:[77]

> These days there is no *meta*. There is too much *lohha'y* (messing up of things). Children eat together with strangers, and strangers sleep in homes where there are infants. No *meta*! [...] It is as if people do not have eyes. Why is it that in restaurants, and in the homes of the educated, people don't eat from one plate or drink from one cup? Why is it that in hospitals each patient sleeps in his own bed, and people suffering from dangerous illnesses are separated from the rest? I can say that by doing this government people show to us that they know *meta* better than we do. How stupid are we to think that *meta* is a bygone custom?
> (My free translation from Iraqw)

Explicit in this discourse is the instrumentalisation of the cultural practice of *meta* and rationalisation of its practice in the current conjuncture. On the one hand this signifies the impact of modernisation on local perceptions. On the other, it shows how recent articulations of illness and healing have blended ideas handed down through traditions with newly emerging perceptions. In the final analysis, this articulation implies that traditions do not necessarily contradict modernity, and that the fall of tradition is not always tantamount to the setting in of modernity. In this sense, this articulation is a critique of the old evolutionary thought that, as shown above, modern elites frequently invoke in their discourses on science and myth.

Despite the mixed attitudes about the role and status of hospitals as far as healing is concerned, an idea is well-established in the area under study; that of late the sphere of healing has split into two parts: the 'home sphere' and the 'hospital

sphere,' where 'home sphere' refers to 'traditional' healing. An orator in a *firoo* discourse recorded in 1994 described this split succinctly:[78]

Hamá daawiimitaán ís waay	Right now we are in trouble, folks.
Bar daawiimitaán yaá, qwaslaaraagaa mak tsár tleehhaán.	In our trouble and wonderings we have divided healers in two groups.
Kuqú aya, kuqú siptaári	**That at home and that at hospital**

It is generally understood that the two spheres present themselves to health seekers as alternative avenues for healing. It should however be noted that for many people in the area the hospital, the traditional healers and *looa* exist a set of avenues for healing that are hierarchically related in terms of their capability to remove illness. Interviews and *Firoo* discourses abundantly indicate that in this hierarchy *looa* stands at the top as the most superior force, traditional healers in the middle, and hospitals at the bottom. We have mentioned above the expressed view that hospital therapy can perhaps be relied upon only for healing illnesses that relate to physical problems such as broken bones requiring technical handling. Explicit in that discussion was the idea that more profound illnesses require ritual handling, which would include petitions (*firoo*) to *looa* or contacting ritual healers. However various *firoo* discourses recorded in the recent past vividly shows that *firoo* was considered to be the last resort in all kinds of illness cases. An example from another 1994 recording attests to this prioritisation:[79]

Geewuduuká' sleeme kingin slaslayká nee qwaslaarér gwaaqá' Atén dír doorene aáng qwaslaare aga tsár tleehhaán: kuqú aya, kuqú gwaaqá'	Even the doctors over there (at the Haydom Hospital) have failed to identify [the causes of] these illnesses. On our part we have divided the healers into two groups: one of our
Hamán ooaan yaá, geewuduuká, naa áykwí dahiyé', Geewuduuká' in tse'eesaán. In bá bohoongós kudí ki/isán.	own, the other of there [at the hospital] We will say this: these illnesses that have entered our country, we shall cool them.
An ooaan yaá, xaasé' geewuduuká' tlakw i bá bohong ín kudí ki/iye' raaqaay	We shall send them back to the 'hole' whence they came. We say: please, let these illnesses go back to the 'hole' where they came from.
Ya/aamaré' i ki/iye'	**Please agree all, let them go back.** (My free translations from Iraqw)

Hence, in the case of hitherto unknown kinds of illness, people have tended to put more hope and trust in modern therapy than in traditional healers. However when they found hospital therapy ineffective their final resort has been to *firoo*, the petitions made to *looa*.

In all these newly developing tendencies, we see a general continuation of the kinds of eclecticism that characterised Iraqw perceptions of illness types and causation in the more distant past. This tendency can be discerned at different levels. First, the general cosmological foundations on which perceptions of illness and healing are based have retained the core mystic element. The roles of *looa*, *neetlang'w*, ritual healing, and ritual harming are still widely recognised. On the other hand the emerging ideas on the role of hospital-based therapy represent a greater recognition of worldly human capabilities to deal with illness situations, such as through surgical procedures.

Secondly, the perceived role of the hospital as a new type of 'healer' does not preclude the old notion of evil and good human capabilities over illness. The ideas that perceive the hospital as both a healer and source of illness signify the continued blending of mythical ideas and empirical reasoning. In its healing role the hospital is viewed as effectively utilising certain technical and empirical capabilities. But these capabilities are not considered effective in handling illnesses perceived as connected with the mystic forces of *neetlang'w* and witches. More importantly, in its evil role of causing illness the hospital has been viewed as utilising the same mystic capabilities that traditional healers occasionally used to harm people.

Third, the general inclination of many people has been to combine material and mystic therapies in dealing with illness situations. As noted earlier, the use of herbal medicine has been on the increase since the time the Iraqw came into more intense contact with neighbouring societies. The coming of hospitals has brought with it *il`mo dawa-* the tablet- considered to sometimes effectively removes illness. It has also come with enormous and much recognised technical skills in dealing with illnesses. Yet, the introduction of hospital therapy has not weakened, let alone eliminated, the tendency for people to depend on ritual healing as a final resort. This includes contacting traditional healers and praying. With regard to prayers, while the belief on the role of *firoo* has declined considerably over the years, the growing Christian faith has maintained the traditional inclination to trust *looa* as the most superior forces to reckon with in matters pertaining to illness and healing.

4. Summing up

In a 1992 article the historian/anthropologist Jan Vansina affirmed the conviction that "people can act only on the basis of their cognitive reality" rather than on the basis of "physical reality itself," adding that cognitive reality constitutes culture.[80] The concept 'cognitive reality' may be recast and rendered in several different ways, but it cannot be characterised as anything else but knowledge. Vansina's re-affirmation of the significance of cognitive reality in relation to reality in general

was therefore a methodological statement. It was, in effect, a critique of the positivist methodology on which most of the discourses that view science and mythology as polar opposites are based. Vansina did not directly address the broader concepts of science and mythology or mysticism, but he clearly stated that although cognitive reality or knowledge usually approximates the physical reality it represents sufficiently enough for people to live on earth, "it always includes features for which there is no physical counterpart."[81] The implication for the present discussion is that all knowledge can at best closely approximate the reality it knows, and that the positivist idea of pure objectivity is not tenable. While it may be possible to specify the distinctive characteristics of scientific and mythical knowledge, it would be inaccurate to extend such distinctions to the essence of knowledge and to consider them as fundamental.

In contrast to the neo-positivist perspective that assumes a sharp distinction between scientific and other kinds of knowledge, an attempt has been made in this article to illustrate the interactive nature of mystic and empirical approaches to knowledge. The theoretical overview presented at the outset has highlighted the strengths of the position that perceives knowledge as a dynamic process that oscillates between empirical ideas and mystic reasoning. The subsequent discussion on popular knowledge on illness and healing among the Iraqw in the Mbulu-Hanang' area has shown how mystic and empirical reasoning invariably relate to one another as mutually constitutive elements of a whole. Elders' testimonies and structured ritual discourses such as *firoo* and *slufaay* all indicate that in the late pre-colonial period, as today, popular elaborations on illness and healing utilised both mystic ideas and empirical reasoning. This was true not only with regard to the way people classified and explained illnesses but also in the way they reasoned about how illnesses may be removed or overcome. This is to emphasize the implausibility of the view that renders mythical and empirical reasoning as polar opposites.

We stated at the outset that the neo-positivist perspective still dominates the minds of educated elites in Tanzania and Africa in general, and that its force in denying the value of the so called non-science (read nonsense) has led to the tendency to exclude popular oral articulations and all forms of non-empirical knowledge from formal discourses on society and development. This, we should add, largely accounts for the well-known failures of the elite-based colonial and post-colonial development polices in Africa. The fallacy involved in abstracting science from other forms of knowledge, and in the denial of any value to popular local knowledge, could not have been better revealed than did the anthropologist/botanist G. Hulstaert, when he reported that "every distinction botanists made about flora in the land of the Nkundo people in central Congo (former Zaire) is also made by its inhabitants."[82] Yet, it is known that at the time of this reporting the environmental perceptions of the Nkundo people included nature spirits and magic as mediating forces. The overlap between what passes as science and what is usually considered non-science is clear enough in this case alone.

Notes

[1] In the context of western civilisation this outlook began to take root in the seventeenth century with the rise of science, and came to dominance in the nineteenth century with the rise of the capitalist ideology to hegemony. In Africa it is inextricably linked with colonial and post-colonial developmentalist ideology and elite politics. For general characterisation of science and myth as direct opposites see, for instance, Ben Halpern, 'Myth and Ideology in Modern Usage,' *History and Theory*, vol. 1, NO. 2 (1961), 136.7; [i] Douglas Davis, 'Introduction: Raising Issues,' in Jean Holm (Ed.), *Myth and History*, (London/New York, Pinter Publishers, 1994), 1

[2] J. M. Levi, 'Myth and History Reconsidered: Archaeological Implications of Tzotzil Maya Mythology,' *American Antiquity*, 53, 3 (1988), 605 & 616.

[3] Howard W. Haggard, M.D., *Mystery, Magic and Medicine: The Rise of Medicine from Superstition to science* (Garden City, New York, Doubleday, Doran & CO., 1933), passim.

[4] Ben Halpern, 'Myth and Ideology in Modern Usage,' *History and Theory*, vol. 1, NO. 2 (1961), 131, fn.5.

[5] Dauglas Davis, 'Introduction: Raising Issues,' in Jean Holm (Ed.), *Myth and History*, (London/New Yorkk, Pinter Publishers, 1994), 1. Davis was here contrasting myth with history, understood as objective (implicitly scientific) quest for knowledge of the past.

[6] Halpern, 'Myth and Ideology,' 136-7.

[7] Halpern, Myth and Ideology, 131.

[8] Levi, 607, passim. On this point Levi refers to such prominent anthropologists of the twentieth century as Levi-Strauss (1966), Godlier (1971), Henige (1982) and Bourdieu (1977), to mention a few.

[9] Ibid., 607-8.

[10] W. Donald Oliver, 'Knowledge, myth and action,' in *The Journal of Philosophy*, Vol. 44, No.1 (Jan. 2, 1947).

[11] Halpern, 136. See also Athur M. Lewis, *The Struggle between Science and Superstition* (Chicago, Charles H. Kerr & Co., 1918), 21.

[12] Sal Restivo & Julian Loughlin, 'The Invention of Science,' in *Cultural Dynamics*, 12 (2)(2000), *138.*

[13] Peter Munz, ' History and Myth,' in *Philosophical Quarterly*, Vol. 6 No. 22 (1956), 1, passim.

[14] Ibid., 6.

[15] Ibid., 7.

[16] Restivo & Roughlin, 'The Invention of Science,' 144-45.

[17] Ibid., 140.

[18] . Ibid; Carolyn Merchant, *Ecological Revolutions: Nature, Gender and Science in New England* (Chapel Hill/London, The University of North Carolina Press, 1989), 18-20, passim.

[19] Restivo & Roughlin, 'The Invention of Science,' 137.

[20] David Golaher L., 'From Ritual to science: The Medical Transformation of circumcision in America,' in *Journal of Social History*, 00224529, Vol. 28, Issue 1 (Fall 1994), 1-24.

[21] Steven Feierman and John M. Janzen, *The social basis of health and healing in Africa* (University of California Press, Berkeley/London, 1992), 5.

[22] Ibid, 6-12, passim.

[23] These two spirits, *looa* and neetlang'w, have been the principle elements in the Iraqw cosmology. It was understood to be the most superior being in the spirit world, commanding immense but subtle power of life on earth.

[24] A story told to Gwadayshi Bosta (aged +/- 80) by elders in the late 1930s. Inquiries among other elderly people indicate that this teaching had been common in the days of their grand parents. From this, one can deduce that the story was well established, at least by 1900.

[25] These two beings constitute contradictory but complementing forces in Iraqw cosmology. *Looa*, presented in myths and in the Iraqw grammar as a feminine being, was and is still widely understood

to be a superior deity that creates and nourishes all life by her own hands. Closely associated with the physical sun, *looa* commands the rhythm of daily human life from dawn to dusk, night time signifying rest for all creatures. *Neetlang'w*, on the other hand, was widely perceived as a masculine being, possessing immense powers to harm human beings when provoked through breach of culturally established code of conduct. For details on Iraqw cosmology see Lawi, 'Local Knowledge...,' Chapters 2 & 3.

[26] It is not possible to determine when this myth was constructed, but it can justifiably be assumed that the ideas of society on which it is based were strongly held in the early decades of the 20th century, the time period in which our informant learned the story.

[27] Interview, Matle Daqaro Mohe (Haydom, August 15th, 2003).

[28] This conclusion follows extensive questioning of how interviewees came to acquire the knowledge they profess in the course of interviews.

[29] These ideas are described and variously interpreted in many ethnographical works, including: Edward Winter, 'Territorial groupings and religion among the Iraqw,' in M. Banton, *Anthropological Approaches to the Study of Religion* (London, Tavistock, 1966), passim; Robert Thornton, *Space, time and culture among the Iraqw of Tanzania* (NewYork, Academic Press, 1980), passim; Katherine Snyder, "Like water and honey": 'Moral Ideology and the Construction of Community Among the Iraqw of Northern Tanzania,' Unpublished PhD dissertation, Yale University, 1993, passim; Ellen Selvik, 'Channeling flows of blood and water. A study of gender, fertility and seclusion practices among Iraqw people in Tanzania,' Unpublished PhD dissertation, University of Oslo, 1998, chapters 5 & 6; Ole Bjorn Rekdal, 'The invention by tradition: Creativity and change among the Iraqw of northern Tanzania;' University of Bergen, 1999; Yusufu Q. Lawi, 'Local knowledge and the political ecology of natural resource use in the Iraqwland, Northern Tanzania, 1900-1980s,' Unpublished PhD Dissertation, Boston University, 2000, chapters 2&3.

[30] Interview, Matle Daqaro Mohe (Haydom, July-Sept., 2003).

[31] ibid.

[32] Lawi, 'Local Knowledge. .. ," chapters 2 & 3.

[33] Interview with Gwandu /Awaki, Kwermuusl, December 2, 1997.

[34] W. D. Kamera, 'Firro and slufay: the traditional litanies of the Iraqw,' *African Study Monographs, Vol. 8 No. 4, (1988), 217.*

[35] The initial avenue for these ritual performances was the seasonal *getla/angw*, a home-based drinking party organised by one of the members of a community and to which all adult members of the community were invited. Other avenues included the party following the completion of a new house and, more recently, the moment when a sick person is taken out of the house ready for transportation to hospital.

[36] See also Ole Bjorn, The Invention by Tradition: Creativity and change among the Iraqw of northern Tanzania,Dr. Polit. Thesis, University of Bergen, 1999, chapter 5.

[37] Robert Thornton, *Space, Time and Culture among the Iraqw of Tanzania* (New York, Academic Press, 1980), 67-69.

[38] Kamera, 'Firo and slufaay,' 219-220.

[39] Welwel Gidmasongw, Recorded for Ole Bjorn Rekdal by Gaseri Nanagi, Haydom, April 16, 1994 (lines 36-42).

[40] This conclusion arises from my own research, conducted in the Mbulu area during 1997/1998, in which I used the concept of generations to estimate the time period in which certain phenomena or ideas featured prominently. Work done by the Norwegian anthropologist Ole Bjorn Rekdal in the Haydom area during the early 1990s has also generated important ideas about cultural continuity and change among the Iraqw.

[41] Lawi, 'Local knowledge,' chapter 2. The concept 'ecology' is used here in the loose sense of relationships of critical interdependence or complementarity in life.

[42] For details on this see Thornton, *Space, Time and Culture,* passim.

[43] Petro Bussi, interviewed in Haydom on April 8th, 2004.

[44] Lala Gwangway, Nade Gidhaqu, and Petro Bussi, interviewed in Haydom on March 13th, 2004, March 17th, 2004, and April 8th, 2004, respectively.
[45] Ibid.
[46] Feierman & Janzen, *The social basis of health and healing,* p. 2.
[47] Gwandu /Awaki, Interview at Kermuusl, October 20th, 1997.
[48] Interview: Bariye Kumbe (Haydom, September 9th, 2003).
[49] Ibid.
[50] Note that I am using 'spirits of the departed family members ' in place of what is often called 'ancestral spirits.' This seems to be more consonant with the Iraqw cosmology, for although in this culture spirits of powerful individuals such as fathers or healers were more important, it is also true that spirits of the formerly less powerful individuals, such as departed unmarried daughters, could cause critical health problems in their respective families.

[51] Nade Dawite, Mbulu town, January 1998.
[52] Feierman and Janzen, *The social basis of health & healing,* p. 1.
[53] Lala Gwangway, Nade Gidhaqu, and Petro Bussi, interviewed in Haydom on March 13th, 2004, March 17th, 2004, and April 8th, 2004, respectively.
[54] Lala Gwangway, Nade Gidhaqu, and Petro Bussi, interviewed in Haydom on March 13th, 2004, March 17th, 2004, and April 8th, 2004, respectively.
[55] Ibid.
[56] Rekdal, 'The invention by tradition,' article iv, pp. 153-184.
[57] Basic text from Thornton, *Time, Space and Culture,* 68-6; My own Iraqw orthography and free English translations.
[58] Recorded for Ole Bjorn Rekdal (Haydom, September 9th, 1994).
59. This idea is frequently emphasized upon by speakers in ritual settings involving the reciting of firoo and slufaay.

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[60] These conclusions derive from an overview of much recorded discourse on this issue as well as my personal recollection of firoo performances in the late 1960s and 1970s.
[61] This information contained in this paragraph mostly derives from interviews conducted in 1997/8 and 203/4 in Iraqw'ar Da/aw and Haydom. Informants generally agreed on the procedure outlined here.
[62] Interview with Tsino Bura, Haydom, July 20th, 2004.
[63] Lawi, 'Local Knowledge ...,' chapter 2.
[64] Interviews: Hhando Slaa (Haydom, Sept. 2003); Bariye Kumbe (Haydom, Sept. 2003).
[65] Snyder, 'Moral Ideology and the Construction of Community Among the Iraqw,' passim; Lawi, 'Local Knowledge ..,' chapters 4 & 5.
[66] Many informants emphasized that the British indirect rule system created an outstandingly oppressive local political regime, which consolidated the already emerging domination of male elders over the entire society.
[67] Hhaway Ami , recorded for Ole Bjorn Rekdal by Gaseri Nanagi (Haydom, April 1, 1994).

[68] Ole Bjorn Rekdal, 'Money, Milk and Sorghum Bear: Change and Continuity Among the Iraqw of Tanzania,' in *The Invention by Tradition: Creativity and change among the Iraqw of northern Tanzania,* Dr. Polit. Thesis, University of Bergen (1999), 80-82.
[69] Dohho Qwaray, interviewed in Haydom, September 25th; Bilauri Haydahow, interviewed in Haydom, September30th, 2003.
[70] Ole Bjorn Rekdal, 'Money, Milk and Sorghum Bear,' 80.

[71] This phrase frequently occurs in firoo rituals, albeit in slightly different wording. It particularly prevails in the recordings done for Ole Bjorn Rekdal in the Haydom area (for instance Tsino Lohay, August 31, 1994; Hhawu Mehhi, August 31, 1994).
[72] Interviews: Bo/ay Ni/ima, Haydom, Sept. 16, 2003; Bilauri Haydahaw, Haydom, Sept. 24, 2003).
[73] Interviews: Gwandu /Awaki, Kwermuusl, Dec. 30, 1997; Yaame Amna/ay, Mbulu, Feb. 24, 1998; Lala Gwangway, Haydom, Sept. 12, 2003. Also, personal communications: Gaseri Nanagi, Haydom, June 20, 2004; Peter Gasheka, Haydom, June 23, 2004; Herman Malleyeck, Haydom, June 23, 2004.
[74] Several informants interviewed in Haydom (August-September, 2003) freely talked about this phenomenon. However their identity is reserved for purposes of personal security.
[75] This rumour may have started long time ago, possibly at the very time of the hospital's inception. However our inquiry captures ideas emanating from *firoo* performances recorded in 1994 and interviews conducted in 1997/8, 2003 and 2004. Informants discussed this issue openly among themselves and with the author. They mentioned names of the staff alleged to involve themselves in 'the hunt for more patients.' But for obvious reasons the author hesitates to mention here the names of both the alleged staff and the informants.
[76] Most serious among such misfortunes include miscarriages or still births, births in mother's parents' home, death of an infant, lightning strikes, shedding of blood through metal objects or by a clawed animal, and death by suicide.
[77] Dohho Qwaray, interviewed in Haydom, September 25th, 2003.
[78] Welweel Gidmasang'w, text recorded for Ole Bjorn Rekdal by Gaseri Nanagi in Maghang' area, April 16th, 1994.
[79] Tsino Lohay, text recorded for Ole Bjorn Rekdal by Gaseri Nanagi, Maghang', April 1st, 1994.
[80] Jan Vansina, *Habitat, Society and Economy*, Berg Occasional Paper No. 1 in Anthropology (Providence/Oxford, Ber1992), 5.
[81] ibid.
[82] Cited in Jan Vansina, ibid., 6.